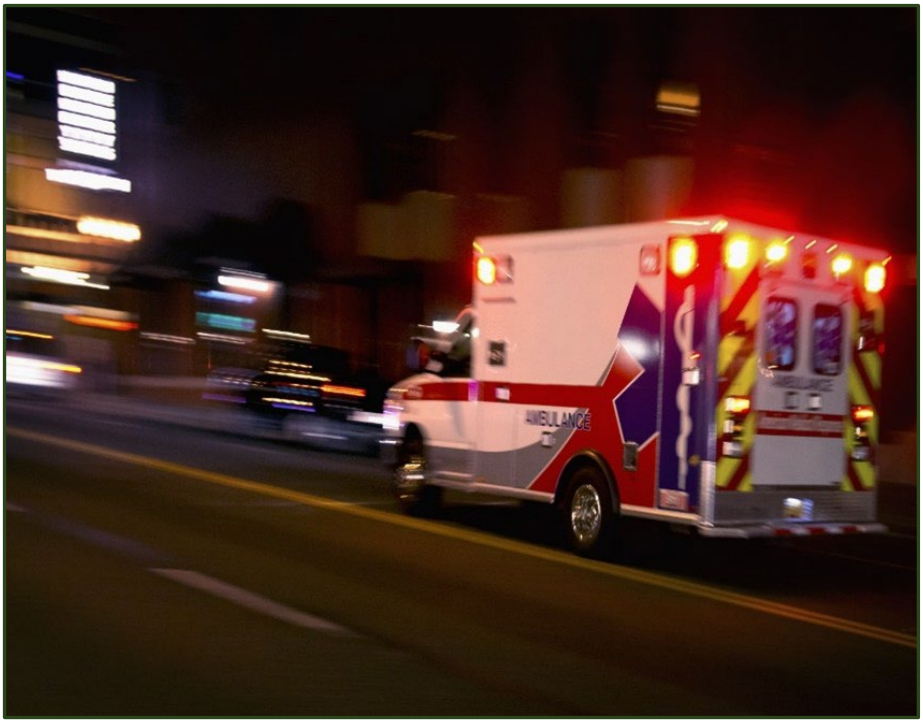
PENNSYLVANIA EMS CRISIS



January 2023

Toolkit and Recommendations

A study of Emergency Medical Services (EMS) in five Pennsylvania counties and the development of a toolkit to assist counties and municipalities with the development of action plans to address the EMS crisis in Pennsylvania.

Prepared for the County Commissioners Association of Pennsylvania and the Pennsylvania Department of Economic Development by MCM Consulting Group, Inc.

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Pennsylvania EMS Crisis

EXECUTIVE SUMMARY

The headline in Figure 1 is similar to headlines being seen across Pennsylvania and the United States and is representative of the state of emergency medical services (EMS) today. EMS agencies are finding it harder and harder to continue to operate in the current environment. Lack of funding, staffing shortages, insufficient reimbursement rates and other difficulties have created a situation that is not sustainable. This is not a new problem however, and this issue has been discussed, studied, and reported on for years in Pennsylvania.


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Weather outlook

Shippenville/Elk Ambulance Service closing Jan. 31

Staffing challenges bring down 50-year-old service

Spooky Scotch Hill

Figure 1.

In the past decade, there have been several studies conducted that have looked at issues within EMS in Pennsylvania, The Senate Resolution 60 Commission, in its 2004 Report to the Senate of the Commonwealth of Pennsylvania, stated, *"The bottom line is that the emergency services of Pennsylvania are being tasked to provide greater levels of service with very limited resources.*" The Senate Resolution 6 Commission, in its 2018 SR6 Final Report, opened its preface with, "*Fire and EMS are in a crisis – right now*." The County Commissioners Association of Pennsylvania (CCAP), in its CCAP EMS Task Force Report of 2019, stated, "*Emergency Medical Services in Pennsylvania are in crisis, affirmed by findings of multiple studies….".* All of these reports contained recommendations to deal with the issues facing EMS and emergency services in Pennsylvania. Some of the recommendations have been adopted but the crisis has only gotten worse. In order to improve the provision of emergency medical services and enhance public safety in Pennsylvania, concrete action must be taken.

Following up on their work by the CCAP EMS Task Force, CCAP partnered with the Pennsylvania Department of Economic Development (PADCED) to study the current issues facing EMS agencies in five counties in two regions of the commonwealth, with the goal of developing a "toolkit" of strategies, best practices, and recommendations to assist counties, municipalities and EMS agencies in addressing the crisis. The five counties that were designated to be in the study were: Butler, Lycoming, Mercer, Sullivan, and Tioga Counties.

CCAP and PADCED contracted with MCM Consulting Group, Inc. (MCM), of State College, Pennsylvania, to conduct the study and develop the toolkit. A steering committee comprised of county commissioners and staff members from both CCAP and PADCED worked with MCM during this project.

MCM would like to thank the members of the steering committee for their input and guidance during this project.

The study found that the biggest issues facing the EMS system in Pennsylvania are:

1. **Financial stability**
   - Medicare, Medicaid, and insurance reimbursement rates are not sufficient to cover the costs associated with the EMS response to calls.
   - Medicare, Medicaid, and most insurance companies will only provide reimbursement if a patient is transported by an EMS unit. If a unit responds to a call for service, and a patient is not transported, payment is not made, even though the EMS agency incurred costs.
   - Many municipalities do not support EMS agencies within their jurisdiction financially as they do for fire departments.
   - Without outside (county or municipal support), EMS agencies are limited to Medicare/Medicaid/insurance reimbursement rates which are fixed and have not been updated to keep pace with inflation and the rising costs that EMS agencies face.

2. **Staffing (recruitment and retention)**
   - EMS agencies are having trouble finding and keeping qualified personnel.
   - Seventy-one percent of the study respondents indicated that their agency did not have a recruitment program in place.
   - Over fifty-seven percent of respondents indicated that they do not have some type of retention program in place.
   - Because they are operating on small (or no) profit margins, EMS agencies are struggling to pay competitive wages and are losing employees to other professions or institutions.

3. **Training and Certification**
   - Potential trainees are having difficulty finding training classes that were either conveniently located or offered at times when they are available.
   - There is currently a shortage of EMS instructors, compounding the problem of course availability.
   - Some EMS classes that are being offered are not being filled and in some instances are being cancelled due to lack of participation.
   - Some study respondents felt that the requirement of National Registry training and certification testing was making it difficult for students achieve certification.

The study also found, as previous ones have, that the current system is not sustainable, and action must be taken sooner rather than later for the sake of public safety. Not only are EMS agencies closing, but many of those that are still in service are taking longer to respond to calls. It is more and more common for first-due EMS agencies to fail within their designated response time. Tioga County reported that they had recorded a fifty-one percent failure to respond rate of their first-due agencies. The survey results showed

that there have been occasions where a call for service has had to go to the fifth-due agency before there was a response. It was noted anecdotally that calls have been known to go to the eighth-due agency in some counties.

Conclusion

The EMS crisis is real, and it is getting worse. Action must be taken to avoid further risk to public safety. It was found during the study that there appear to be several agencies/departments/associations/ governmental bodies that are trying to tackle this crisis. However, the undertakings are not being coordinated, and duplication of efforts was found. It would be more effective if one agency was to take the lead in addressing the issues creating this crisis. Until that happens, it is important for EMS agencies to present a united front in working for change. They must be united in their goals as well as their discussions with their associated fire services (if appropriate), municipal, county, and state elected officials. Municipalities and counties, likewise, must be cohesive in their goals discussions with state, and if necessary, federal officials.

What can counties do? - It is recommended that counties review the information provided in this report and toolkit. County officials could then host meetings with their EMS agencies and municipalities to discuss the specific issues that need to be addressed within their counties. Local issues and needs should be outlined, and goals set. If there are local township and/or borough associations within a county, county officials could impress upon the municipal officials their legislative responsibility to provide for EMS service within their municipalities and encourage them to take a leading role in addressing any local issues. County officials can also work through CCAP to educate state leaders on the crisis, as well as push for legislative action to address the crisis as appropriate.

The toolkit that was developed contains 61 considerations/recommendations for counties, municipalities, and agencies, along with some sample forms and reference documents. County officials are encouraged to read through all the tools outlined in the toolkit as there is discussion on each issue. The considerations/ recommendations for counties, contained in the tools are summarized below.

County Considerations/Recommendations

- Encourage the PA Department of Health to develop a diversification plan to incorporate additional paramedic program training locations throughout the Commonwealth:
    - Develop partnerships with community colleges, hospitals, and health networks to increase the available locations of program offerings.
    - Maintain partnerships with training facilities by incentivizing the organizations through direct and indirect funding.
- Encourage the PA Department of Health to consider the recommendations presented below.
    - Increase oversight of the training facilities course offerings, coordinating program starting dates that provide for choice in location for students.

    - Include a graphical representation of the state with links identifying paramedic program training facilities as a component of the Department of Health website.
    - Maintain the EMS Registry page with current and future program offerings.
- Counties could assist EMS agencies in outreach to schools if needed.
- Counties could provide assistance on integrating EMS training into curriculums if needed.
- Counties could facilitate discussions with EMS agencies to determine if a per-call incentive program would be feasible in terms of record keeping and funding.
- Counties could consider funding a program with county funds.
- Counties could petition Congress to provide federal tax exemptions for any state or local benefits that volunteers receive.
- Counties could consider paying for EMS training and certification for new hires in return for a service commitment.
- Counties could offer to assist EMS agencies with consultation from county human resources staff members.
- Counties could support EMS agencies as much as possible with the development of retention tools if needed.
- Counties could provide financial support for retention programs to the extent possible.
- Counties could support EMS agencies as appropriate in the development of recruitment media.
- Counties could provide web-hosting services if capable.
- Counties could allow recruitment videos or other appropriate media to be placed on county web sites.
- Counties could encourage community television stations or other local media outlets to provide services at little or no cost to EMS agencies.
- Municipalities and counties could assist EMS agencies with grant funding research and application. See the Financial Stability - Grants toolkit more detailed information.
- Municipalities and counties may consider adopting the tax programs and credit incentives outlined in the full toolkit.
- Municipalities and counties could petition the General Assembly for an increase in the millage that is allowed to be allocated for EMS support under Title 8, Pa.C.S § 1302.
- Municipalities and counties could provide clerical staff for the printing, mailing and processing of subscription services or fund drives.
- Municipalities and counties could assist EMS agencies in developing and marketing a donation drive from public and private partnerships to generate donation funding or other resources for EMS agencies.
- Counties could ensure that municipalities are aware of their responsibility to provide EMS services to their municipality and provide suggestions to address the funding of EMS service.
- Counties could provide guidance to municipalities on supporting EMS agency financial functions with municipal or county financial personnel.

- Counties could provide a database of funding opportunities for municipalities and EMS agencies.
- County fiscal and grant writing staff can assist agencies and municipalities with the sourcing of, securing, writing, and applying for grants.
- Counties and/or municipalities can share budgeting programs with EMS agencies.
- Counties could work with EMS agencies on community outreach for recruitment. of volunteers, pro-bono, or in-kind services, sharing of budgeting forms or programs.
- Counties could request and support changes in legislation to increase reimbursement rates from Medicare and Medicaid programs.
- Counties could consider tax programs that would benefit EMS agencies.
- Municipalities could support EMS agencies with municipal finance personnel or grant writers.
- Counties could support municipalities and/or EMS agencies by providing information on access to third party billing vendors.
- Counties could support outreach to community partners who have insurance and/or medical billing experience.
- Counties could provide billing services at reduced or no cost.
- Counties could provide guidance to municipalities on supporting EMS agency financial functions with municipal or county financial personnel.
- Counties could provide a database of funding opportunities for municipalities and EMS agencies, and assistance with grant writing.
- Counties could share budgeting programs with municipalities and EMS agencies.
- Counties could petition the state legislature and federal government for increased Medicare/Medicaid reimbursement rates.
- Counties could petition the governing or regulating agencies for reasonable reimbursement for treatment without transport.
- Counties could request insurance payments for go directly to EMS agencies as opposed to the insured.
- Counties could support the municipalities and agencies in their respective counties by assisting with coordination and negotiation of a group purchase of licensing for software, or third-party billing.
- Counties could support EMS agencies with financial personnel to provide billing services.
- Counties could provide EMS agencies with assistance with third-party billing expenses.
- Support EMS agency business and financial management with county financial staff.
- Include EMS agency personnel in financial training programs offered to county staff.
- Support recruitment of business and financial management volunteers or staff using county websites, social media, or other outreach efforts.
- Counties could support municipalities and/or EMS agencies by allowing assistance from county grant writers (if available) for grant applications.
- Counties could assist with grant research by municipalities and/or EMS agencies.

- Counties could work with municipalities to assess the need for community paramedicine locally.
- Counties could determine the cost-benefit of decreased transports versus implementing and maintaining paramedicine programs.
- Counties and municipalities could assist EMS agencies and local health organizations in coordination of community campaigns.
- Counties and municipalities could consider programs that provide cross-trained responders within fire, law enforcement, and municipal/county employees.
- Counties and municipalities could research funding methods for support of cross-trained responder programs.
- Research the ET3 model.
- Facilitate discussion with local EMS agencies, hospitals and regional medical command about the ET3 model and whether it may be an effective model for local services.
- Counties could act as a moderator to facilitate the discussions between EMS agencies and municipalities. A mechanism for continued discussions between municipalities and agencies could be created and fostered.
- Counties and Municipalities could consider contributing funds to the start-up of regional EMS services.
- Regionalization should be inclusive of all EMS agencies, exploring and utilizing the best practices of each service to benefit patient outcome.

The following report outlines the study process, includes the report of the survey results in Appendix A, and contains the tools that were developed in Appendix B. MCM is pleased to present this report and toolkit to CCAP and PADCED.

1. The Issues

In many areas of Pennsylvania, the time needed for an ambulance to respond to a call for service is dramatically increasing. Ambulance services are being shuttered because they cannot afford to operate or cannot find sufficient staffing to stay operational. Potential responders are, at times in some areas of the state, finding it hard to find readily accessible training courses. Reimbursements through programs such as Medicare and Medicaid are not sufficient to cover the costs incurred by EMS to provide services, respond to an emergency, or save a life. All of these factors are contributing to what has become an "EMS crisis" within the Commonwealth, and in fact, throughout the United States.

While the provision of emergency services is a responsibility assigned to municipalities in Pennsylvania by legislation, the membership of the County Commissioners Association of Pennsylvania (CCAP) feel that the counties have a moral obligation to their citizens to assist municipalities and EMS agencies in tackling the issues that are plaguing EMS in the commonwealth. As such, CCAP partnered with the Pennsylvania Department of Economic Development (PADCED) to study the current issues facing EMS agencies in five counties in two regions of the commonwealth,

with the goal of developing a "toolkit" of strategies, practices, and recommendations to assist counties, municipalities and EMS agencies in addressing the crisis. The five counties that were designated to be in the study were: Butler, Lycoming, Mercer, Sullivan, and Tioga Counties.

CCAP and PADCED contracted with MCM Consulting Group, Inc. (MCM), of State College, Pennsylvania, to conduct the study and develop the toolkit. The project was divided into two phases: phase I was for the study of the current issues facing EMS agencies in the five counties; phase II was the development of the tools for the "toolkit". A steering committee comprised of county commissioners and staff members from both CCAP and PADCED worked with MCM during this project. The steering committee consisted of:

Kevin Boozel, Butler County Commissioner
Mark Hamilton, Tioga County Commissioner
Brian Hoffman, Sullivan County Commissioner
Wayne Nothstein, Carbon County Commissioner
Melissa Gates, CCAP
Lisa Schaefer, CCAP
Tom Stark, CCAP
Yvonne Lemelle, PADCED

MCM established bi-monthly meetings with the steering committee to keep them apprised of project progress as well as to solicit feedback. A day-long collaboration meeting with the steering committee and MCM project staff was held in August of 2022. During the course of phase II of the project, steering committee commissioners held meetings in three of the project counties (Butler, Sullivan, and

Tioga), with the goal of providing an overview of the project and, more importantly, to solicit feedback from the EMS response agencies and municipalities within each of the respective counties (above what was gathered during the study phase of the project). In addition, a presentation of the project was given at the fall CCAP conference on November 21, 2022.

The comments received at the on-site meetings echoed the information that was gathered in the survey portion of the study (described in more detail in the next section, with the full report contained in Appendix A) – that financial stability, staffing (recruitment and retention), and training and certification were the biggest issues facing the EMS system in Pennsylvania. The study found, as previous ones have, that the EMS crisis is very real, the current system is not sustainable, and action must be taken sooner rather than later for the sake of public safety. Not only are EMS agencies closing, but many of those that are still in service are taking longer to respond to calls. It is more and more common for first-due EMS agencies to fail within their designated response time. Tioga County reported that they had recorded a fifty-one percent failure to respond rate of their first-due agencies. The survey results showed that there have been occasions where a call for service has had to go to the fifth-due agency before there was a response. It was noted anecdotally that calls have been known to go to the eighth-due agency in some counties.

The survey report and the toolkit (found in Appendices A and B respectively) go into detail on the issues found and the considerations/ recommendations offered to address them. Below are summations of each issue.

1.a. Financial Stability

The provision of emergency medical services is not cheap. One agency noted that to provide one basic life support (BLS) ambulance with staff 24/7 for one year costs $450,000.00, and to provide one (ALS) ambulance with staff 24/7 for one year costs $650,000.00. The information gathered during this project, both through the study and with direct conversations with EMS providers, makes it very clear that the EMS agencies that are managing to stay open are operating on razor-thin budget margins.

This could very well be a consequence of the current private insurance and Medicare reimbursement programs. Private industry can increase wages because they can increase prices. However, without outside (county or municipal support), EMS agencies are limited to Medicare/Medicaid/insurance reimbursement rates which are fixed and have not been updated to keep pace with inflation and the rising costs that EMS agencies face.

Private industry can increase wages because they can increase prices. However, without outside (county or municipal support), EMS agencies are limited to Medicare/Medicaid/insurance reimbursement rates which are fixed.

"If these rates were to increase, we could pay staff a competitive wage and would have more people interested. No one wants to work a tough job where they make less than if they worked for a gas station. If the state can fix reimbursement, they will fix the shortage of ambulances." – survey respondent.

For example, one EMS agency at one of the county meetings advised that they had calculated, on average, their agency loses $120.00 every time one of their ambulances responds to a call, as their costs are not fully covered by insurance payments. Any industry that continues to lose money will not survive. Aside

"It is absurd that reimbursements are not covering the basic costs to keep ambulances staffed and operational." – survey respondent.

from reimbursement rates not keeping pace with rising costs, payments are only made if the patient is transported. If the patient refuses transport, there is no payment made to the agency. If a patient transport is made and payment is issued, the payment goes to the insured (patient), who is then responsible to pay the EMS agency directly. That does not always happen.

During this project EMS agencies noted a lack of support, financial and otherwise, from their host municipalities. The Pennsylvania Borough and Township codes are clear in that the provision of emergency services, including EMS, is the responsibility of Boroughs and Townships. However, the codes are not clear about how the services are to be provided. In the study that was conducted, fifty-

one percent of the responding agencies advised that they receive no financial or other support from their host municipalities.

"…each municipality needs to pay a basic fee for having the service exactly how they pay for police or garbage pickup. Either directly from municipal funds or by a "membership" fee that gets imposed on each resident." – survey respondent.

One comment that was heard several times during the course of this project, is that municipalities do not contribute financially to EMS agencies because EMS services can bill for their services while fire departments and police departments cannot. However, it is apparent that billing alone is not sufficient to keep EMS agencies solvent and operating, and, in turn, fulfilling the requirements of boroughs and townships to provide EMS service.

On the other hand, it was found that some municipalities are very involved in the provision of EMS within their region. Just one example is that of Manor Township in Armstrong County. The township will pay for the paramedic training for potential hires in turn for a three-year commitment to the municipal EMS system. Pike County, in north-eastern Pennsylvania, conducted their own study of EMS service within the county in 2018, and found that the EMS situation within the county was dire. The county then undertook an atypical approach to tackling the issue.

The county developed an Emergency Medical Services Matching Grant program, which doubles a municipalities annual EMS contribution, up to a maximum of 2 mils. This equates to approximately $2.2 million dollars on a countywide scale. The program was started in January of 2022 and has shown significant results since its implementation. One of largest improvements seen in the county was the dramatic decrease in response times by EMS agencies, with one township seeing an average response time of 19 minutes less than before the program was instituted. That municipality had discontinued EMS service in 2009 and was relying on EMS from other townships, leading to increased response times. With the county's match and COVID relief funds, the township was able pay for a service to be based and operate within its boundaries again.

In addition to the financial commitment by the county, an EMT scholarship program that is funded by local donors has been successful in providing trained personnel for the county EMS agencies.
Pike County Commissioner Matthew Osterberg, in a statement to the Tri-County Independent, noted that it (the program) is not to imply that the state legislature should not make some changes on insurance and Medicare reimbursements paid to ambulance companies, but those changes are not easy. *"We did not have time to sit here and wait for Harrisburg or Washington to come up with a solution, because (it is) our residents who are going to suffer for them to make a decision — if they make a decision."* For information about the Pike County EMS Matching Grant program, contact the Pike County commissioners at 570-360-3172.

1.b. Training and Certification

It was found during the course of the project that potential trainees were having difficulty finding training classes that were either conveniently located or offered at times when they were available. The Pennsylvania Department of Health, Bureau of EMS advised that there is currently a shortage of EMS instructors, compounding the problem of course availability. It was also noted by some EMS instructors that classes being offered are not being filled and in some instances are being cancelled due to lack of participation. There is a disconnect between the class offerings and the potential participants that needs to be addressed.

"The majority of our members work outside the county during the day and have limited time for training or calls on weekdays, evenings, and nights. Our ambulance is routinely diverted away from smaller hospitals to bigger facilities farther away, increasing our transport time by at least forty minutes round trip." – survey respondent.

There were several comments given during the survey portion of the project that expressed concern that the requirement of National Registry training and certification testing was making it difficult for students achieve certification. However, the PA Bureau of EMS noted that Pennsylvania is a member of a twenty-one state EMS compact that offers advantages such as mutual aid, and it is working to share data for reciprocity. The adoption of National Registry certification is required for participation in the compact. Pennsylvania would lose the benefits of membership in the compact if the National Registry requirement was dropped.

1.c. Staffing/Recruitment and Retention

EMS agencies are having trouble finding and keeping qualified personnel. There is no doubt that working in EMS is a stressful job and requires a certain type of demeanor and aptitude. Some agencies are finding that once a qualified candidate is hired and trained, they are leaving for better-paying positions with other agencies.

"There are no new applicants in the area that are willing to volunteer their services." – survey respondent

Over seventy-seven percent of the survey respondents indicated that recruitment and retention is an issue for their agency. However, over seventy-one percent of the respondents indicated that their agency did not have a recruitment program in place, and over fifty-seven percent of respondents indicated that they do not have some type of retention program in place. The toolkit provides information about and examples of both recruitment and retention programs.

"EMS does not have the financial resources to improve pay for our current employees. Employee retention issues are almost all related to people leaving EMS for other higher paying jobs. Coupled with lack of new providers in the field, we are drowning quick." – survey respondent.

2. The Study

For the first phase of the project, MCM reviewed past studies relating to EMS operations and issues in Pennsylvania, as well as current and pending legislation as it relates to EMS in Pennsylvania. A survey was developed to not only gather information on the EMS agencies composition, but also to inquire about the top issues facing each agency. The survey was reviewed with, and received approval from, the steering committee. An on-line version was created and the link to the study was sent to contacts at each of the licensed EMS (ALS/BLS/QRS) agencies within the five study counties in March of 2022. Responses were collected through May of 2022, and there was a return rate to the survey of 52%.

The feedback gathered from the survey identified several issues that were a common theme among the respondents: financial stability, staffing levels, training requirements, and recruitment and retention of staff (both paid and volunteer). These issues are similar to the issues identified in the previous studies noted in the executive summary – reinforcing the fact that the situation for EMS agencies in Pennsylvania is not improving, and is, in fact in some cases, getting worse. The report on the findings of the survey as well as the raw survey data is found in Appendix A of this report. Questions that identify individual agencies or respondents to the survey have been left out as the invitations offered that no identifying data from the responses would be published.

3. The Toolkit

3.a. Focus Groups

With the results of the survey, it was determined that the toolkit would concentrate on four "Focus Groups" on which to base the tools: **Training and Certification; Recruitment and Retention; Financial Stability; and Delivery Methods**. For each focus group, research was done into the underlying reason for the issues, as well as what, if any, programs, best practices, or legislative initiatives existed to address each area. Tools were then developed. Some of the tools were found to be applicable to more than one focus group. Each tool was reviewed and assigned a code as to whether it was applicable to rural, suburban, or urban areas, and paid or volunteer agencies. The tools were further broken down into types and areas, depending on what the research revealed.

3.b. Types

The types that were developed are:

- Model Program/Best Practices
- Recommendations
- Sample Forms
- Business and Administration

3.c. Areas

The areas that were developed for the tools are:

- Training and Certification – Accessibility
- Training and Certification – Availability
- Recruitment and Retention – High School EMS Programs
- Recruitment and Retention - Financial Incentives
- Recruitment and Retention – Live-in Programs
- Recruitment and Retention – Reference Articles
- Recruitment and Retention – Retention Incentives
- Recruitment and Retention – Recruiting on Social Media
- Recruitment and Retention/Financial Stability - Tax Credits and Financial Incentives
- Financial Stability - Business and Administration
- Financial Stability – Billing
- Financial Stability – Budget
- Financial Stability - Business and Administration – Personnel
- Financial Stability – Grants
- Delivery Methods – Community Lifeline – Paramedicine
- Delivery Methods - Community Lifeline – Primary Care Providers and Services
- Delivery Methods – Cross-Trained Responders
- Delivery Methods - Emergency Triage, Treat, and Transport (ET3)
- Delivery Methods - Intermediate Advanced Life Support
- Delivery Methods – Regionalization

Each "tool" in the toolkit has an introduction that summarizes what is addressed in the tool; a discussion of the issue being addressed; and recommendations and/or considerations for counties/municipalities/EMS agencies. Some of the tools have attachments that provide sample forms or describe model programs/best practices. The toolkit can be found in Appendix B of this report.

4. Summary

The EMS crisis is real, and it is getting worse. Action must be taken to avoid further risk to public safety. It was found during the study that there appear to be several agencies/departments/associations/ governmental bodies that are trying to tackle this crisis. However, the undertakings are not being coordinated, and duplication of efforts was found. It would be more effective if one agency was to take the lead in addressing the issues creating this crisis. Until that happens, it is important for EMS agencies to present a united front in working for change. They must be united in their goals as well as their discussions with their associated fire departments (if applicable), municipal, county, and state elected officials. Municipalities and counties, likewise, must be cohesive in their goals discussions with state, and if necessary, federal officials. What can counties do? - It is recommended that counties review the information provided in this report and toolkit. For quick reference, the recommendations/ considerations from each tool are listed in the next section. County officials could then host meetings with their EMS agencies and municipalities to discuss the specific issues that need to be addressed within their counties. Local issues and needs should be outlined, and goals set. If there are local township and/or borough associations within a county, county officials could impress upon the municipal officials their legislative responsibility to provide for EMS service within their municipalities and encourage them to take a leading role in addressing any local issues. County officials can also work through CCAP to educate state leaders on the crisis, as well as push for legislative action to address the crisis as appropriate.

5. County Considerations/Recommendations

The section below lists the considerations and recommendations from the toolkit that are specific to counties. County officials are encouraged to read through all the tools outlined in the toolkit as there is discussion on each issue. This section is for quick reference only. The considerations/ recommendations that deal with legislative change are highlighted in yellow.

a. Training and Certification – Training Availability

County Considerations/Recommendations:

- Encourage the PA Department of Health to develop a diversification plan to incorporate additional paramedic program training locations throughout the Commonwealth:
    - Develop partnerships with community colleges, hospitals, and health networks to increase the available locations of program offerings.

- Maintain partnerships with training facilities by incentivizing the organizations through direct and indirect funding.

- Encourage the PA Department of Health to consider the recommendations presented below.

  - Increase oversight of the training facilities course offerings, coordinating program starting dates that provide for choice in location for students.

  - Include a graphical representation of the state with links identifying paramedic program training facilities as a component of the Department of Health website.

  - Maintain the EMS Registry page with current and future program offerings.

b. <u>Recruitment and Retention – High School EMS Programs</u>

County Considerations/Recommendations:

- Assist EMS agencies in outreach to schools if needed.
- Provide assistance on integrating EMS training into curriculums if needed.

c. <u>Recruitment and Retention - Financial Incentives</u>

County Considerations/Recommendations:

- Facilitate discussions with EMS agencies to determine if a per-call incentive program would be feasible in terms of record keeping and funding.
- Consider funding a program with county funds.
- Petition Congress to provide federal tax exemptions for any state or local benefits that volunteers receive.
- Consider paying for EMS training and certification for new hires in return for a service commitment.

d. <u>Recruitment and Retention - Retention Incentives</u>

County Considerations/Recommendations:

- Offer to assist EMS agencies with consultation from county human resources staff members.
- Support EMS agencies as much as possible with development of retention tools if

needed.

- Provide financial support for retention programs to the extent possible.

e. Recruitment and Retention - Recruiting on Social Media

County Considerations/Recommendations:

- Support EMS agencies as appropriate in the development of recruitment media.
- Provide web-hosting services if capable.
- Allow recruitment videos or other appropriate media to be placed on county web sites.
- Encourage community television stations or other local media outlets to provide services at little or no cost to EMS agencies.

f. Recruitment and Retention/Financial Stability - Tax Credits and Financial Incentives

County Considerations/Recommendations:

- Municipalities and counties could assist EMS agencies with grant funding research and application. See the Financial Stability - Grants toolkit more detailed information.
- Municipalities and counties may consider adopting the tax programs and credit incentives outlined above.
- Municipalities and counties could petition the General Assembly for an increase in the millage that is allowed to be allocated for EMS support under Title 8, Pa.C.S § 1302.
- Municipalities and counties could provide clerical staff for the printing, mailing and processing of subscription services or fund drives.
- Municipalities and counties could assist agencies in developing and marketing a donation drive from public and private partnerships to generate donation funding or other resources for EMS agencies.

g. Financial Stability - Business and Administration

County Considerations/Recommendations:

- Counties could ensure that municipalities are aware of their responsibility to provide EMS services to their municipality and provide suggestions to address the funding of EMS service.
- Counties could provide guidance to municipalities on supporting EMS agency financial functions with municipal or county financial personnel.
- Counties could provide a database of funding opportunities for municipalities and EMS agencies.

- County fiscal and grant writing staff can assist agencies and municipalities with the sourcing of, securing, writing, and applying for grants.
- Counties and/or municipalities can share budgeting programs with EMS agencies.
- Counties could work with EMS agencies on community outreach for recruitment of volunteers, pro-bono, or in-kind services, sharing of budgeting forms or programs.
- Counties could request and support changes in legislation to increase reimbursement rates from Medicare and Medicaid programs.
- Counties could consider tax programs that would benefit EMS agencies.
- Municipalities could support EMS agencies with municipal finance personnel or grant writers.

h. Financial Stability - Billing

County Considerations/Recommendations:

- Counties could support municipalities and/or EMS agencies by providing information on access to third party billing vendors.
- Counties could support outreach to community partners who have insurance and/or medical billing experience.
- Counties could provide billing services at reduced or no cost.

i. Financial Stability - Budget

County Considerations/Recommendations:

- Counties could provide guidance to municipalities on supporting EMS agency financial functions with municipal or county financial personnel.
- Counties could provide a database of funding opportunities for municipalities and EMS agencies, and assistance with grant writing.
- Counties could share budgeting programs with municipalities and EMS agencies.

j. Financial Stability - Business and Administration – Billing

County Considerations/Recommendations:

- Counties could petition the state legislature and federal government for increased Medicare/Medicaid reimbursement rates.

- Counties could petition the governing or regulating agencies for reasonable reimbursement for treatment without transport.
- Counties could request that insurance payments for go directly to EMS agencies as opposed to the insured.
- Counties could support the municipalities and agencies in their respective counties by assisting with coordination and negotiation of a group purchase of licensing for software, or third-party billing.
- Counties could support EMS agencies with financial personnel to provide billing services.
- Counties could provide EMS agencies with assistance with third-party billing expenses.

k. Financial Stability - Business and Administration – Personnel

County Considerations/Recommendations:

- Support EMS agency business and financial management with county financial staff.
- Include EMS agency personnel in financial training programs offered to county staff.
- Support recruitment of business and financial management volunteers or staff using county websites, social media, or other outreach efforts.

l. Financial Stability – Grants

County Considerations/Recommendations:

- Counties could support municipalities and/or EMS agencies by allowing assistance from county grant writers (if available) for grant applications.
- Counties could assist with grant research by municipalities and/or EMS agencies.

m. Delivery Methods - Community Lifeline – Paramedics

County Considerations/Recommendations:

- Counties could work with municipalities to assess the need for community paramedicine locally.
- Determine the cost-benefit of decreased transports versus implementing and maintaining paramedicine programs.

n. Delivery Methods - Community Lifeline – Primary Care Providers and Services

County Considerations/Recommendations:

- Counties and municipalities could assist EMS agencies and local health organizations in coordination of community campaigns.

o. Delivery Methods - Cross-Trained Responders

County Considerations/Recommendations:

- Counties and municipalities could consider programs that provide cross-trained responders within fire, law enforcement, and municipal/county employees.
- Counties and municipalities could research funding methods for support of cross-trained responder programs.

p. Delivery Methods - Emergency Triage, Treat, and Transport (ET3)

County Considerations/Recommendations:

- Research the ET3 model.
- Facilitate discussion with local EMS agencies, hospitals and regional medical command about the ET3 model and whether it may be an effective model for local services.

q. Delivery Methods - Intermediate Advanced Life Support

County Considerations/Recommendations:

Steps for implementation of IALS:

- Step one – meetings: EMS Council, PSAP, select group of EMS providers, and the regional medical director should have meetings to discuss the process and protocols.
- Step two – create a new unit: Creation of the unit type Intermediate (IALS) needs to be used in computer aided dispatch (CAD) and on the radio. (Lancaster County made the decision to dispatch IALS as a basic life support (BLS) following the BLS protocols, as this unit type did not fit into their three-tier dispatching model.)
- Step three – final decision on protocols and new incident types: The regional medical director should work with the EMS council on the translation of changes into the protocols for dispatch to an IALS level of care. From this guideline the PSAP should create new incident types. (Lancaster County had a three-tiered response levels: Class 1 [ALS], Class 2 [BLS light/siren], and Class 3 [BLS no lights/siren]. Lancaster PSAP created a Class 1i for IALS.) Examples:

    Allergic reaction Class 1

Allergic reaction Class 1i (the new incident type)
Allergic Reaction Class 2
Allergic Reaction Class 3

- Step four – work behind the scenes: (Lancaster County PSAP had to update the response zones with the new level of response. A decision was made to keep the IALS response to their home agency calls only. For ALS calls in the county; Class 1 ALS calls go to the closest ALS unit and if a BLS unit is physically closer, they are dispatched as well to render aid until the ALS unit arrives.)
- Step five – time to test: (Lancaster County began with one agency to make sure the software was mapping to the correct incident types. The CAD recommended the correct resource based on the incident type. CAD also reacted properly if the home IALS was not available. This testing was run for up to two months before expanding to other agencies.)

r. Delivery Methods – Regionalization/Authority Model

County Considerations/Recommendations:

- Counties could act as a moderator to facilitate the discussions between EMS agencies and municipalities.
- A mechanism for continued discussions between municipalities and agencies could be created and fostered.
- Counties and Municipalities could consider contributing funds to the start-up of regional EMS services.
- Regionalization should be inclusive of all EMS agencies, exploring and utilizing the best practices of each service to benefit patient outcome.
- Counties could support the introduction of a bill similar to Senate Bill 698 (creation of emergency services authorities) and encourage its passing.

APPENDIX A

EMS STUDY
SURVEY RESULTS
REPORT

EMS STUDY

SURVEY RESULTS

Prepared for:

PA Department of Economic and Community Development & The County Commissioners Association of Pennsylvania

Prepared by:

MCM Consulting Group, Inc.

328 Innovation Blvd, Suite 210,
State College, PA 16801

July 2022

Executive Summary

The County Commissioners Association of Pennsylvania (CCAP), working with the Pennsylvania Department of Community and Economic Development (DCED), has understood that emergency medical services (EMS) in Pennsylvania have been facing a host of issues that is impacting the level of service that those agencies can provide. Financial concerns, staffing shortages, and a host of other issues are causing delayed responses, curtailment of services, and even forcing some services to shutter their doors. Some calls for EMS service are not fulfilled until the seventh or eighth agency is dispatched. This can mean that there are times when an ambulance is not responding to a call for service until forty-five minutes (or longer) after the initial dispatch. Knowing that the issues EMS agencies are facing impact all citizens in every county in the commonwealth, CCAP has been working to find either remedies or practices that can help alleviate these issues.

As part of this effort, CCAP partnered with the PA DCED and contracted with MCM Consulting Group, Inc. (MCM), of State College, Pennsylvania to study the current issues facing EMS agencies in five counties in two regions of the commonwealth. The five counties that were designated to be in the study were: Butler, Lycoming, Mercer, Sullivan, and Tioga Counties. The goal of this multi-phase project is not only to identify the issues that EMS is facing in Pennsylvania, but to also develop toolkits of strategies and practices that would be available to help counties assist EMS agencies in confronting and surmounting the current issues they are facing.

The steering committee for the project included county commissioners and representatives from CCAP and DCED, and consisted of:

Yvonne Lemelle, DCED
Melissa Gates, CCAP
Lisa Schaefer, CCAP
Tom Stark, CCAP
Mark Hamilton, Tioga County Commissioner
Kevin Boozel, Butler County Commissioner
Wayne Nothstein, Carbon County Commissioner

The MCM project team consisted of:

Kristy Agosti, President/CEO
Jonathan Hansen, Project Manager and Staff Supervisor
Mike Rearick, Director of Operations
Jeffery Steiert, Project Manager and Staff Supervisor
Valerie Zents, Consultant

Adam Leister, Consultant
Daniel Becker, Consultant

A project schedule was created, outlining the project deliverables and project meetings. The project team agreed to hold meetings on the first and third Fridays of each month for the first few months of phase I of the project, and then to meet monthly or as needed for the remainder of phase I. These recurring meetings reviewed project work and reported on the progress of the deliverables.

MCM completed the following tasks:

- Reviewed past studies relating to EMS operations and issues in Pennsylvania
- Reviewed current and pending legislation as it relates to EMS in Pennsylvania
- Developed a survey that was designed to not only gather information on the EMS agencies composition, but also to inquire about the top issues facing each agency
- Reviewed the survey questions with, and received approval from, the steering committee
- Sent out a link to the on-line survey to contacts at each of the licensed EMS (ALS/BLS/QRS) agencies within the study counties
- Tabulated the results of the survey
- Analyzed the results of the survey to determine the top issues facing EMS in Pennsylvania

The feedback gathered from the survey identified several issues that were a common theme among the respondents: financial stability, staffing levels, training requirements, and recruitment and retention of staff (both paid and volunteer).

The responses will continue to be analyzed will be used in part to help develop the toolkits for phase II of the project.

Survey Process

The survey that was developed contained sixty-six questions. An electronic version of the survey was created in Survey Monkey© on-line for use by the respondents. An introductory email, notifying the licensed EMS agencies in the study counties of the study and pending invitation to complete the survey, was sent by CCAP on March 3, 2022. Invitations to complete the survey online were sent by MCM to eighty-four agencies in the study counties. The invitations were sent to the agencies that were licensed by the Pennsylvania Department of Health to provide either quick response service (QRS), basic life support (BLS), and advanced life support (ALS). Follow up invitations to those agencies that had not yet completed the survey were sent on March 28, 2022, and May 8, 2022. A return rate to the survey of 52% of the invited agencies was realized.

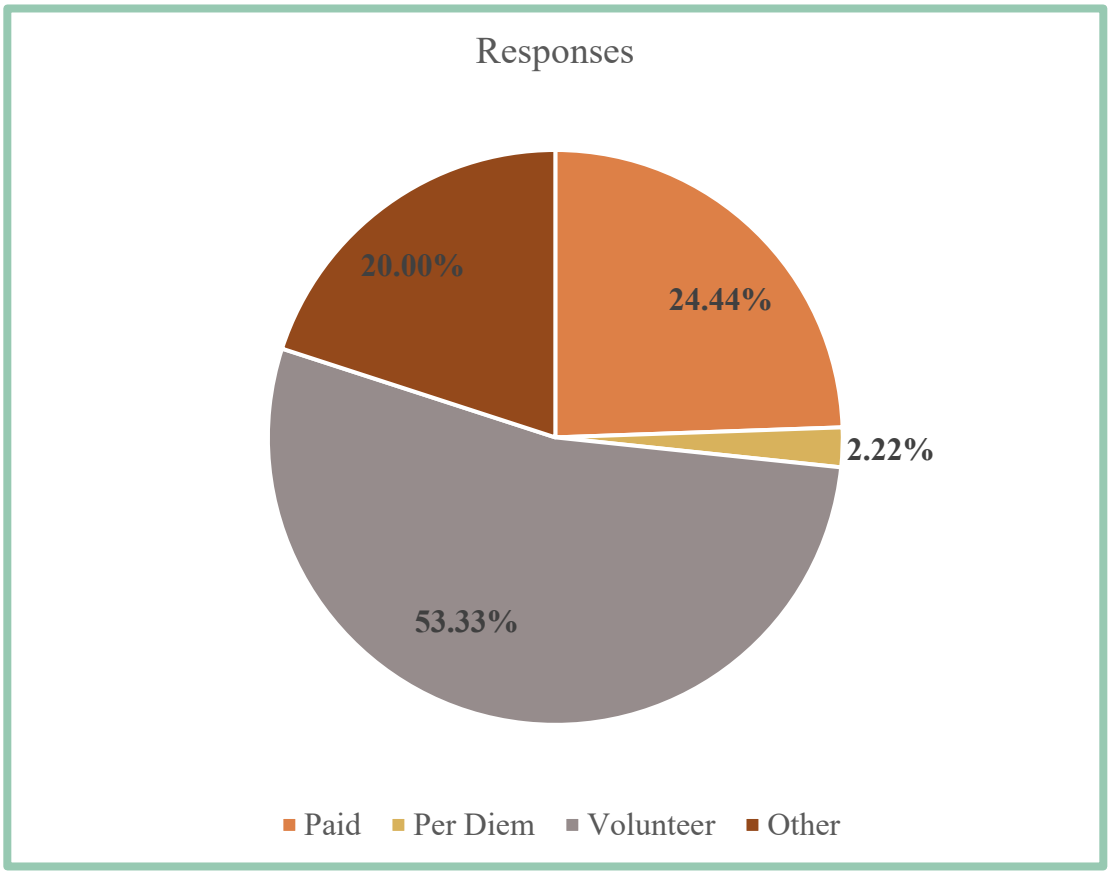
Highlights of the results from each section of the needs assessment survey will be presented in this portion of the report. Summary statistics in graph form are included where applicable. Not all of the survey questions are listed below. The complete electronic survey and responses are included as Appendix A. *Questions that identify individual agencies or respondents to the survey have been left out as the invitations offered that no identifying data from the responses would be published.*

Survey Section 1: Agency and Contact Information

This section of the survey was designed to capture contact information for the agency, and whether the agency was staffed by paid, volunteer or paid per diem staff, and whether it was non-profit or for-profit.

Survey Question 5

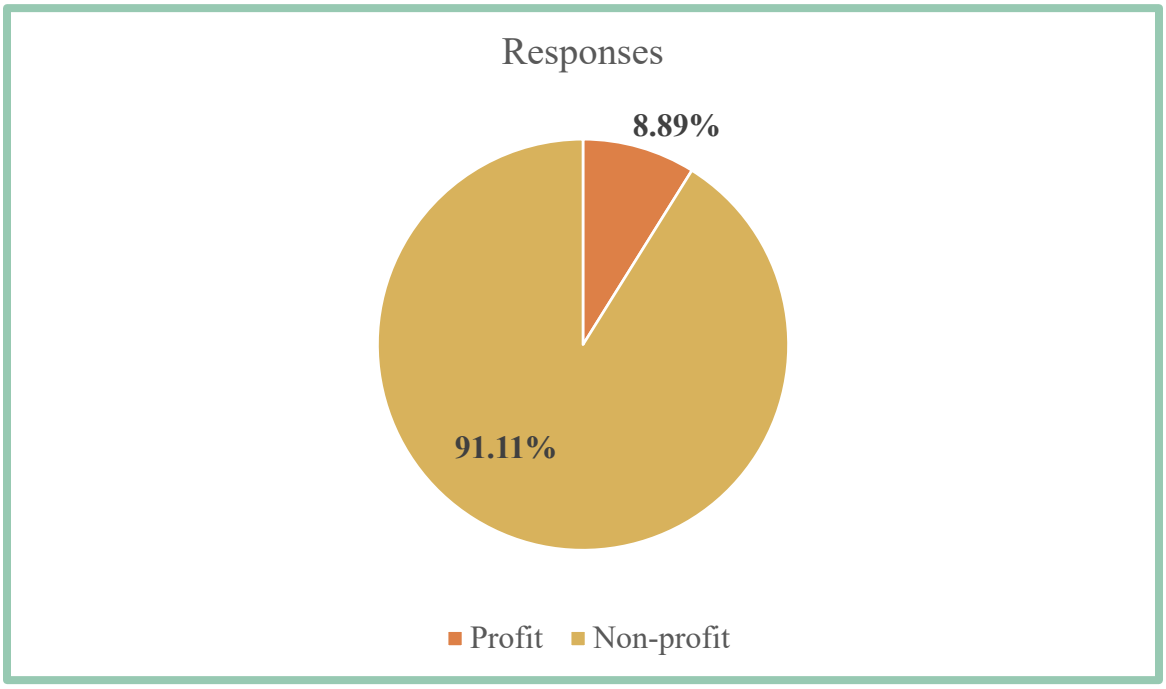
Is your EMS station staffed by paid, volunteer or per diem staff?



As seen above in the chart, the majority of the EMS agencies in the study counties are staffed by volunteers. Roughly twenty-five percent of the agencies are staffed solely by paid personnel.

Survey Question 6

Is your agency for profit or non-profit?



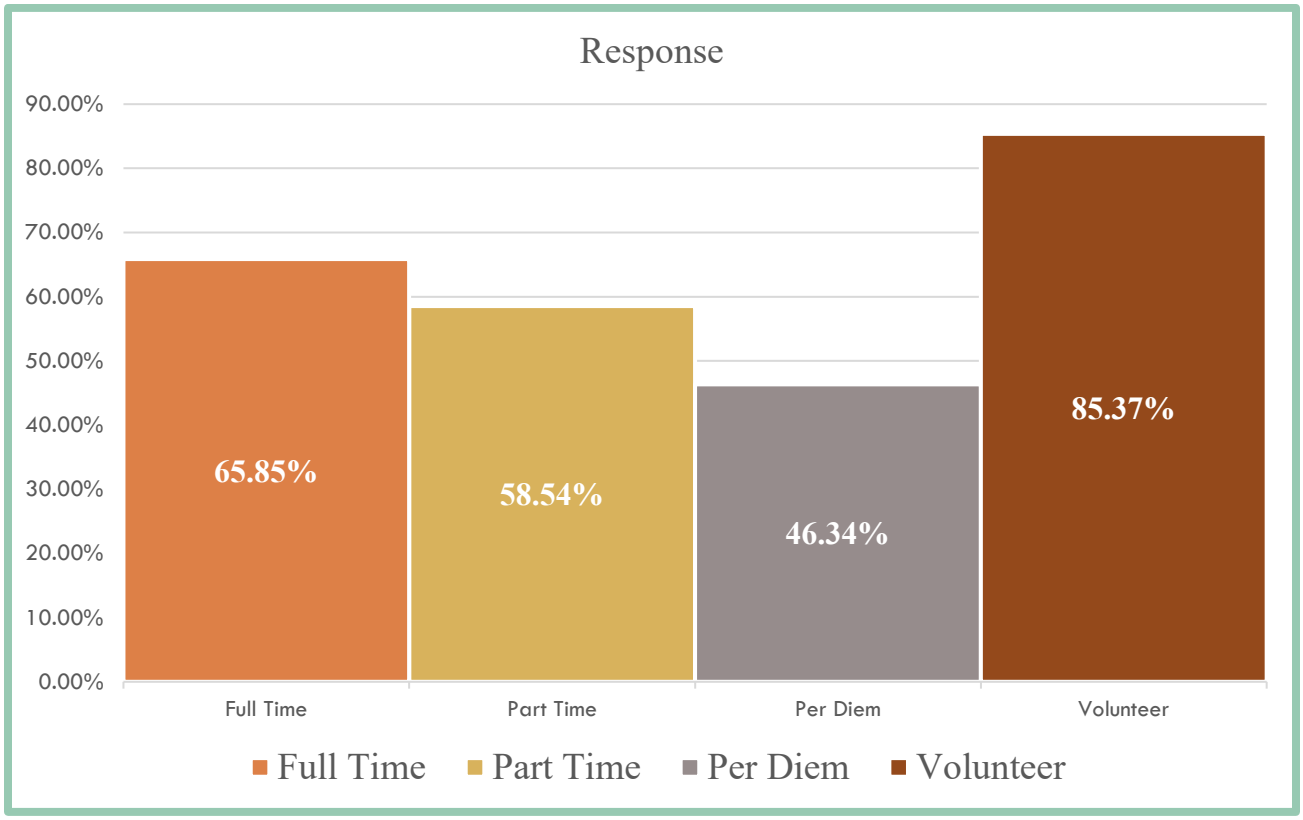
Over ninety percent of the EMS agencies in the study counties are non-profit.

Survey Section 2: Staffing

This section of the survey was designed to ascertain information on staffing levels, crew schedules and placement of units.

Survey Question 7

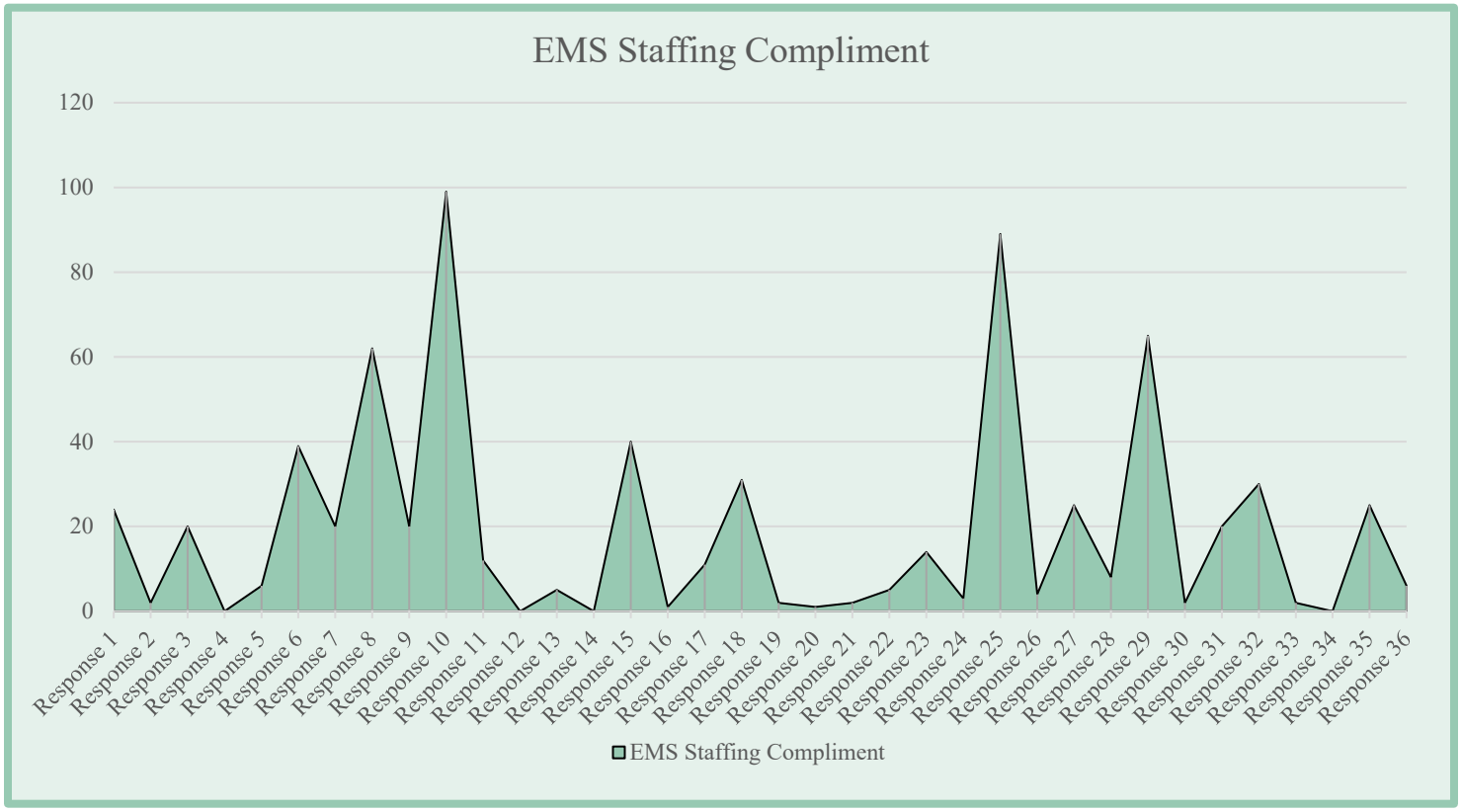
What are your current EMS staffing levels for full time, part time, per diem, and volunteer staffing?



The responses to this question indicate that the largest number of EMS staff members are volunteers, followed by full-time paid, part-time paid and per diem staff respectively.

Survey Question 8

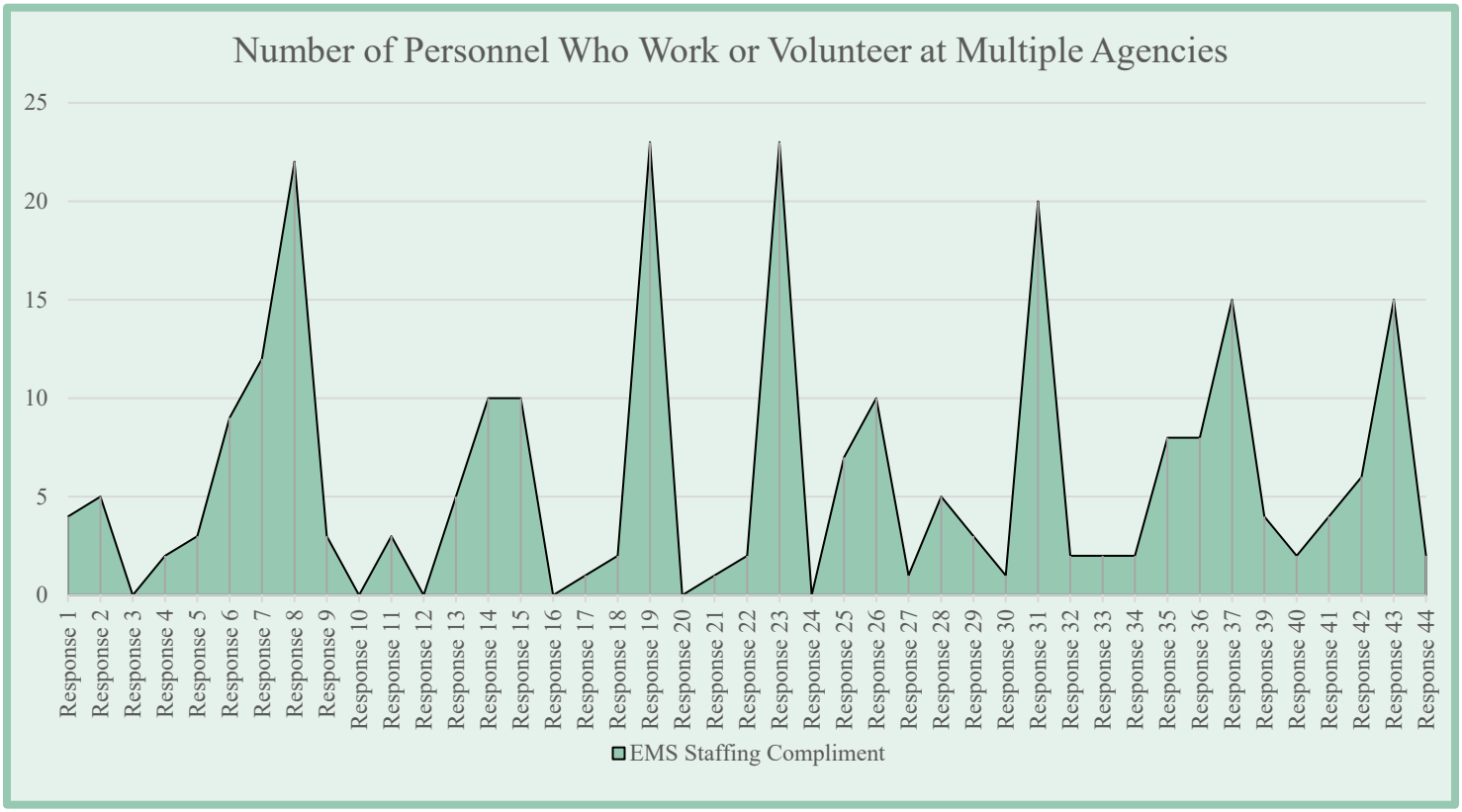
What is your full EMS staffing compliment?



The average total number of staff per agency that responded to the survey was twenty staff members. However, forty-two percent of the respondents answered that their agency has six or fewer staff members.

Survey Question 9

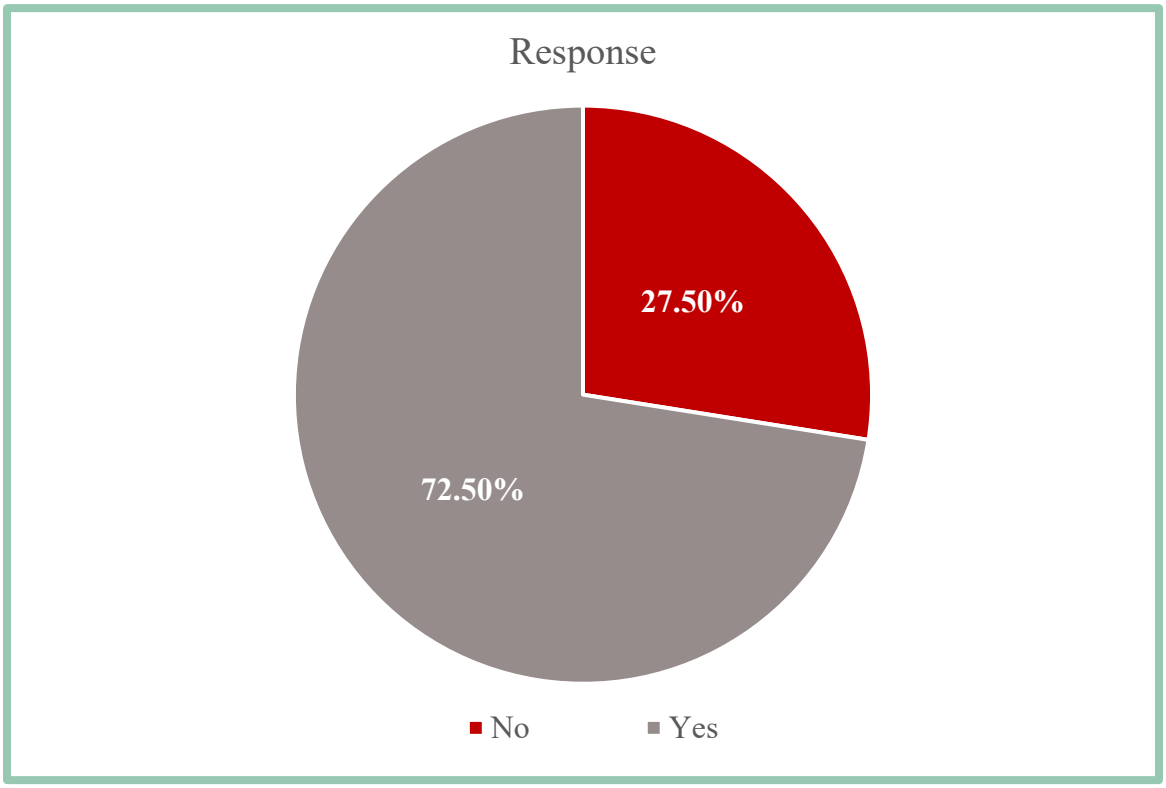
How many of your personnel work/volunteer at multiple agencies?



Almost all of the respondents answered that some or all of their staff members either work or volunteer at other EMS agencies. This highlights the potential for staff burn-out and the need for additional trained EMS personnel.

Survey Question 10

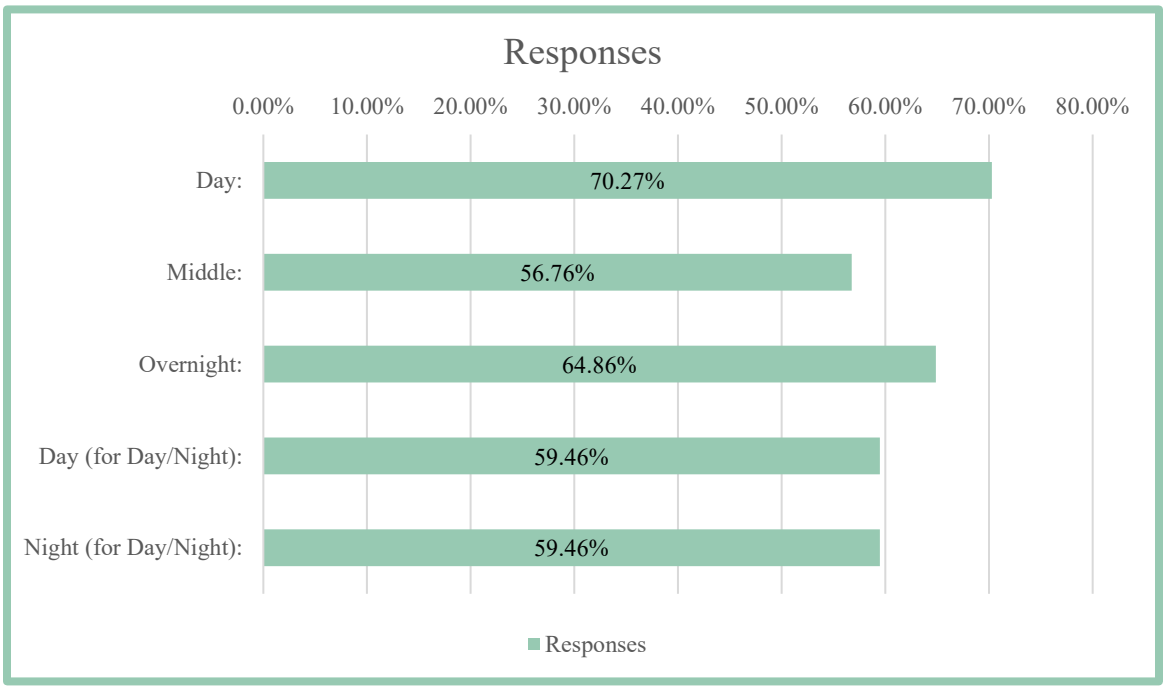
Does your EMS agency have an established staffing plan (24-hour coverage or another schedule)?



Just over twenty-five percent of the responding agencies do not have an established staffing plan, relying solely on staff to respond if available. Complete data from this section can be found in Appendix A.

Survey Question 11

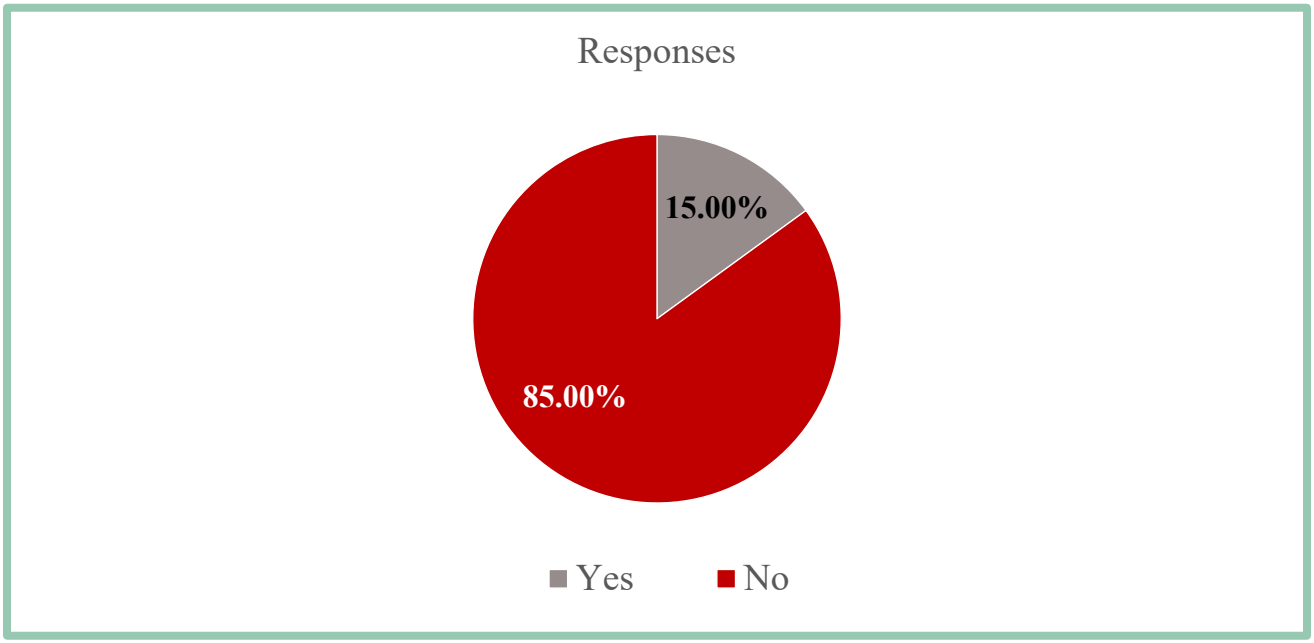
How many ALS/BLS/QRS crews are scheduled: Day/Middle/Overnight -or- Day/Night?



The responses to this question indicate that agencies are staffed more during the day than the night. It also indicates that there are agencies that do not have staffing twenty-four

Survey Question 12

Question Twelve: Do any of your scheduled crews overlap schedules?



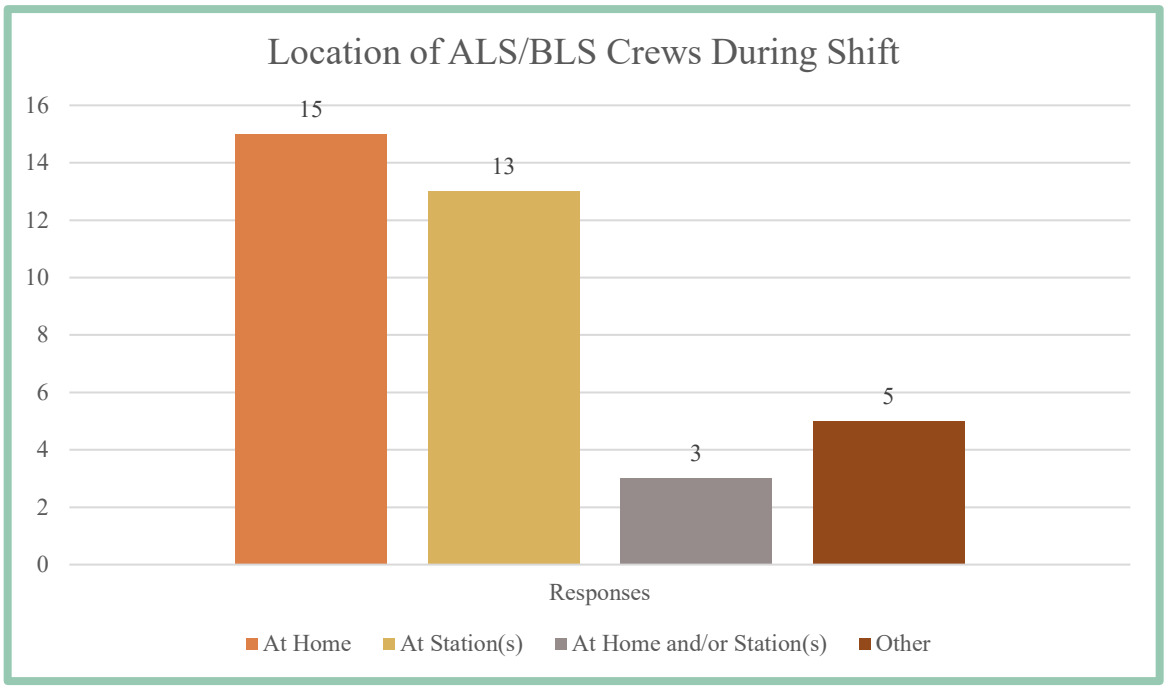
The responses to this question indicate that most agencies do not have shifts that overlap. If there is more than one operational period with crews assigned, most agencies have one crew ending their shift when the next crew/operational period starts.

Survey Section 3: Unit Placement and "Move-Ups"

This section of the survey was designed to gather information on where agencies place their staff and units, how they are moved as circumstances dictate (for example: during times of high call volume), and how back up crews and additional staff are mobilized.

Survey Question 13

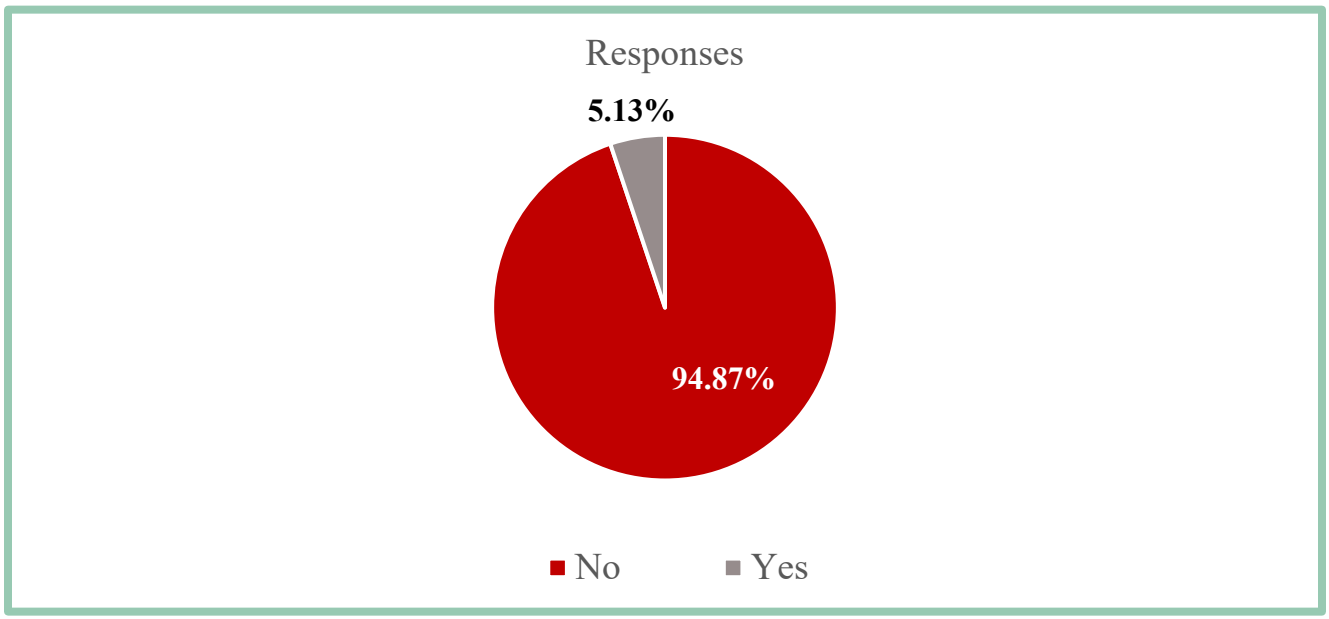
Where would your ALS/BLS scheduled crews be located during shifts?



The responses to this question indicate that the majority of agencies do not regularly have crews on station.

Survey Question 14

Do you have automation built into unit placement, and if yes, under what circumstances does your unit move, and to what locations?



Only five percent of the responding agencies had any type of automation built into their unit placement.

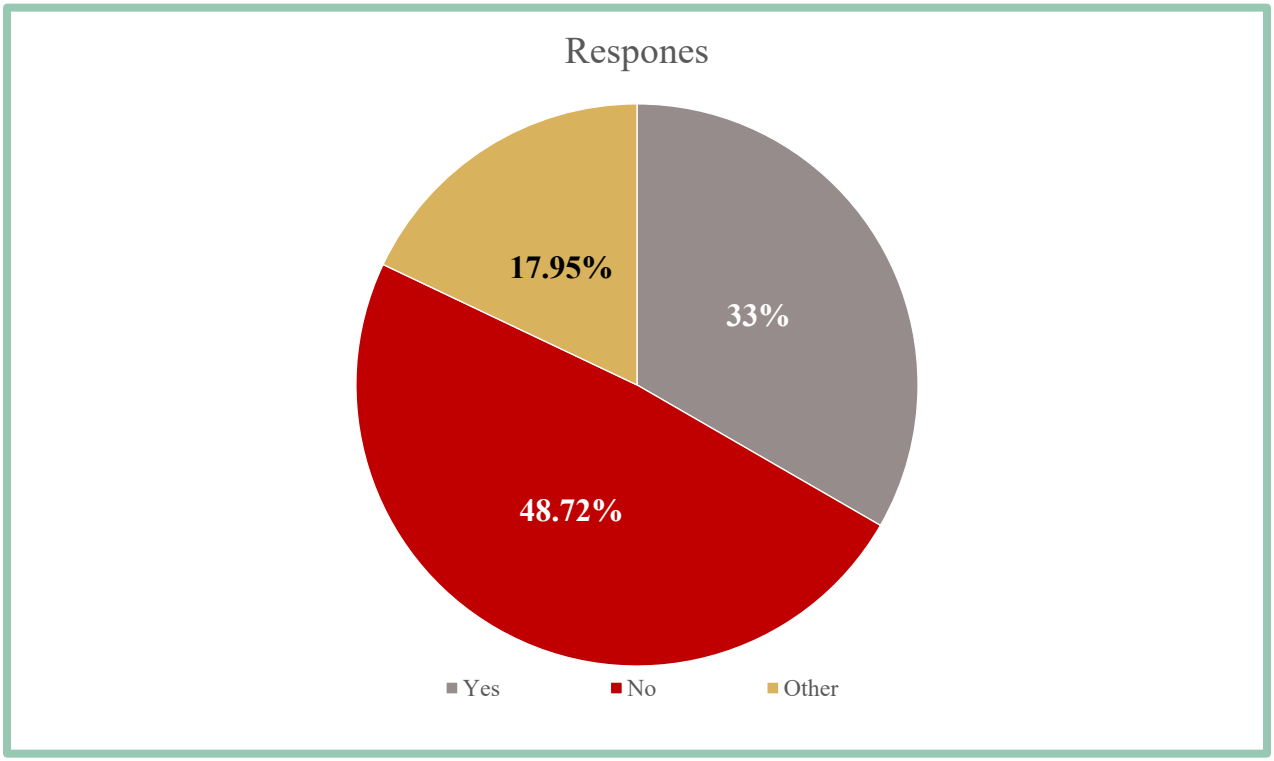
Survey Question 15

What triggers a unit moving back to the central location?

Question fifteen was answered only by the two services which indicated that automation was built into unit placement for their service. The two responses indicated that return to a central location was triggered either by command, or when another unit entered the service area.

Survey Question 16

Do any of your crews participate in “move-ups” to other station locations during times of high call volume across the county/region?



Only a third of respondents advised that their units move to other locations during times of high call volume. Most agencies only move their units to another location when requested. This may be a prime contributor to extended response times that are being seen throughout the study area.

Survey Section 4: Primary Coverage Area

This section of the survey was developed to determine the primary and second-due coverage areas for each of the responding agencies. The section consisted of eleven questions and asked the agencies to select the municipality(ies) that had chosen them to provide primary coverage. All of the municipalities in each county were offered as selections. Agencies were also asked to identify the municipalities that they provide second-due coverage for. The complete breakdown of respondents' answers can be found in Appendix A.

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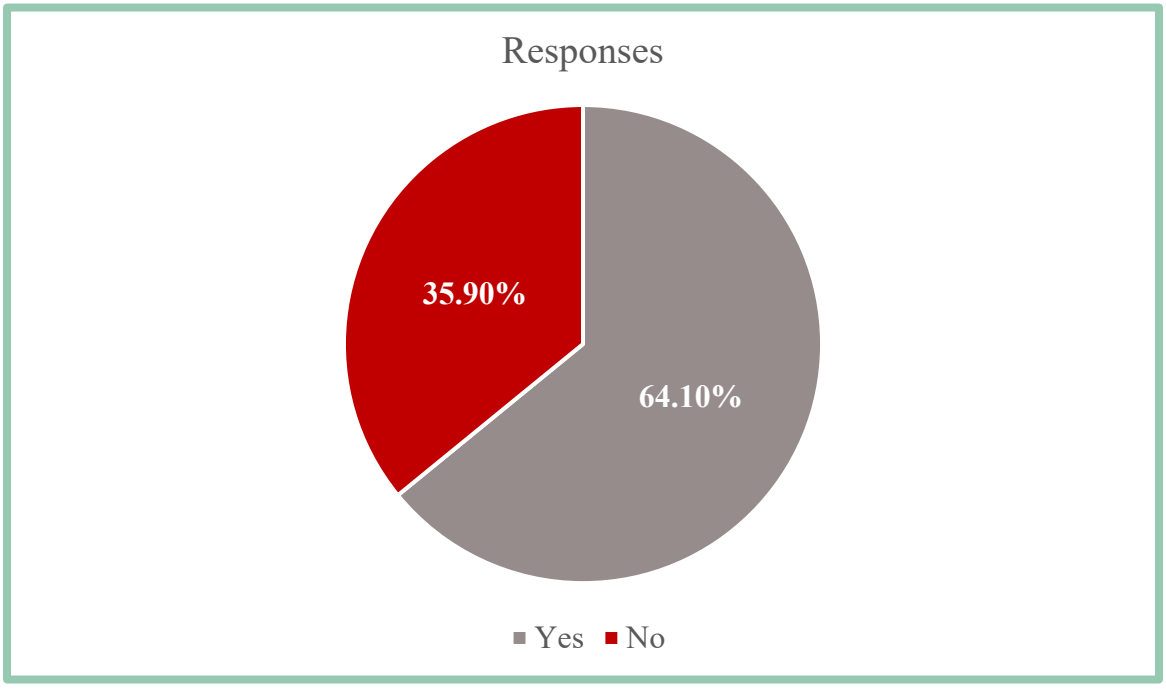
Survey Section 5: Public Education

This section of the survey was designed to gather information on whether responding agencies are providing any type of public education in regard to EMS and public safety. This information was requested in order to determine if public education may impact proper use of EMS services, staffing and public welfare.

Survey Question 29

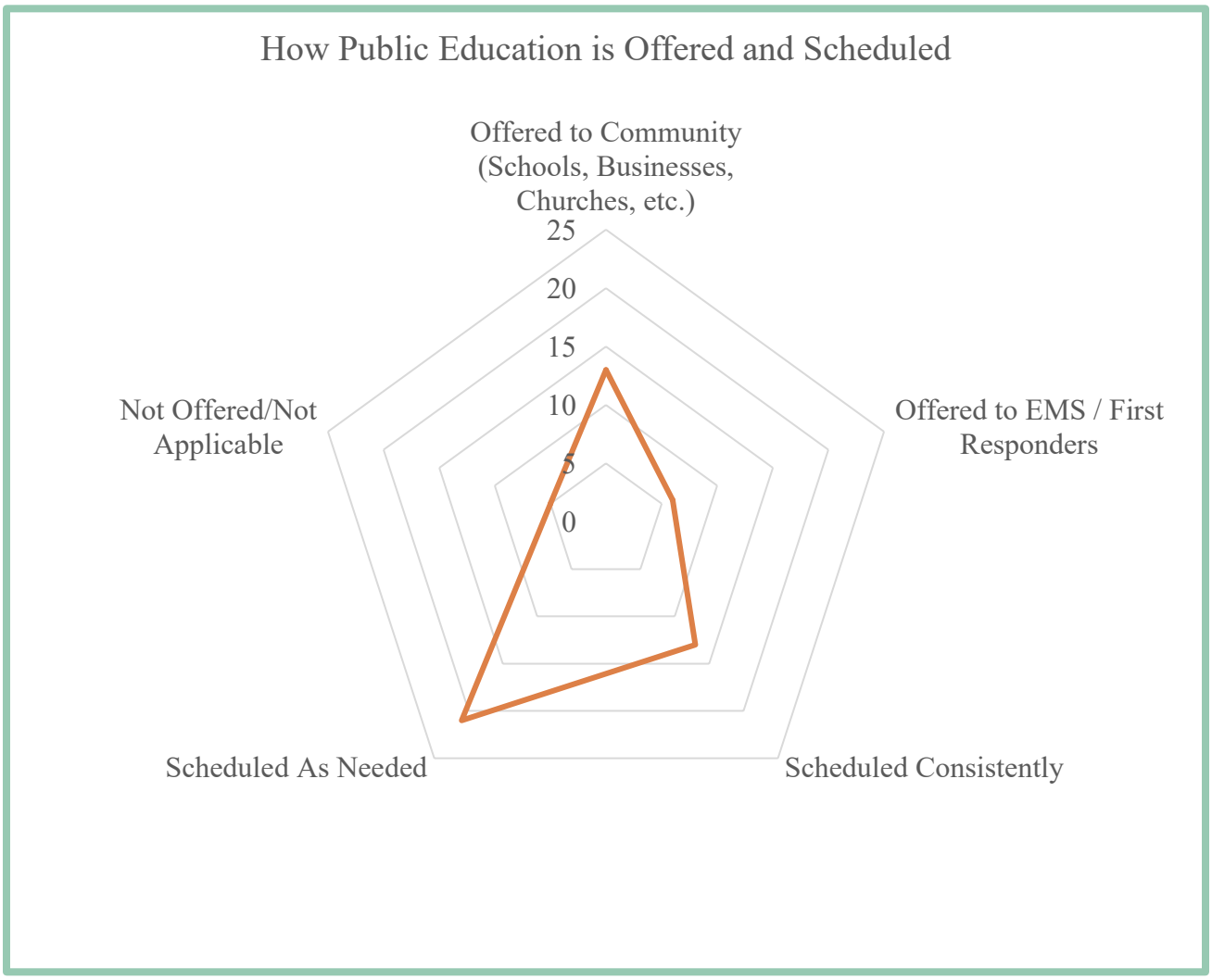
Do you have a public education program in place (First Aid/CPR/EMT/etc.)?



Almost two-thirds of the agencies that responded to this survey have some type of public education program in place.

Question 30

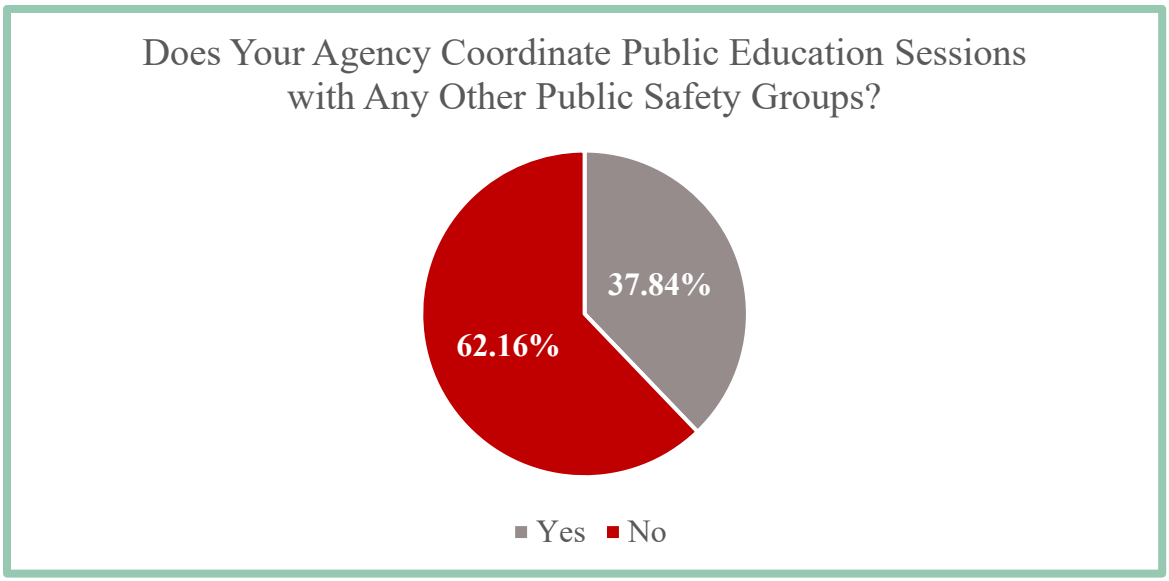
How often do you provide public education and to what audiences?



The responses to this question indicate that the agencies that have a public education program in place, do not have regularly scheduled offerings. Rather, the majority schedule them as they feel they are needed or have some opportunity/occasion to offer them.

Survey Question 31

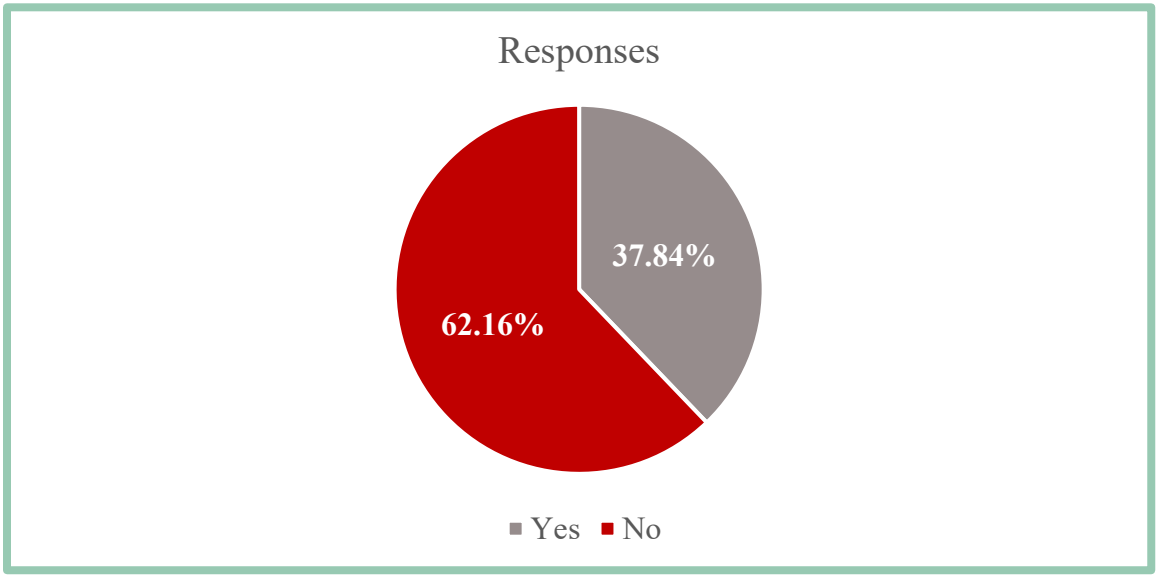
Do you coordinate your public education sessions with any other public safety groups?



The majority of the agencies that offer public education programs do not offer them in conjunction with other agencies.

Question 32

Does your public education material include when to call and what constitutes an emergency?



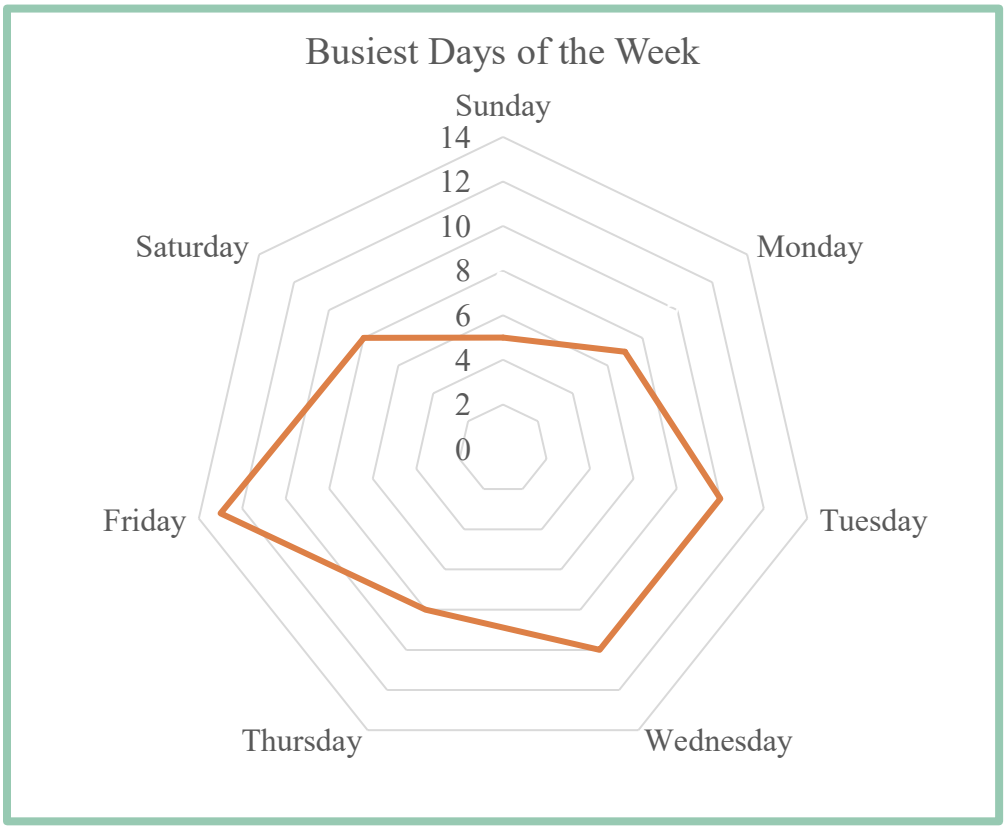
The majority of public education programs offered by the responding agencies do not cover when it is appropriate to utilize EMS services and 911. Increased education of this type could possibly cut down on unnecessary or “nuisance” calls.

Survey Section 6: Busy Times, Length of Calls and Dispatch

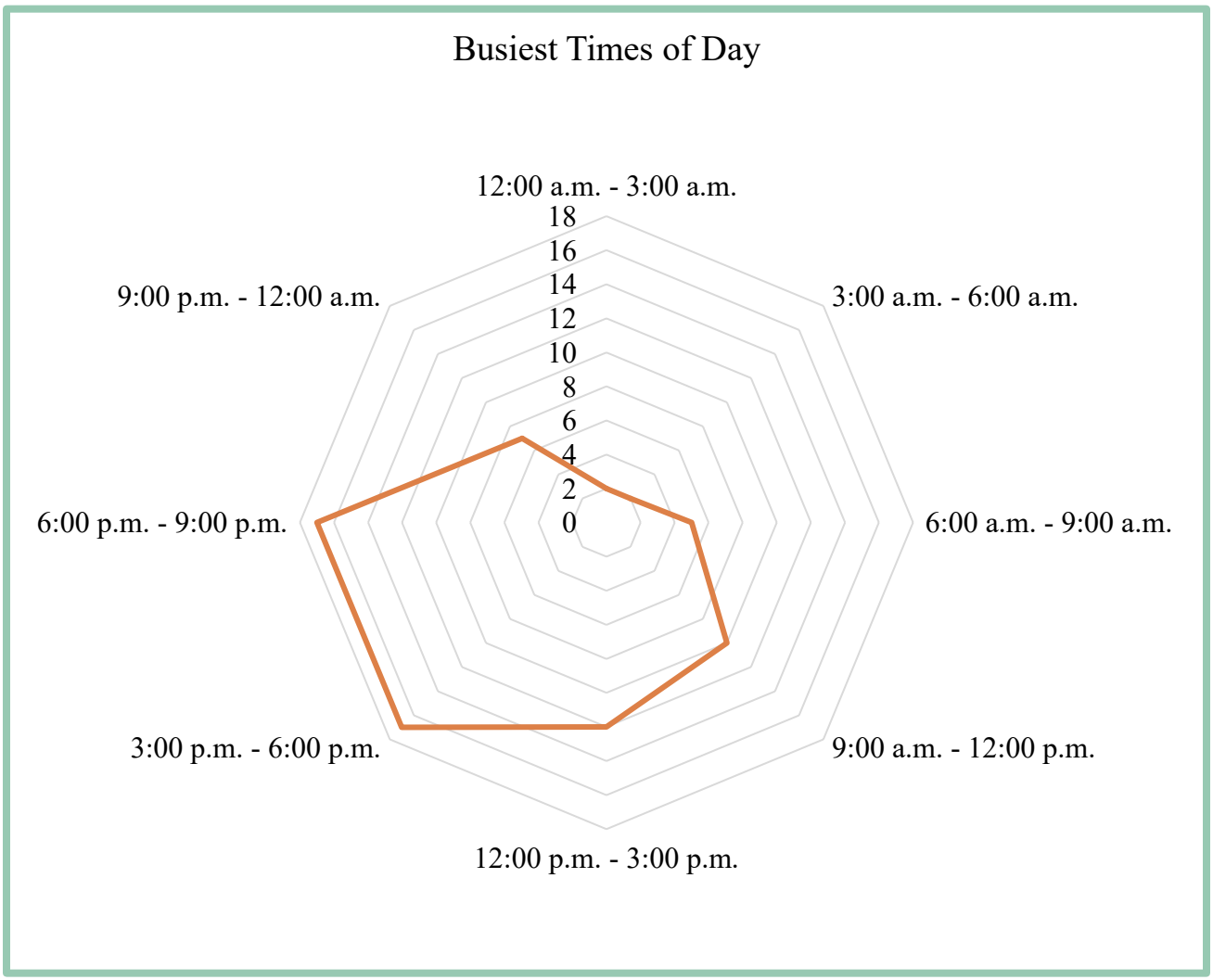
This section of the survey was developed to gather information on when the agencies are busiest, staffing during these busy times, and length of calls. This information will be analyzed to see if staffing and unit location are being optimized for the most efficient responses.

Survey Question 33

What are the busiest times of the day and busiest day(s) of the week for your agency?



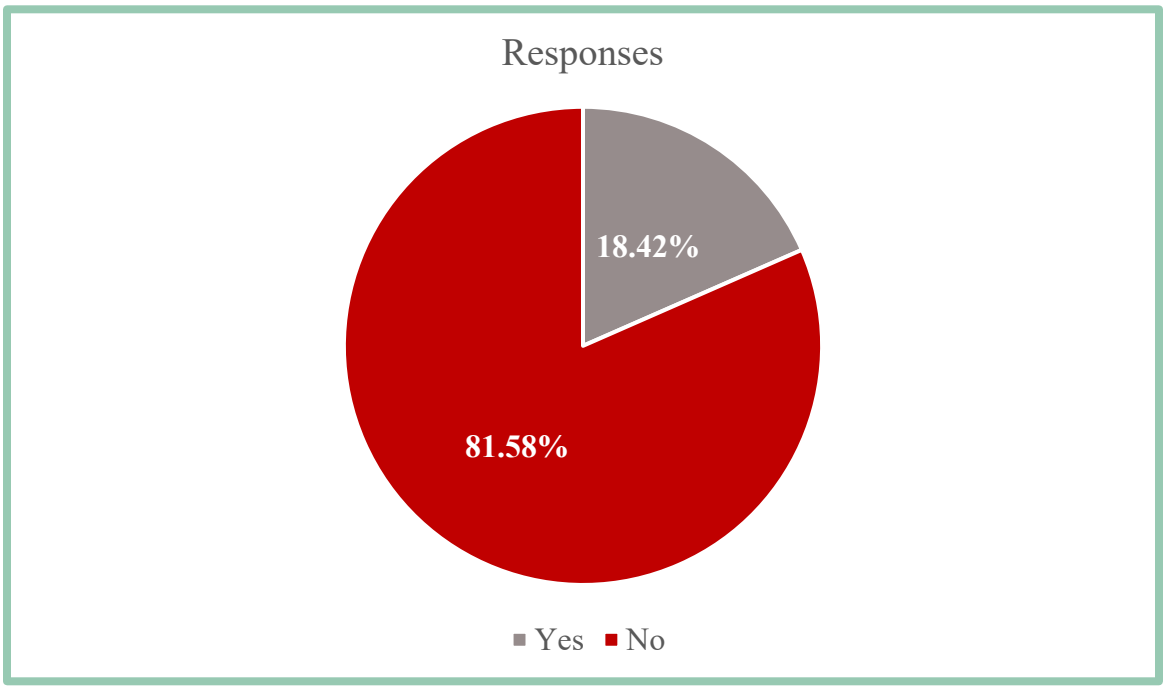
The busiest days of the week for the agencies that responded are weekdays, with Friday being the busiest. This is difficulty for volunteer agencies that have less staff available during workdays.



The busiest times of the day for the agencies that responded were afternoons into the evenings, from 12:00 noon until 9:00 p.m.

Survey Question 34

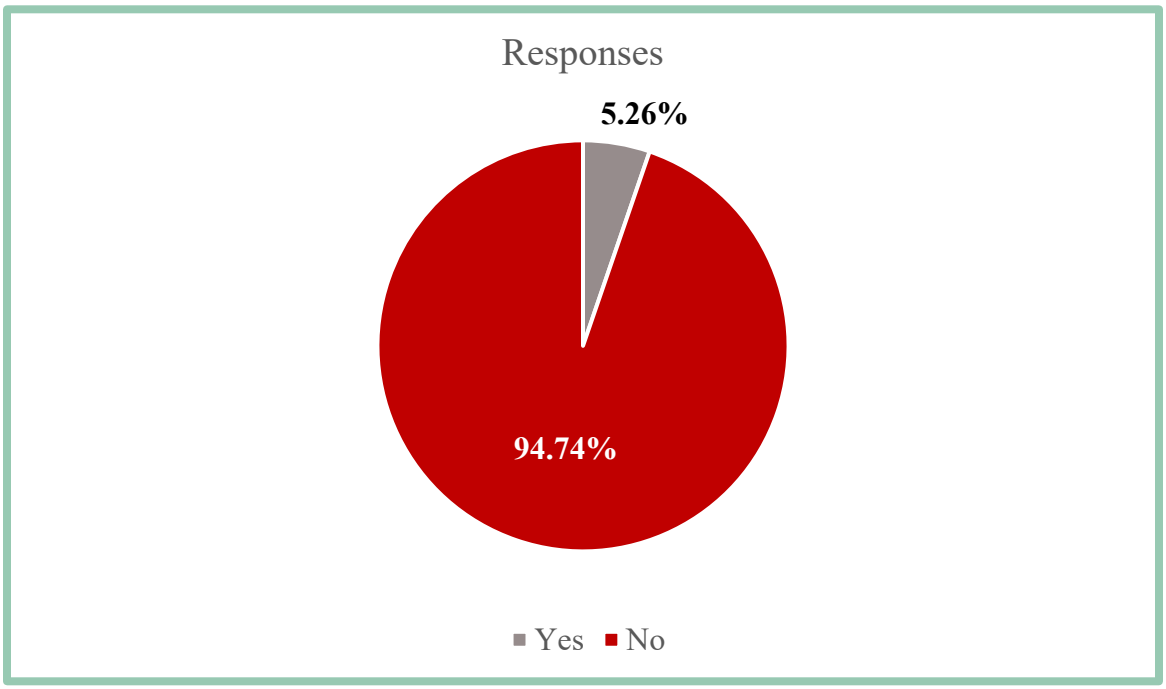
Do you up-staff for these known busy times?



Even though the agencies know when their busiest times of the day are, few of them schedule additional staff to cover these times.

Survey Question 35

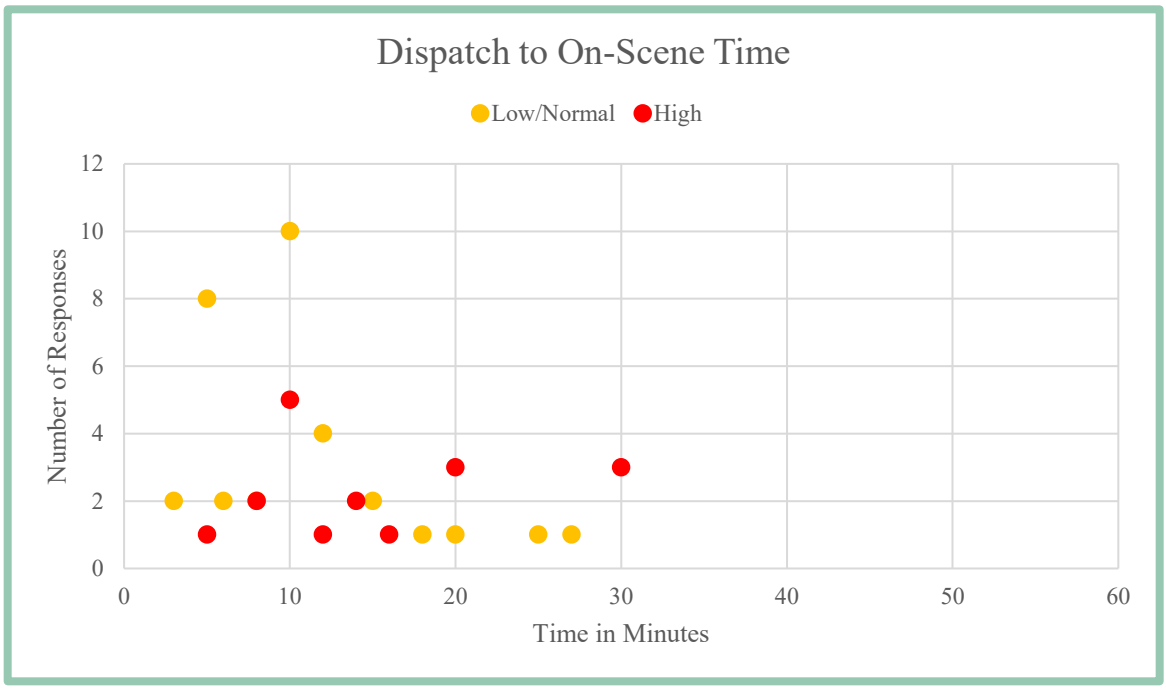
Has your organization ever participated in a busy study, or heat map, predictive call location study?

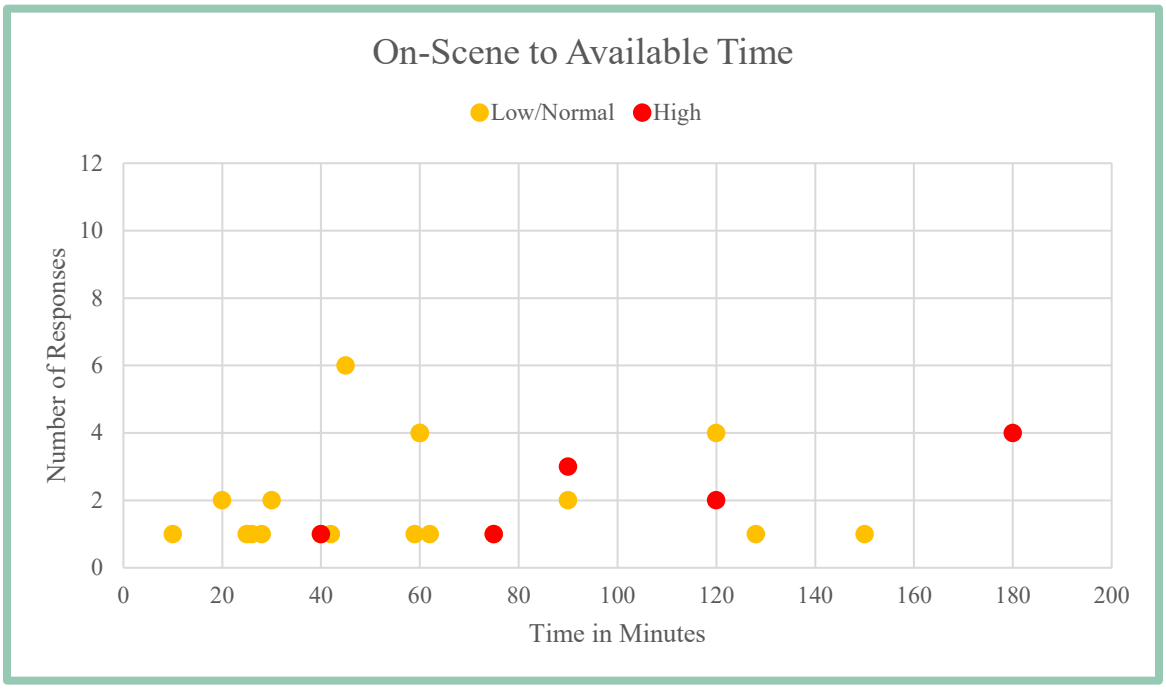


The responses to this question indicate that the responding agencies could possibly be more responsive to staffing needs during busy times. Busy studies and heat-mapping could assist them in more efficient staffing and unit placement.

Survey Question 37

How much time does a “typical” call take from dispatch to on-scene, and from on-scene to available?

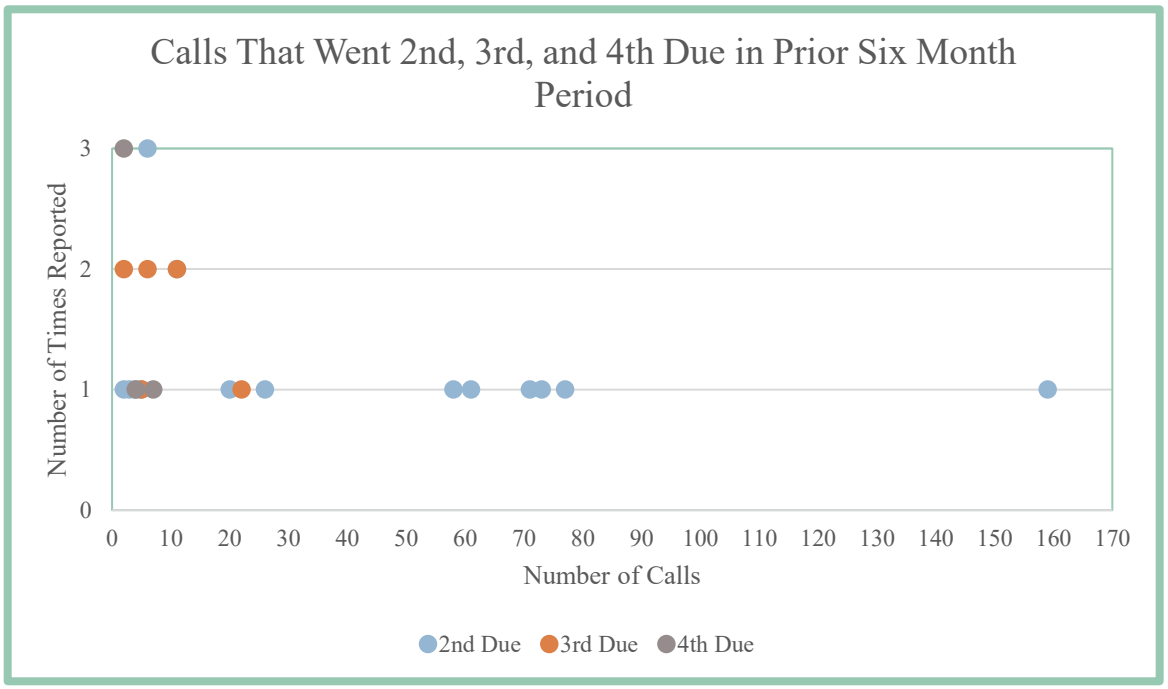




These responses vary based on location, as would be expected. A call in a more rural area would be expected to take longer, with extended distances to incident scenes and hospitals. The “low” and “high” values are reported for services that stated a durational range, and “normal” points are plotted for those services which stated a single time in response to the prompts. For example, those services which reported a dispatch to on-scene time of five to ten minutes are reflected in the tables above with a “low/normal” of five and a “high” of ten, while those services which reported a dispatch to on-scene time of twenty minutes were plotted with a “low/normal” of twenty and no “high” value.

Survey Question 38

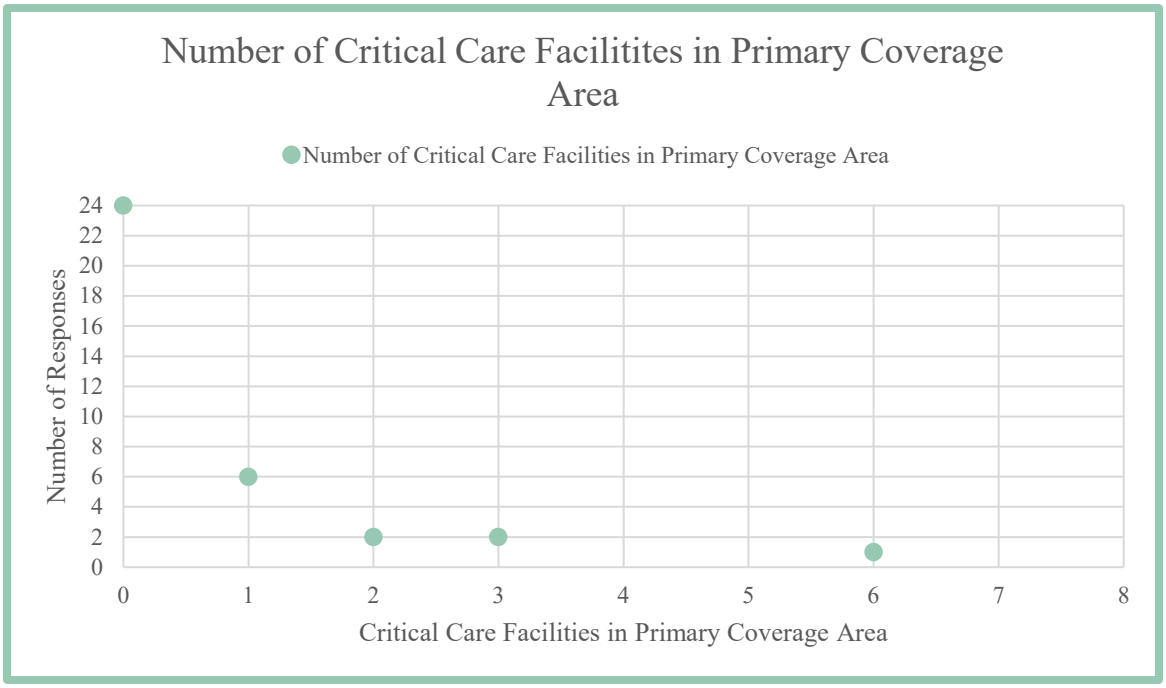
In the past 6 months, how often have the calls in your primary territory gone:



Respondents acknowledge that some calls in their first due territories have not been covered until the 4th or 5th due agency is dispatched. This delay in response is most likely attributed to lack of staffing and can contribute to a negative outcome for the patient.

Survey Question 40

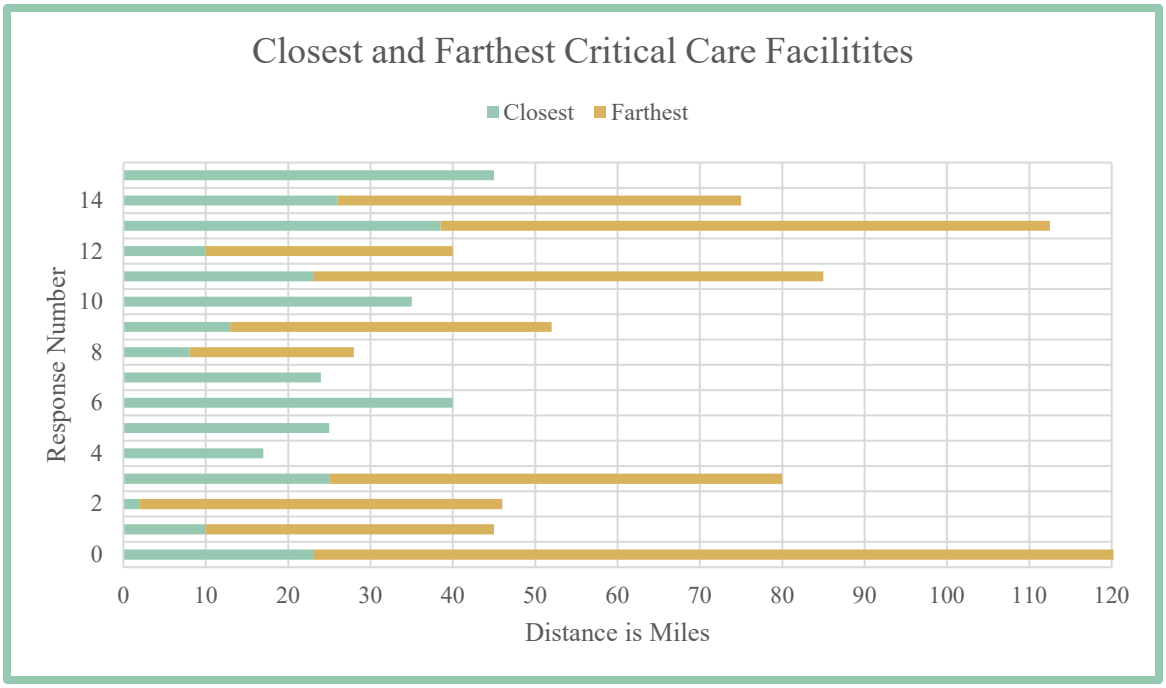
How many critical care facilities exist in your primary coverage area?



The responses to this question indicate that the majority of the respondent agencies have to travel outside of their primary coverage to transport a patient. As shown in the responses to question 41, this sometimes leads to units having to transport patients over 80 or even 100 miles to get to the closest critical care facility. These long travel distances are a factor in the availability of the units in their primary territory, necessitating additional coverage in the primary territory, whether by additional units of the agency or other agencies that are pulled from outside territories.

Survey Question 41

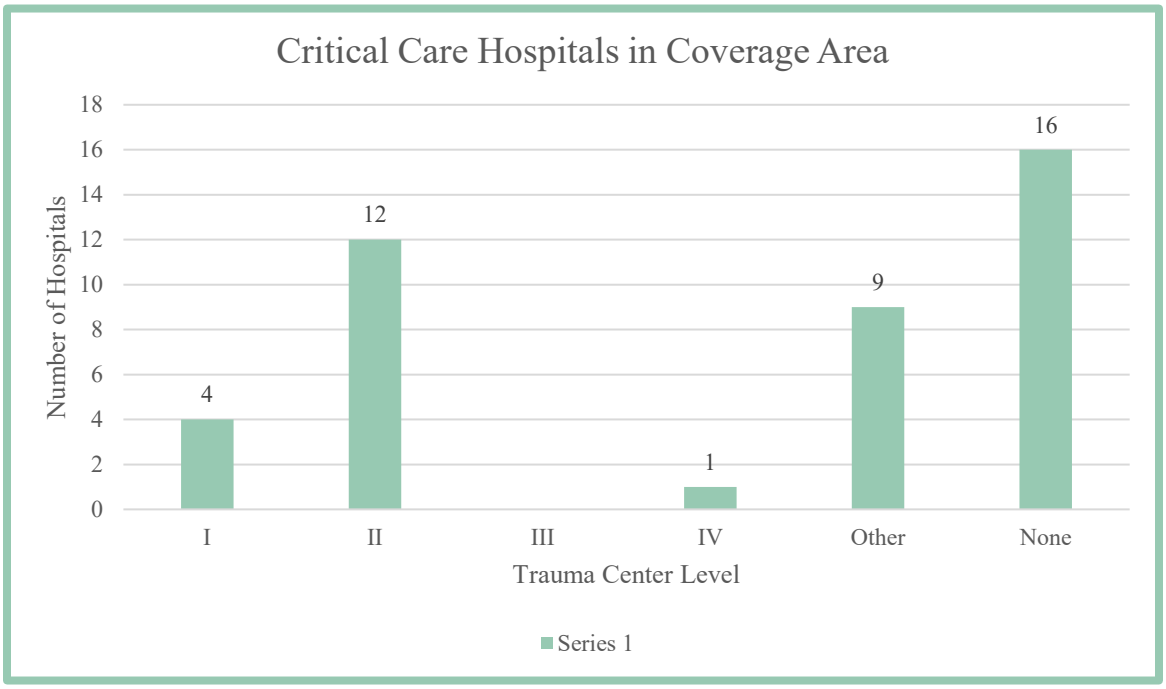
What is the closest/farthest critical care facility to which you transport patients?



Lack of a close, appropriate facility adds to the length of time that a call will take, tying up the unit and crew for an extended amount of time. This and other factors are certainly contributing to calls for service not being able to be covered by the first, second, or even third due agencies. The figure above represents the closest and farthest reported critical care facilities according to individual responders. Those who reported only a single distance are not represented with a "farthest" bar on the chart above. Further, responses with a non-quantifiable reported distance were omitted from the chart and can be viewed in Appendix A of this report.

Survey Question 42

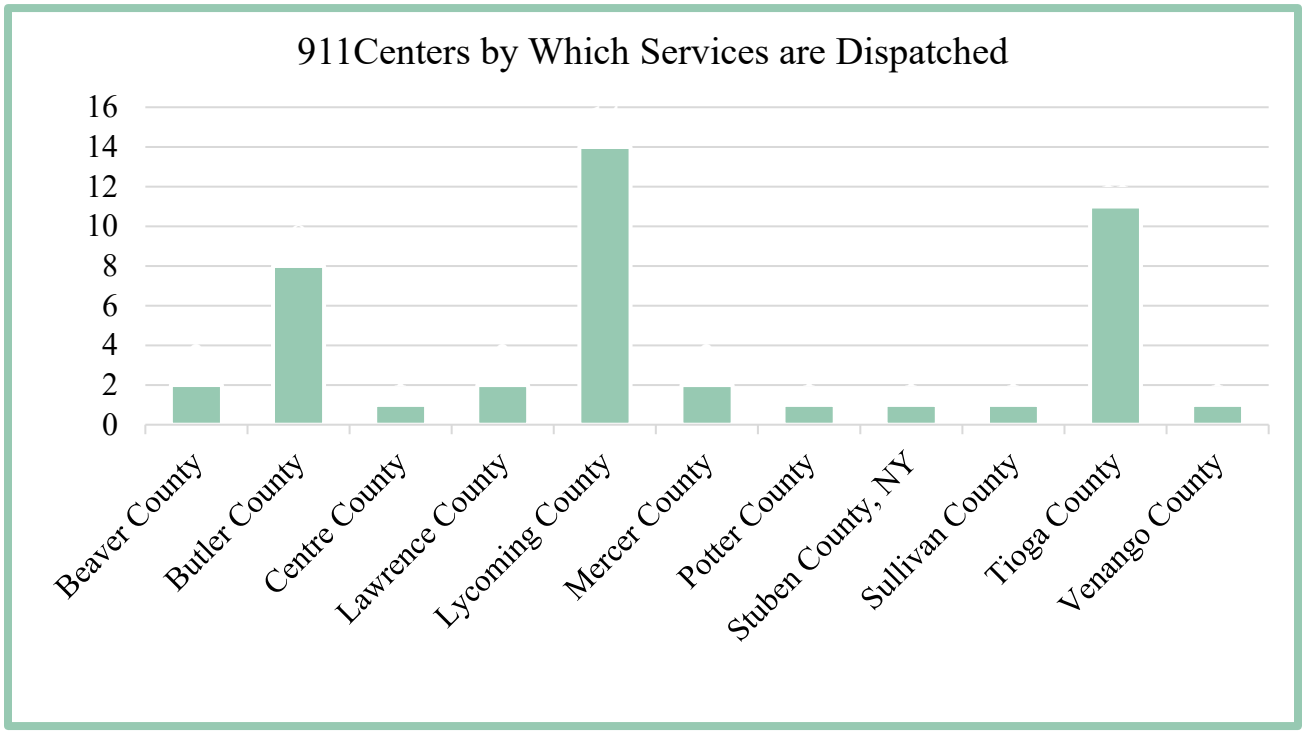
What kind of critical care hospitals do you have in your coverage area?



Again, lack of a close, appropriate facility adds to the length of time that a call will take, tying up the unit and crew for an extended amount of time. This and other factors are certainly contributing to calls for service not being able to be covered by the first, second, or even third due agencies.

Survey Question 43

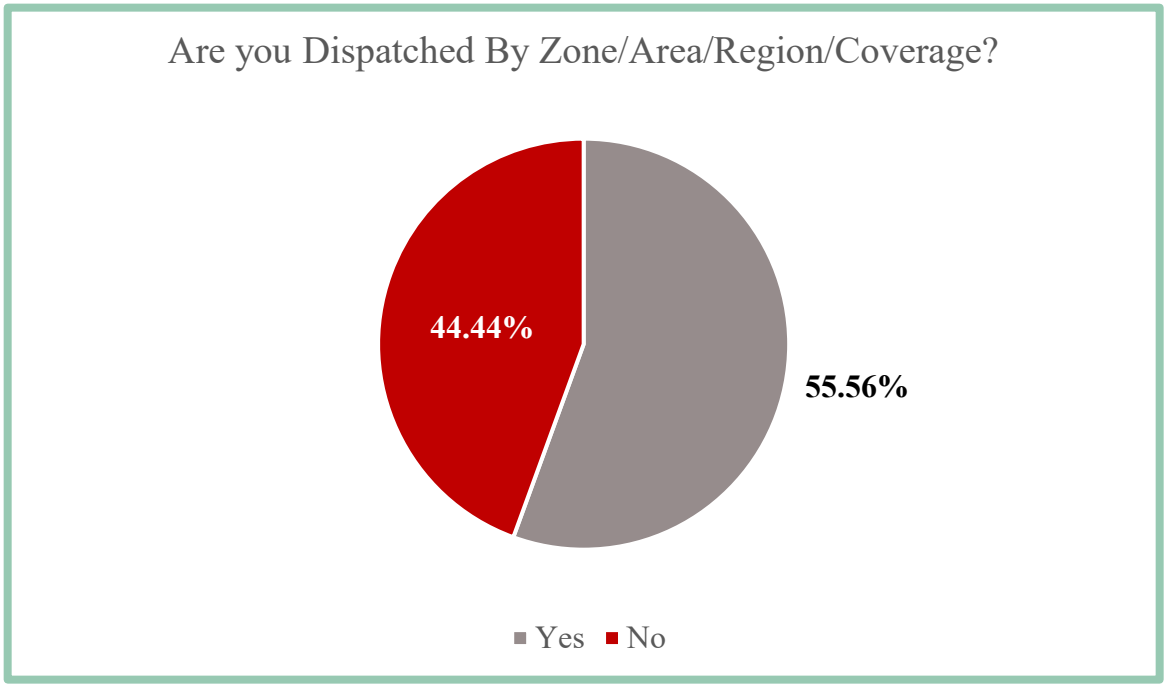
Which 911 center(s)/PSAP(s) dispatch you?



As expected, the more populous counties have higher numbers of EMS agencies to dispatch.

Survey Question 44

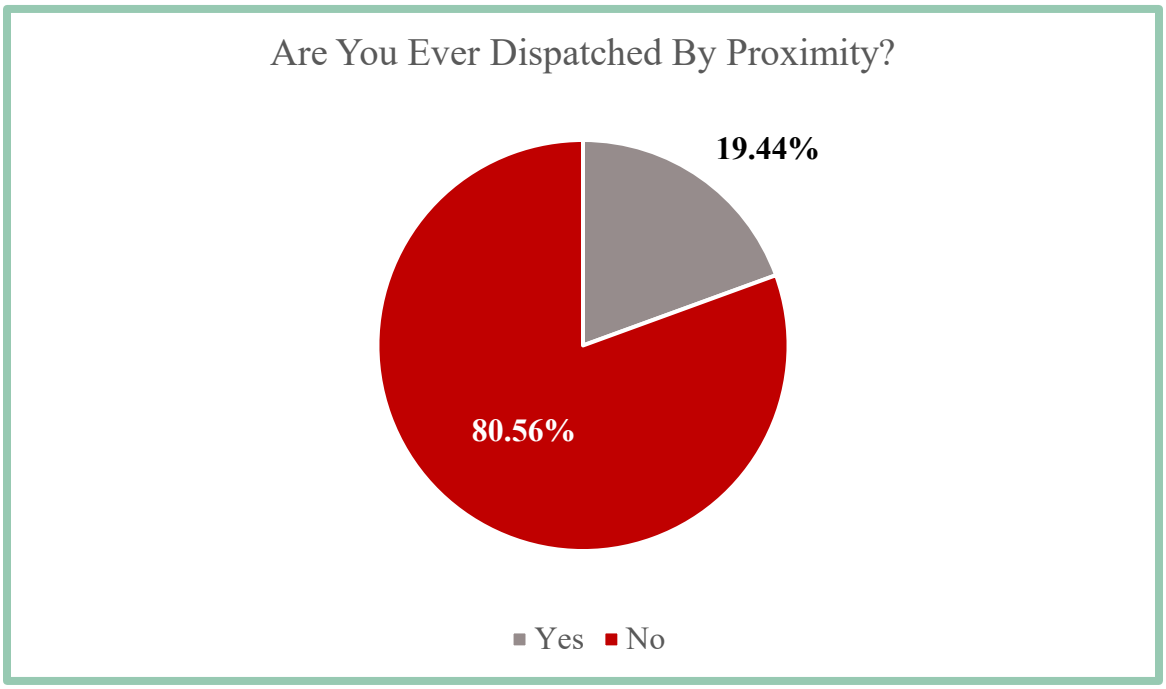
Are you dispatched by zone/area/region/coverage? If yes, are there "assigned" ESZ to each unit on shift?



The responses do indicate that most units are assigned primary territory and are dispatched accordingly.

Survey Question 45

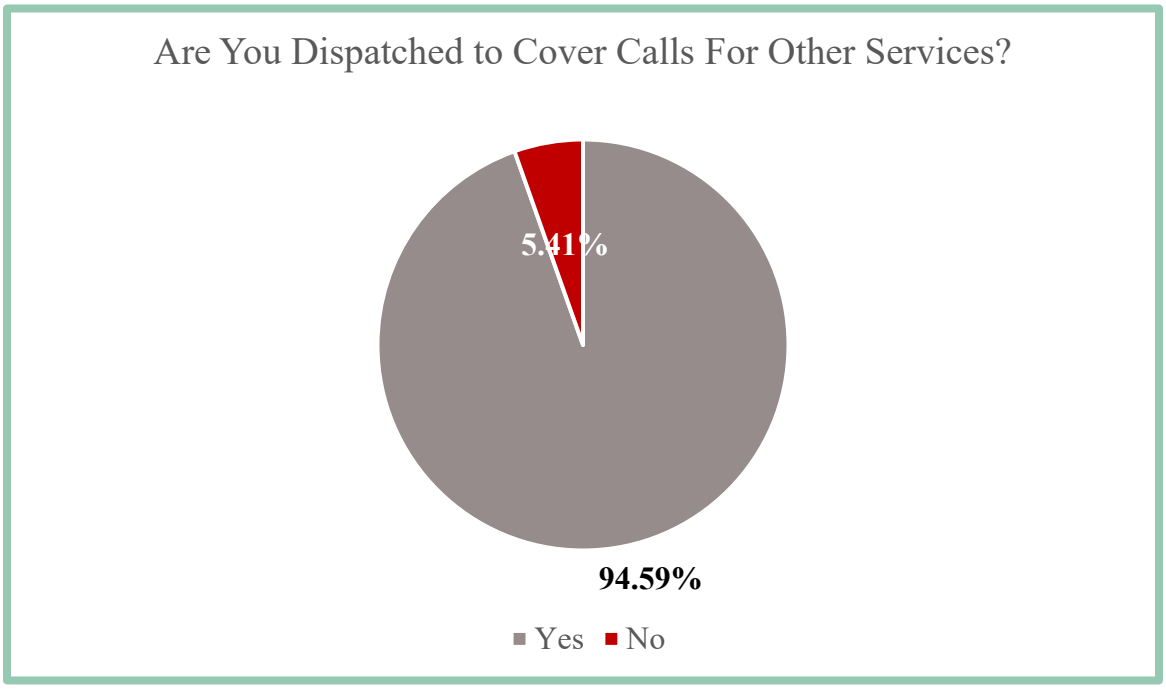
Are you ever dispatched by proximity (closest unit regardless of zone)?



The responses to this question indicate that methods of selecting units to cover individual calls should be examined more if the closest unit to an incident is not being dispatched.

Survey Question 46

Are you ever dispatched to cover calls for other services?



As gleaned from the previous survey responses, agencies are called to cover other agencies' first due territory regularly. This leaves decreased numbers of units, or possibly no units, to cover calls in the second due unit's territory.

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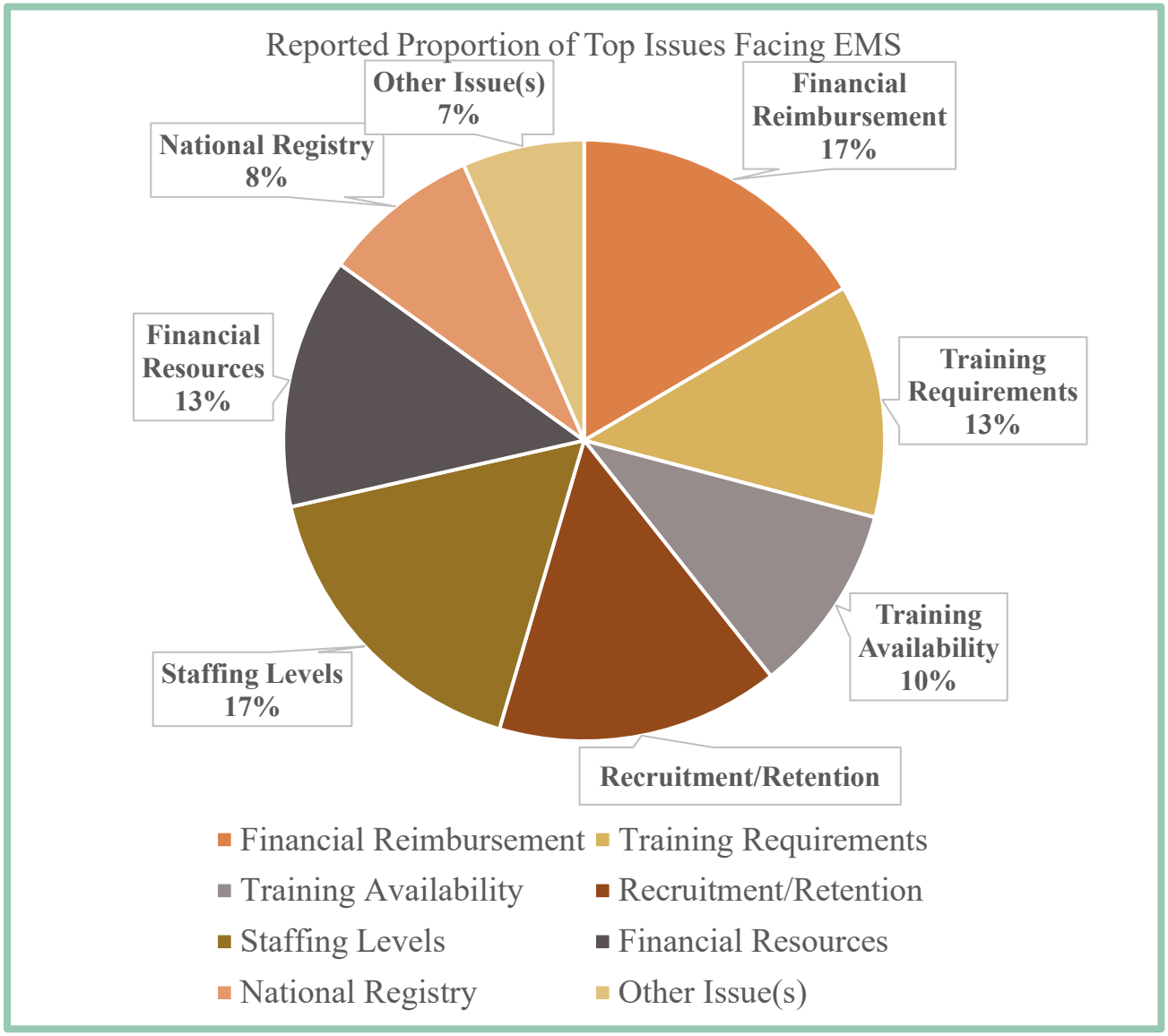
Survey Section 7: Issues facing EMS in Pennsylvania

This section of the survey was developed to obtain responders thoughts and opinions on what are the major issues facing EMS in Pennsylvania today and what possible solutions for these issues do the respondents feel are possible. Are there staff recruitment and retention programs in place? What type of government support do the EMS agencies receive, if any?

Survey Question 47

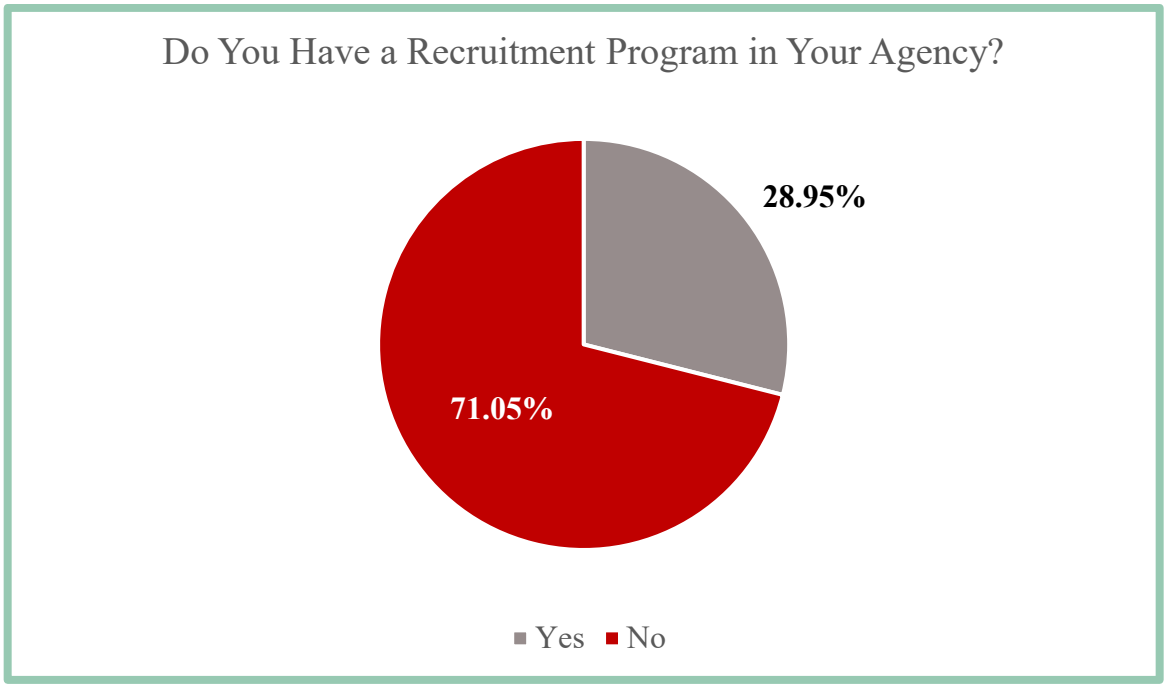
Please rank the following issues in order of what you feel is the biggest issue facing EMS response in your area currently.



The responses to survey question 47 indicate that the main issues that are facing EMS agencies in the study area counties are financial concerns, staffing/recruitment and retention, and training and certification issues. If respondents answered: “Other Issue”, they were asked to provide narrative responses. Those narrative responses can be found in Appendix A.

Survey Question 49

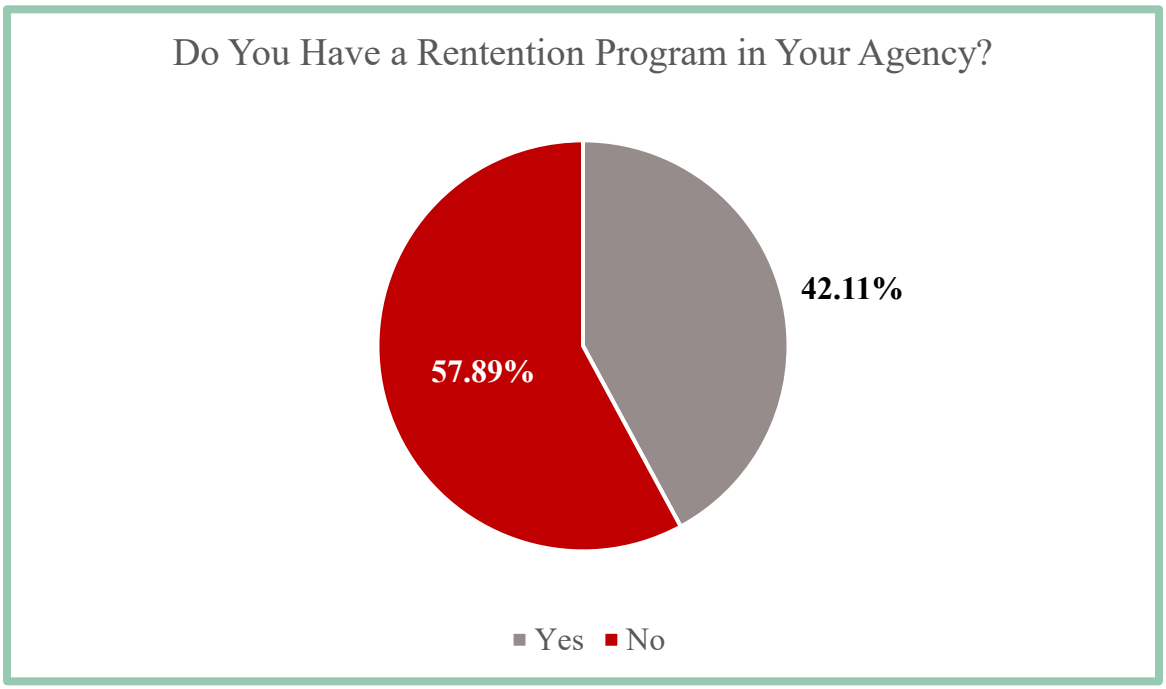
Do you have a recruitment program in your agency? (If so, what?)



Although the agencies that responded to this survey indicated that one of the primary concerns and issues that they are facing is recruitment and retention, over 70% of them noted that they do not have a recruitment program in place.

Survey Question 50

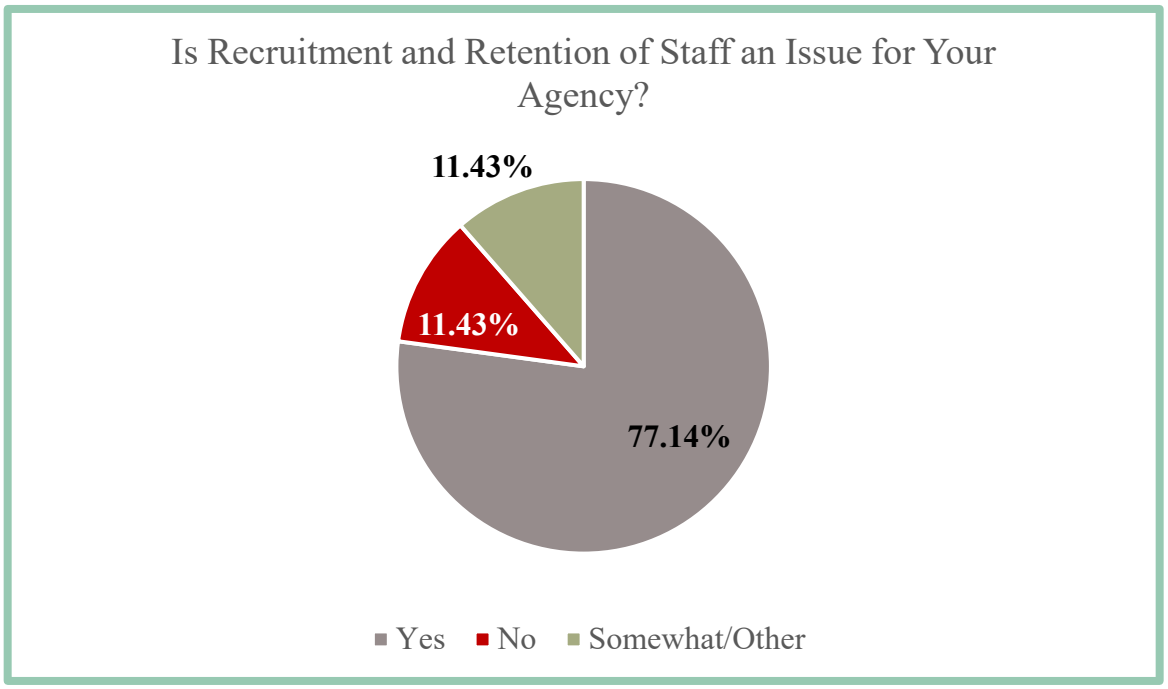
Do you have a retention program in your agency (incentives, staff development, etc.)? (If so, what?)



As with the previous question, the majority of the agencies responding to the survey do not have a staff retention program in place.

Survey Question 51

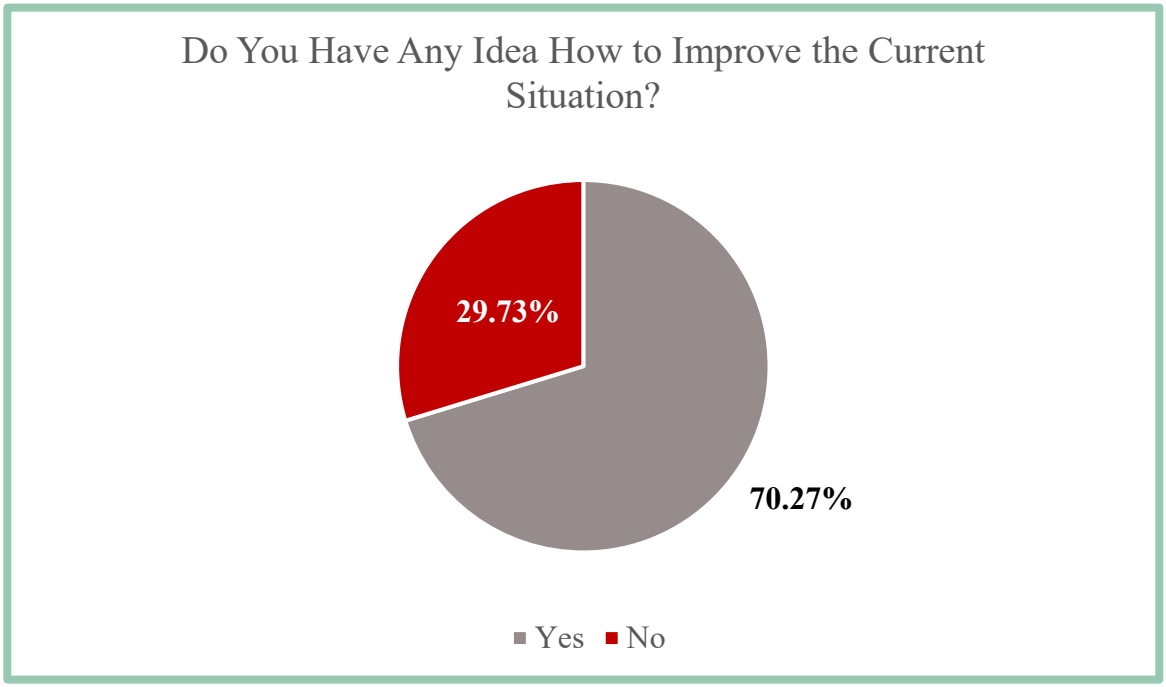
Do you believe that recruitment or retention of staff is an issue for your agency, and if so, why?



The responses to this question reinforce that recruitment and retention of staff is a major issue for EMS agencies.

Survey Question 52

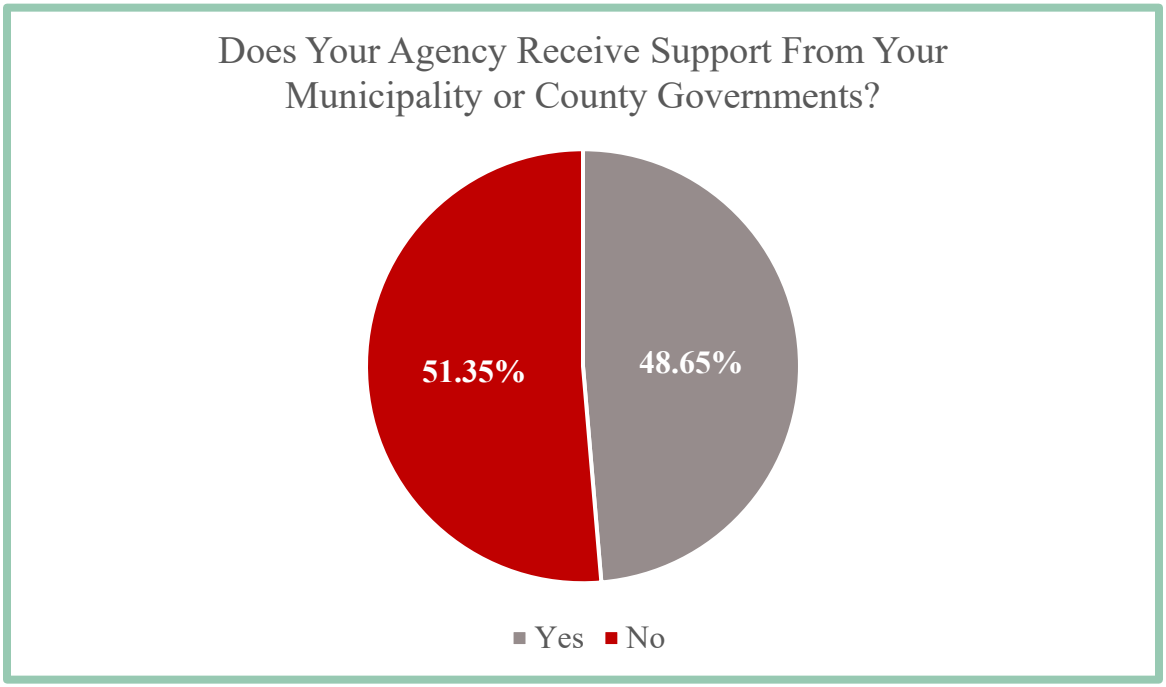
Based on your ranking of the biggest issues facing EMS service in your area currently, do you have any ideas on how to improve the current situation?



The responses to this question including the suggested ideas are listed in Appendix A.

Survey Question 53

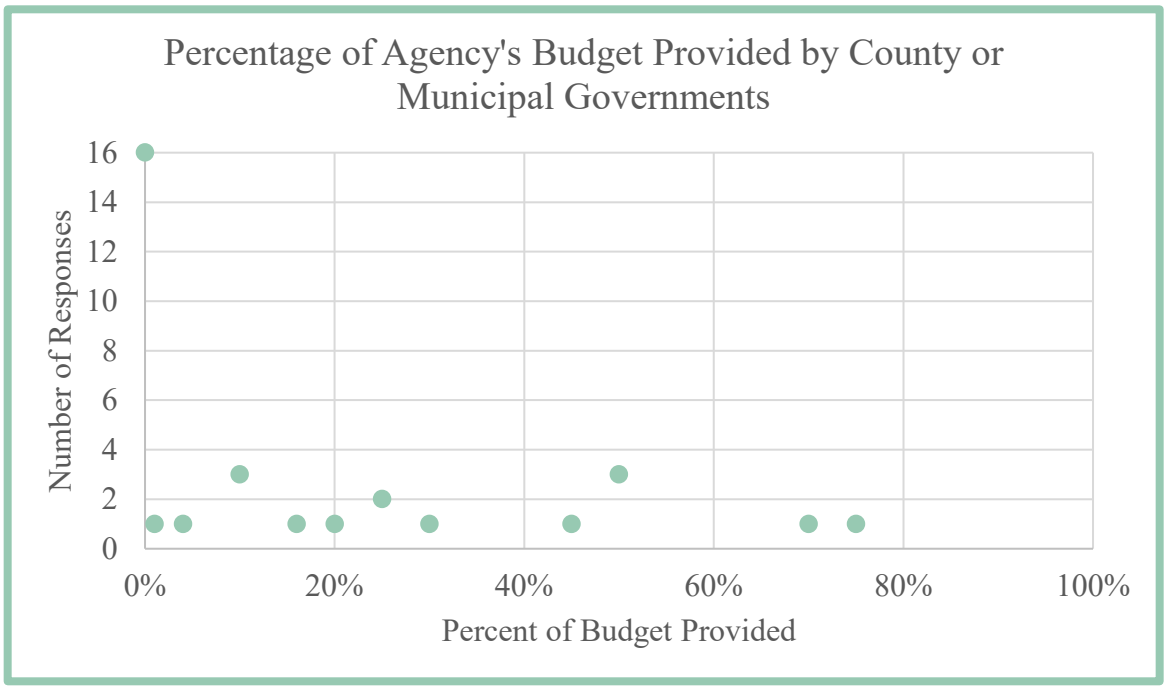
Does your agency receive support (financial/in-kind/insurance/etc.) from your municipal or county governments?



Over fifty percent of the responding agencies answered that they do not receive any type of support from their municipal or county governments. The Pennsylvania Borough and Township codes are clear that EMS service is a responsibility of those municipalities. The codes do not specify how that service is to be delivered.

Survey Question 54

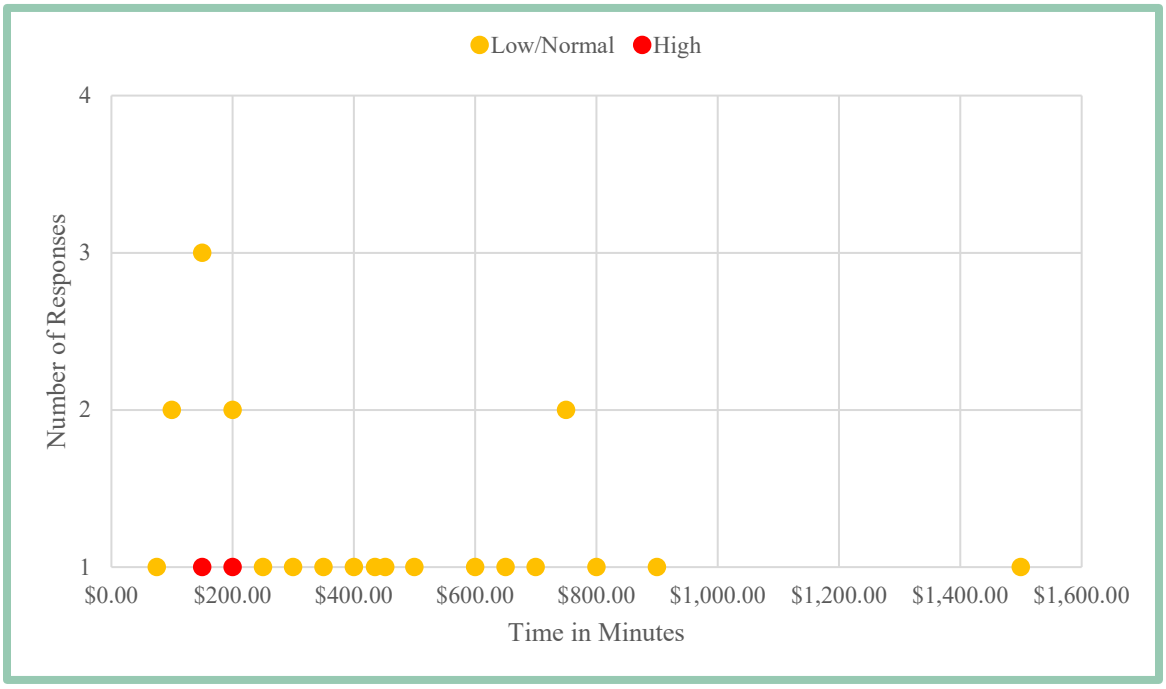
What percentage of your agency's overall budget is provided by county(ies)/municipality(ies)?



The responses to this question reinforce the response to question 53 – municipalities are not providing large amounts of financial support to EMS agencies in the study counties.

Survey Question 55

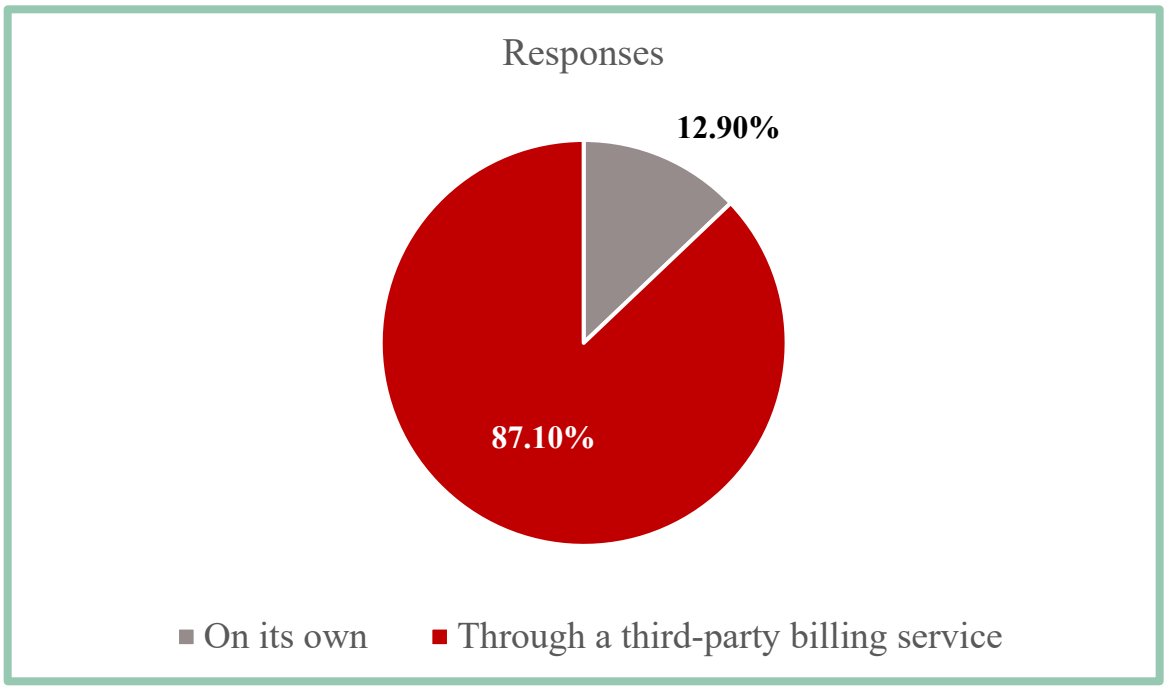
What is the amount needed financially to cover your per call costs?



This question was designed to ascertain the financial impact each call for service has on the responding agency to be able to quantify the minimum amount of funding that agencies need to cover the calls to which they are dispatched.

Survey Question 56

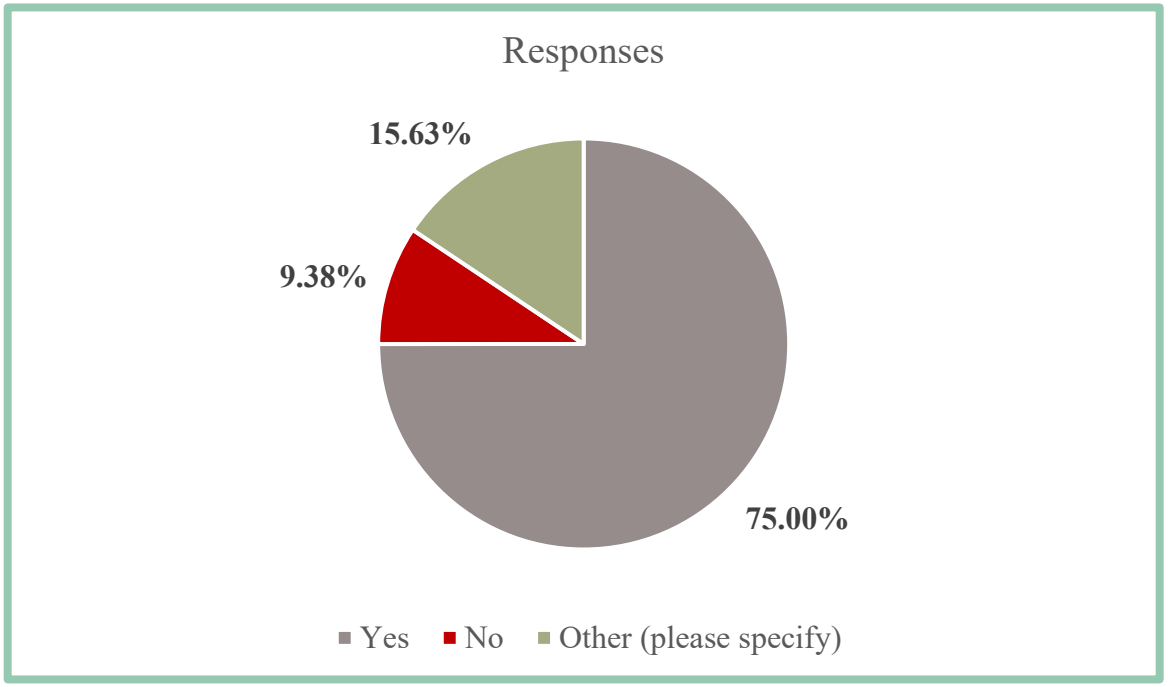
Your agency bills:



The responses to this question indicate that the majority of EMS agencies in the study counties are either paying or losing a portion of the reimbursement received for each call to a third party billing service.

Survey Question 57

Is your agency satisfied with the billing service provided?



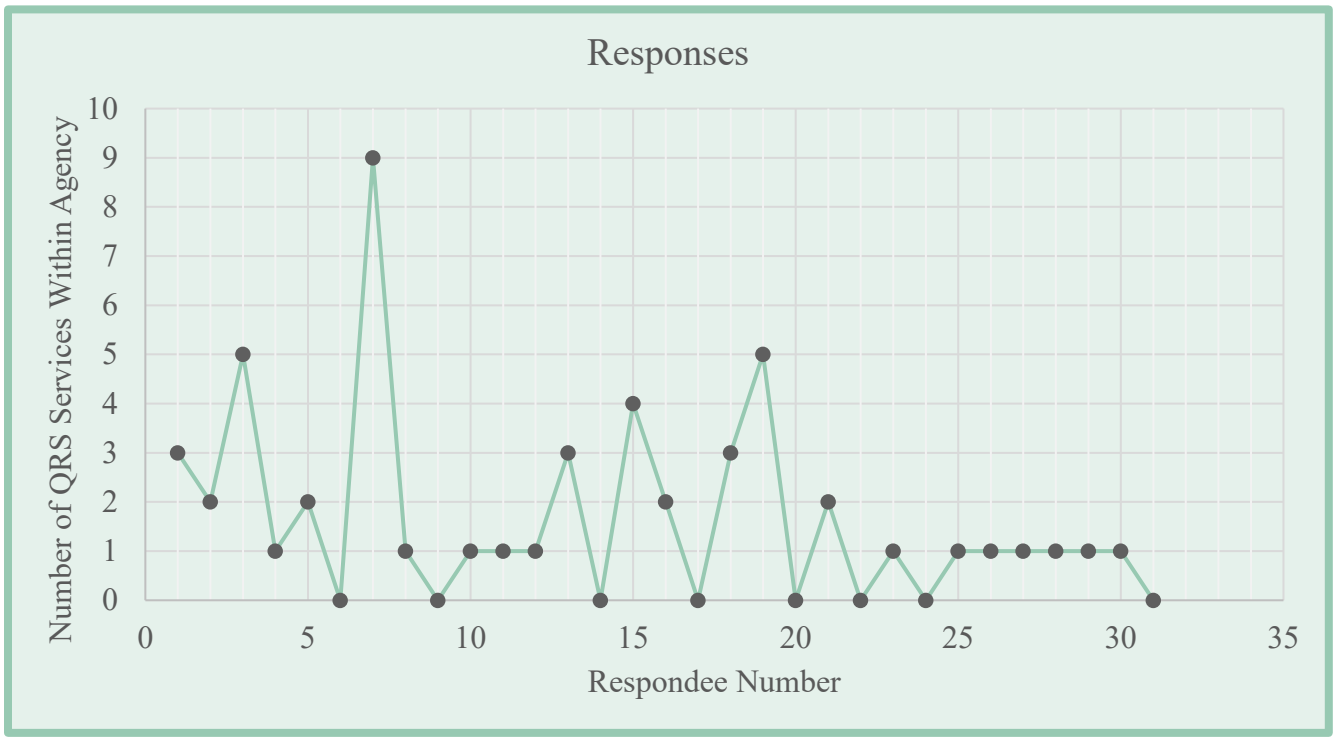
The majority of the respondents indicated that they were satisfied with their current billing service.

Survey Section 8: QRS Agencies

This section of the survey was designed to gather information on QRS agencies in the study counties. QRS agencies are normally first to arrive at an incident scene and start rendering care prior to the arrival of EMS transport agencies.

Survey Question 58

How many QRS services work with your agency?

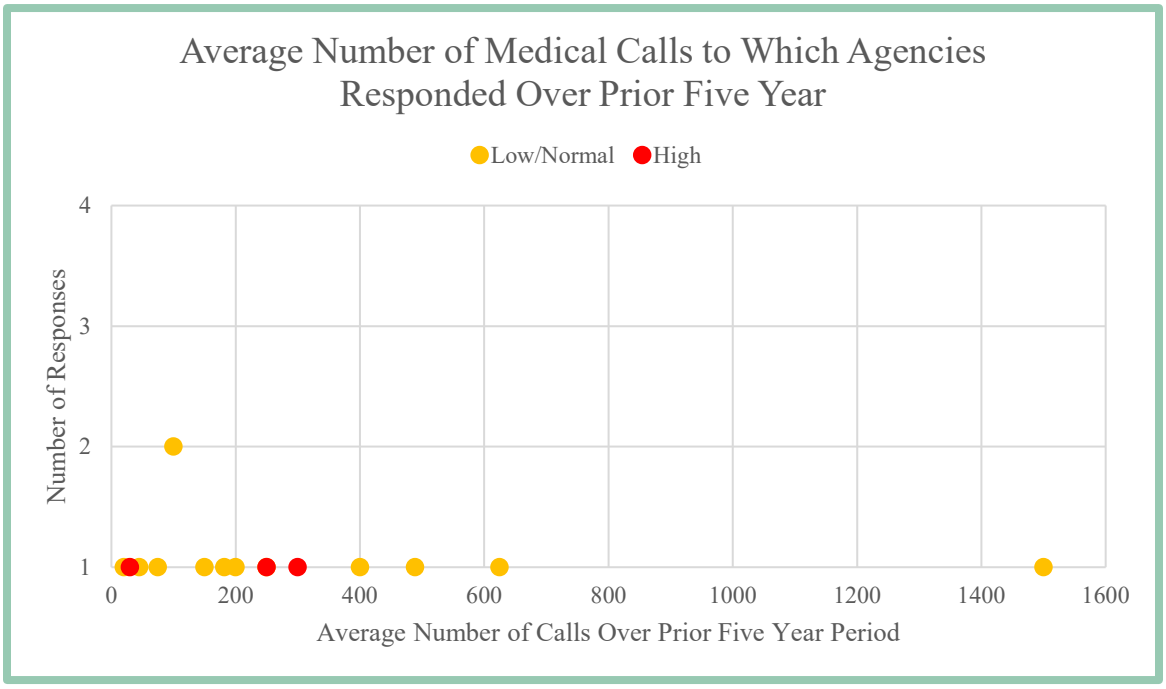


Average Number of QRS Services Within Responding Services
1.69

The following questions were to be completed by fire service agencies that provide quick response services (QRS), to get an understanding of their level of involvement in providing EMS services within the study counties.

Survey Question 60

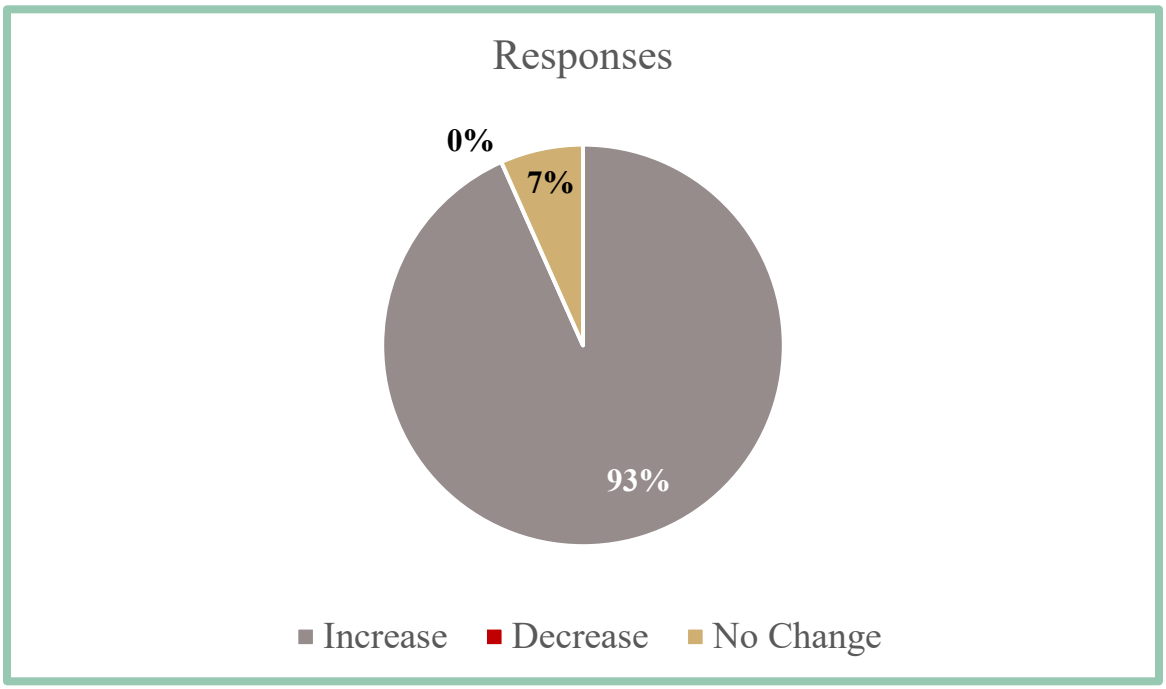
What is the average number of medical calls your fire service has responded to over the past five years?



Fire departments with QRS units may be responding to an increasing number of calls due to the lack of availability of BLS/ALS units.

Survey Question 61

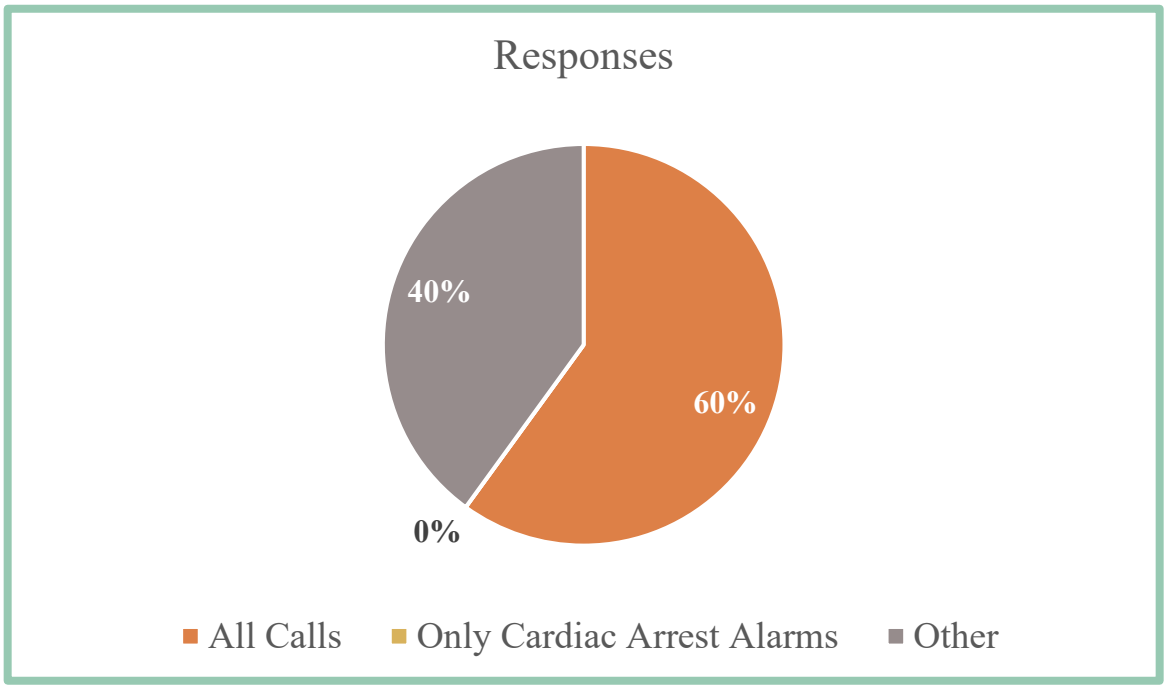
Have you seen an increase or decrease in number of medical calls?



Again, fire department QRS units are seeing an increasing number of calls, potentially due to the lack of availability of BLS/ALS units. A combination of all of the issues described in this survey are most likely contributing to this increase.

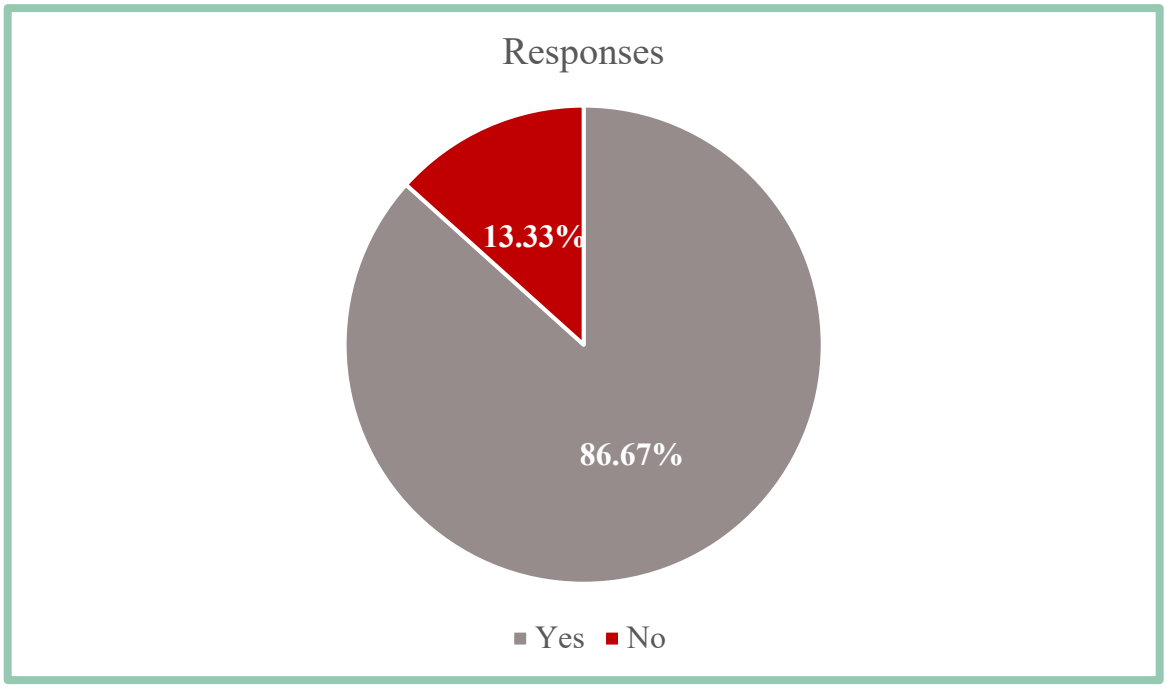
Survey Question 62

Does your fire service provide QRS on all types of medical calls or only cardiac arrest alarms?



Survey Question 63

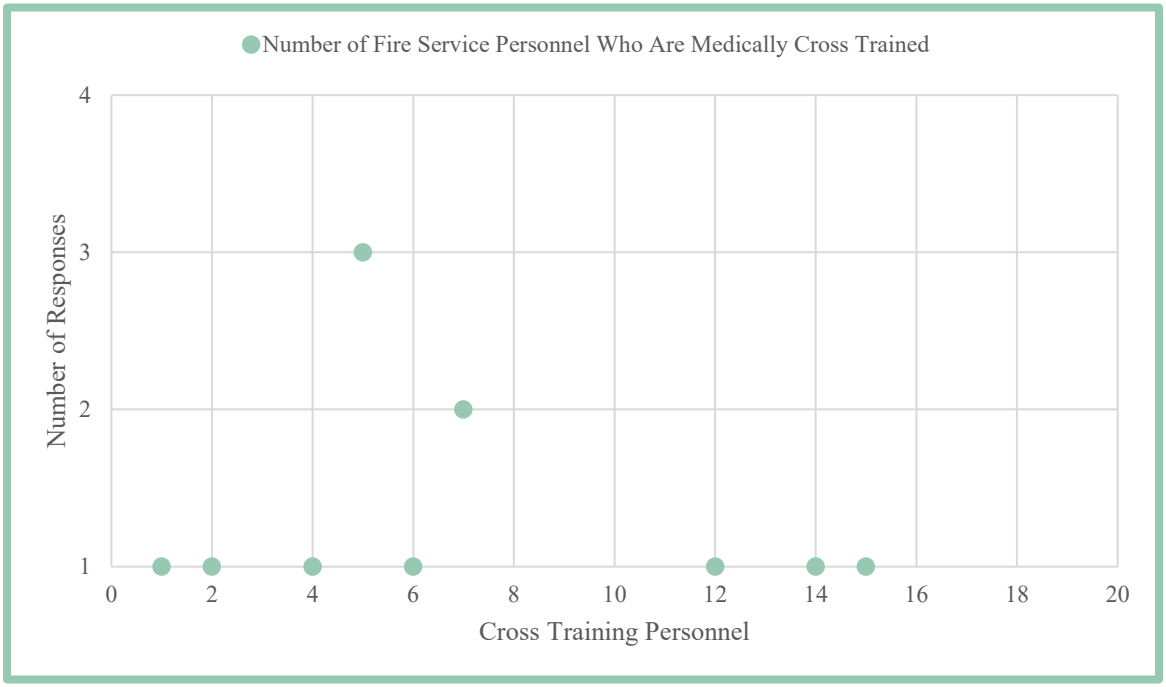
Does your fire service provide QRS coverage outside your service area if requested?



The majority of fire department QRS units will respond outside of their primary service area if they are requested. However, the frequency of this occurring was not provided.

Survey Question 64

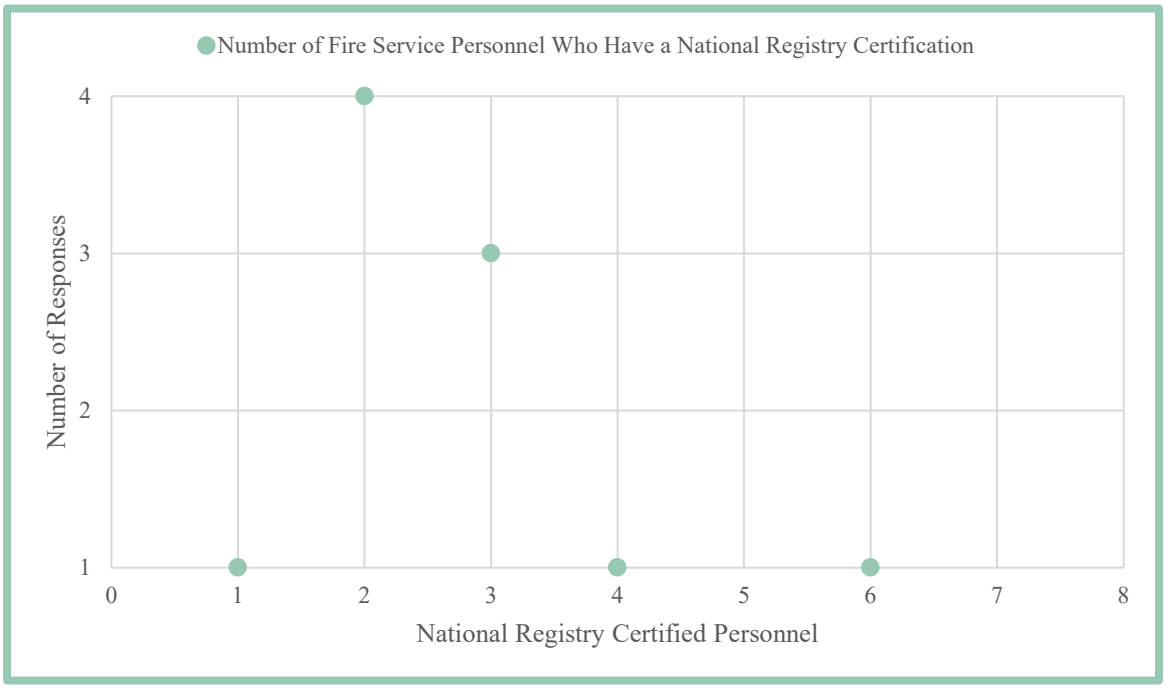
How many of your fire service personnel are cross trained medically (e.g., F.R., EMT, EMT-A, EMT-Paramedic, PHRN, others)?



The responses to this question indicate that all of the fire department that responded to the survey have at least one staff member that has some level of EMS training.

Survey Question 65

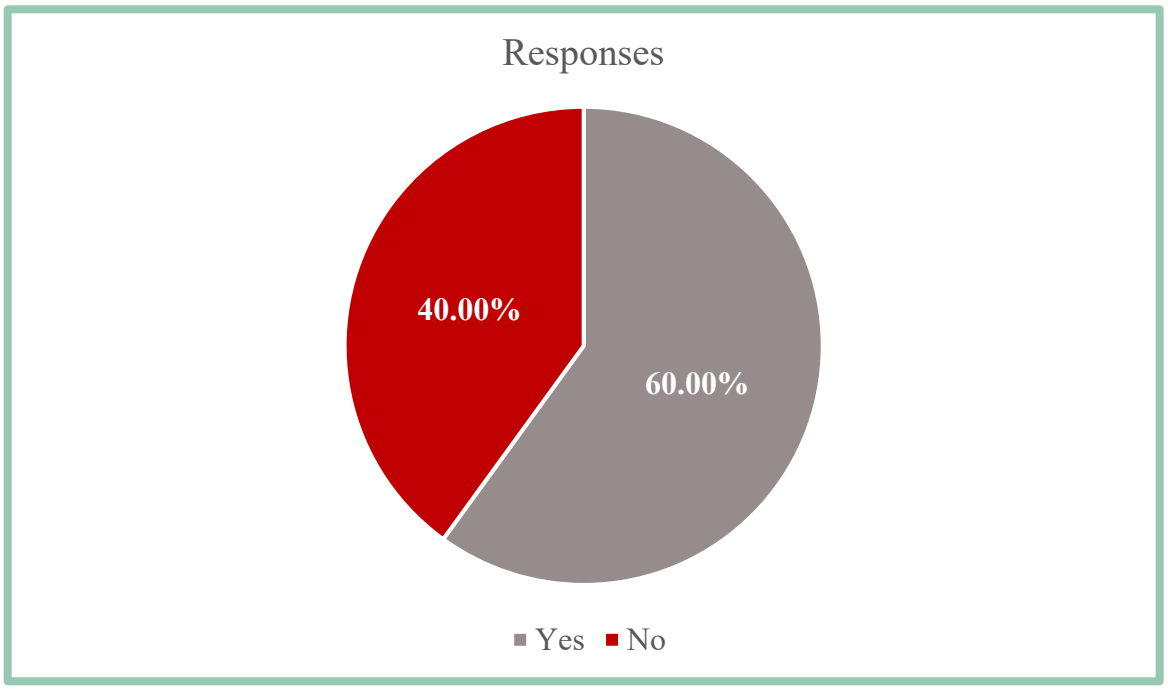
Of these who are cross trained medically, how many have a National Registry Certification?



Only Thirty-three percent of the fire department-based EMS personnel in this study have national registry certification.

Survey Question 66

Has your fire service ever had to decline/turnover a call for QRS in the past five years?



Although not specified in the responses to this question, responses to previous questions in this survey would indicate that lack of staffing would be the main reason for QRS calls being declined or turned over.

In Conclusion

The responses to the survey that was developed reinforce the understanding that there are many issues facing the provision of EMS in Pennsylvania. It appears that EMS service in whole is facing a critical point in whether it can continue to provide life-saving service in efficient and effective ways for the citizens of Pennsylvania. It is clear that action needs to be taken, sooner rather than later, to assist EMS agencies in the areas of financial stability, staffing and training, and recruitment and retention of personnel.

As noted in the executive summary of this report, the information obtained from this survey along with the other information reviewed during phase I of this project will be analyzed in phase II of the project. The goal of phase II is to develop toolkits of strategies and practices that would be available to help counties assist EMS agencies in confronting and surmounting the current issues they are facing. Those strategies and practices will address each area of concern:

- Financial Stability – What can be done to provide additional financial support for EMS agencies, and what practices can be put into place to assist them in reaching financial solvency?
- Staffing and training – What steps can be taken to aid EMS agencies in meeting staffing requirements, how does training factor into meeting those requirements, and does training requirements contribute to the gain or loss of staff?
- Recruitment and Retention – Following in line with the staffing and training concerns, how can recruitment and retention programs be utilized to add more staff and keep the current qualified staff? What programs exist, what programs can be developed, and how can those programs be used most effectively?

All of the questions contained in the survey and the complete responses, minus any identifying data, can be found in Appendix A.

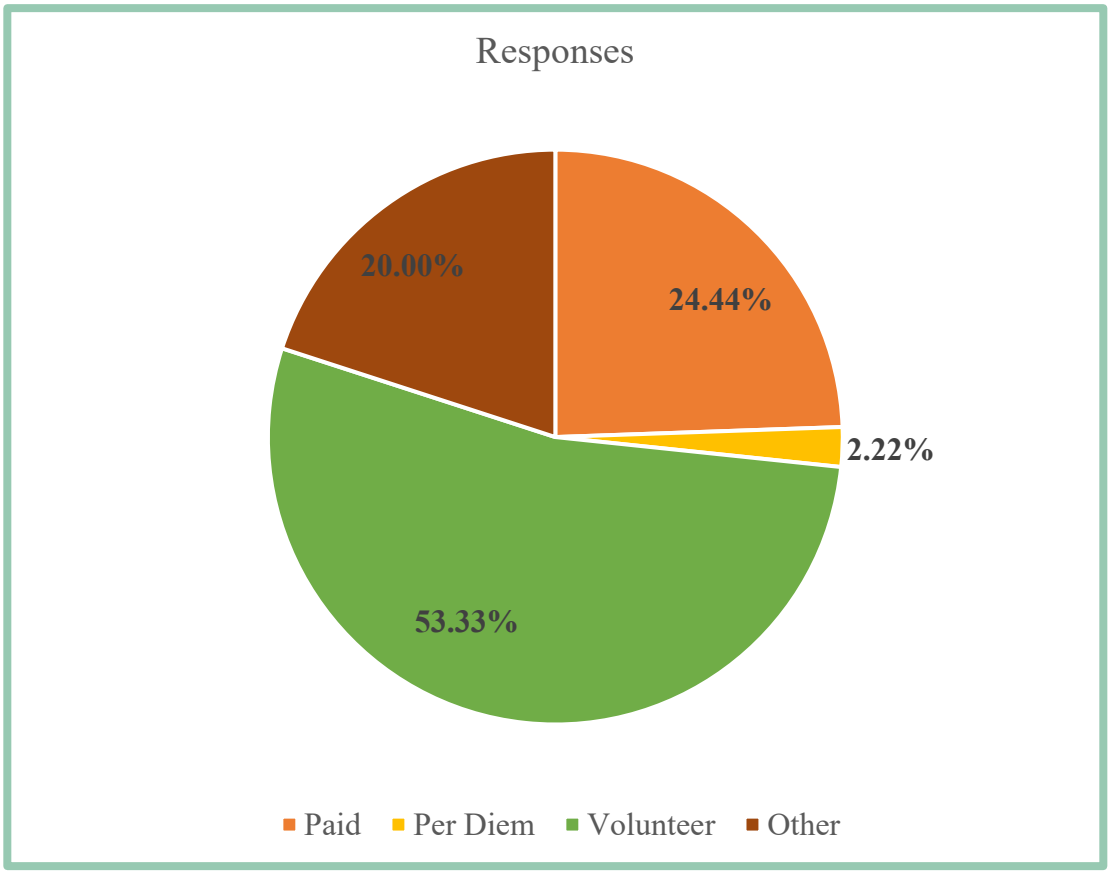
APPENDIX A

DCED/CCAP EMS STUDY

QUESTIONS AND REPONSES

Question Five: Is your EMS station staffed by paid, volunteer or per diem staff?

Answered: 45 Skipped: 0

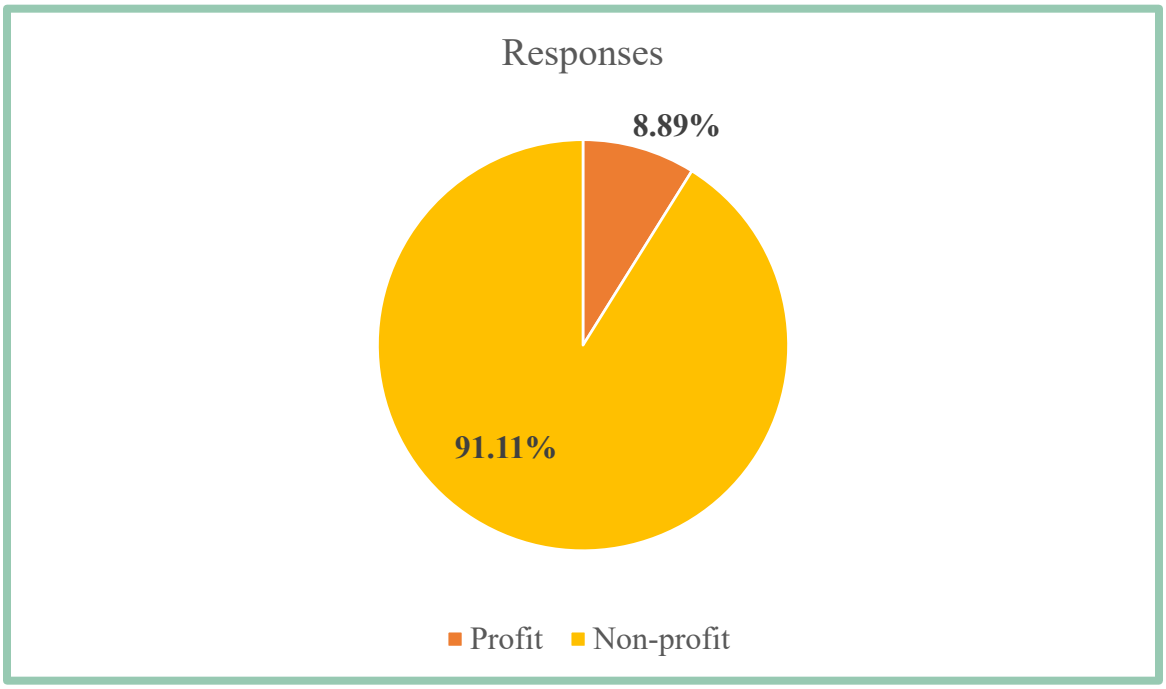


ANSWER CHOICES	RESPONSES	
Paid	24.44%	11
Per Diem	2.22%	1
Volunteer	53.33%	24
Other (please specify)	20.00%	9
TOTAL		**45**

OTHER (PLEASE SPECIFY)
Paid on weekdays - per diem rest of the time.
Combination: one paid employee and paid per-call for volunteers.
Paid Monday through Friday from 7:00 a.m. through 5:00 p.m. By volunteer the rest of the time and holidays.
Combination of paid and volunteer.
Both paid and volunteer.
Paid and volunteer.
All the above.
Paid five days per week, ten hours per day, and per diem the rest of the time.
All of the above.

Question Six: Is your agency for profit or not for profit?

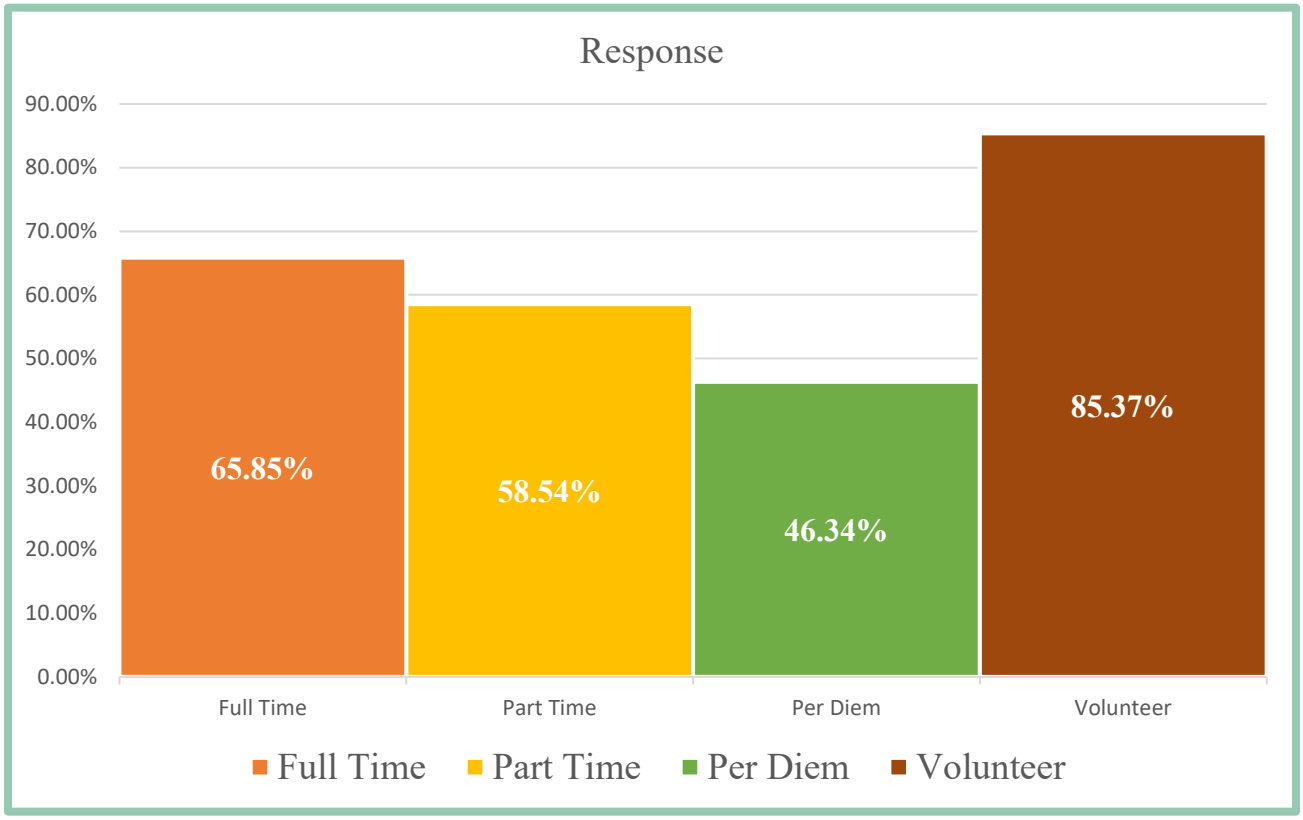
Answered: 45 Skipped: 0



ANSWER CHOICES	RESPONSES	
Profit	8.89%	4
Non-profit	91.11%	41
TOTAL		**45**

Question Seven: What are your current EMS staffing levels for full time, part time, per diem, and volunteer staffing?

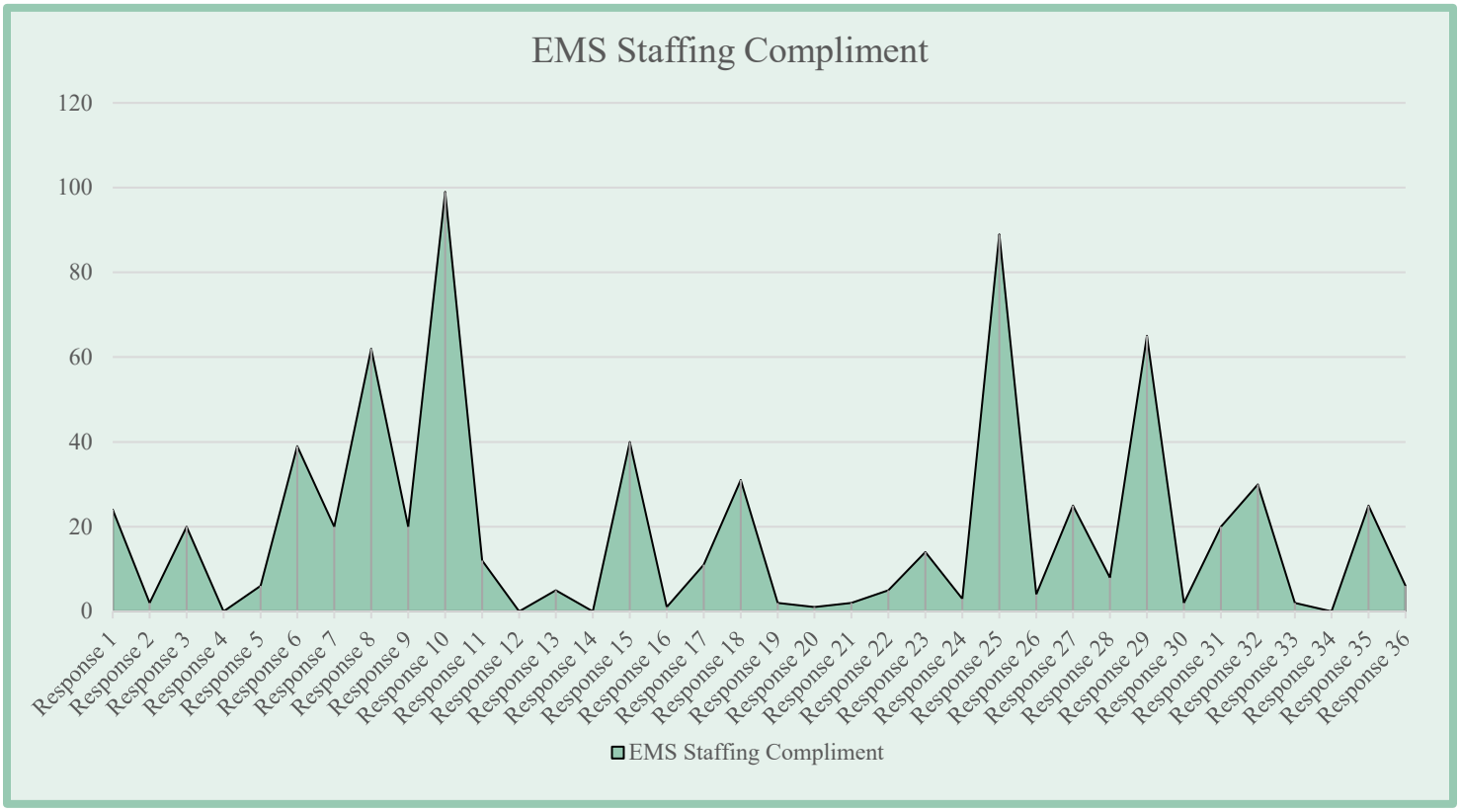
Answered: 45 Skipped: 0



ANSWER CHOICES	RESPONSES	
Full time:	65.80%	27
Part time:	58.54%	24
Per diem:	47.50%	19
Volunteer:	85.37%	35

Question Eight: What is your full EMS staffing compliment?

Answered: 45 Skipped: 0



Question Ten Response Results
RESPONSES
24
2-3
4 EMR, 15 EMTs, and 1 EMSVO.
Volunteer.
6
39

Question Ten Response Results
RESPONSES
20
62
20
99
12
0
5
Combination.
40
1 DOH Provider.
11
31
2
1
2
5
14
3
89

Question Ten Response Results
RESPONSES
4
25
8
65
2
20
30
2
BLS Squad (QRS).
25
6

Question Nine: How many of your personnel work/volunteer at multiple agencies?

Answered: 39 Skipped: 6

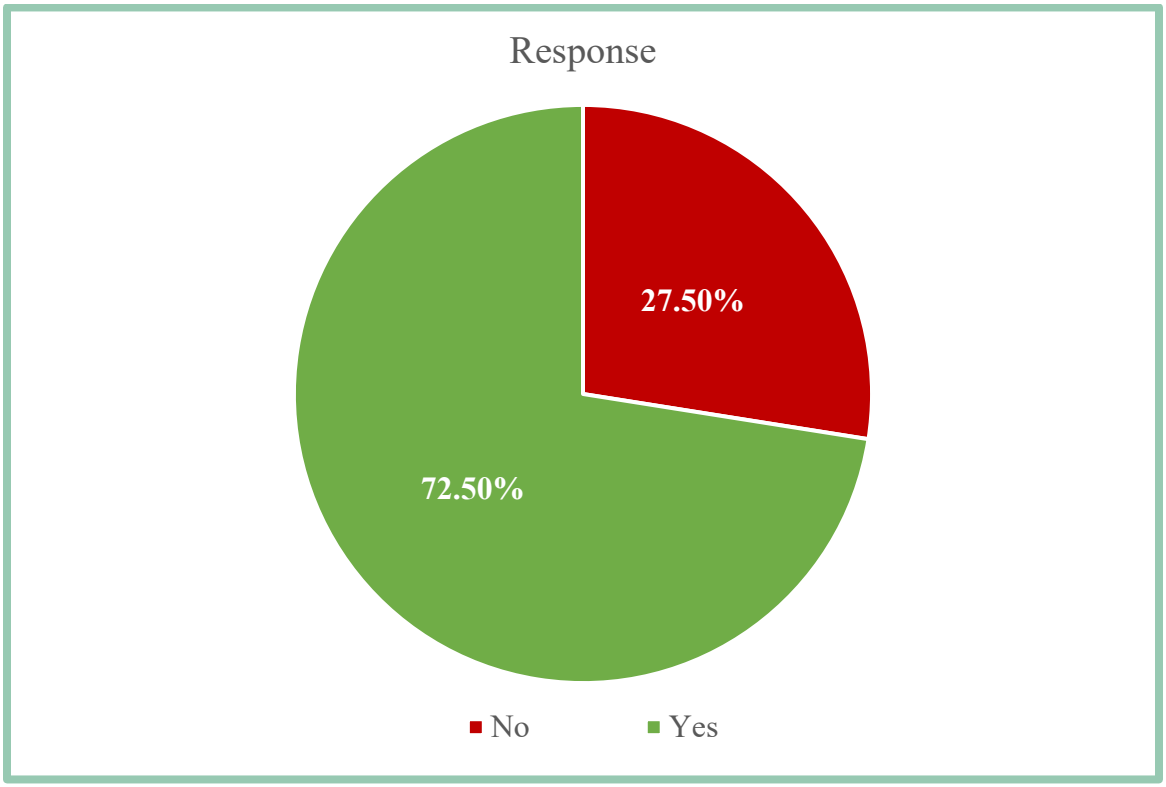
Question Nine Response Results
RESPONSES
4
5-6
All.
2
3
9
12
22
3
Unknown.
3
0
5
Ten or more.
10
100%

Question Nine Response Results
RESPONSES
1
2
23
100% also assist at other agencies.
7
10
1
5
3
1
20
2
2
2
8
8
15
4
2

Question Nine Response Results
RESPONSES
4
6
15
2 EMTs.

Question Ten: Does your EMS agency have an established staffing plan (24-hour coverage or another schedule)?

Answered: 40 Skipped: 5



ANSWER CHOICES	RESPONSES	
No	27.50%	11
Yes (Please provide details):	72.50%	29
TOTAL		**40**

Question Ten Narrative Response Results
YES (PLEASE PROVIDE DETAILS):
Multiple volunteers when available at certain times cover the ambulance schedule, otherwise the ambulance is put unattended to prevent delay in patient care.

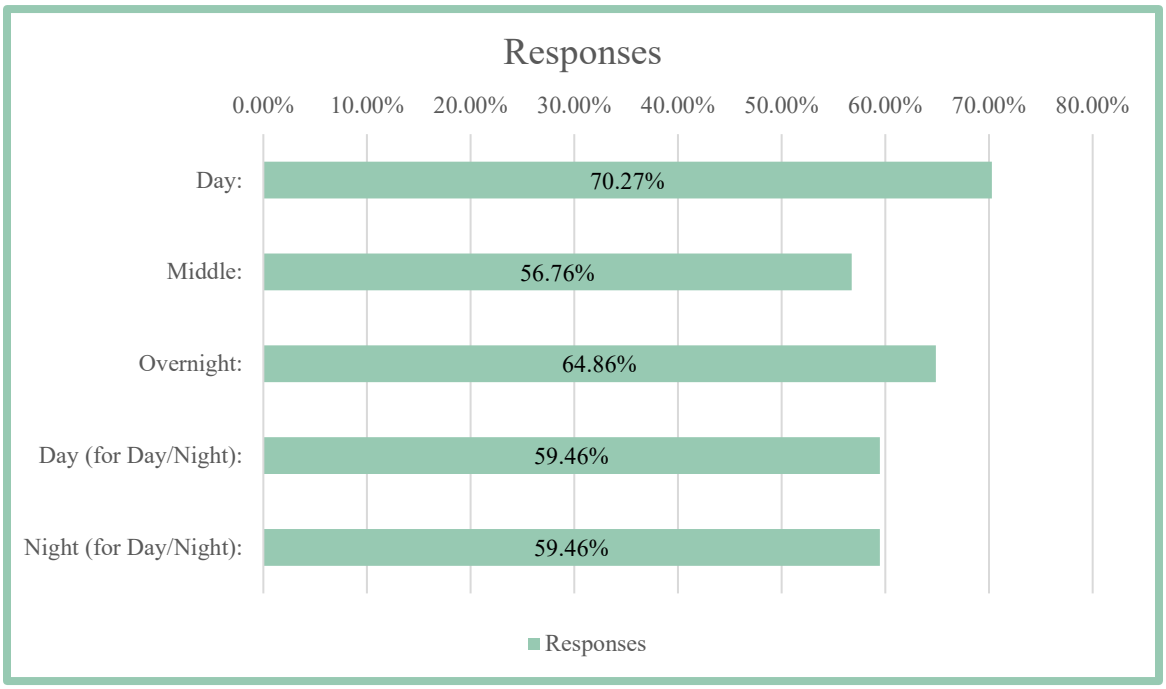
Question Ten Narrative Response Results
YES (PLEASE PROVIDE DETAILS):
We have a Google sheet set up for all member to see on phones or computers and sign up for time slots.
Rotational duty section.
Weekly calendar.
Two shifts at twelve hours per day, seven days a week.
Using scheduling software to allow volunteers to put in availability, so I will not answer question eleven as it is variable.
We have scheduled at least two medics and one EMT 24/7.
Paid staffing Monday through Friday from 7:00 a.m.-5:00 p.m. Volunteer covered shifts from 5:00 p.m.-10:00 p.m. and 10:00 p.m.- 7:00 a.m. weekdays. Volunteer covered shifts from 7:00 a.m. – 3:00 p.m., 3:00 p.m. 12:00 a.m., & 12:00 a.m. – 7:00 a.m.
Twenty-four-hour coverage - ambulance and event coverage.
Full coverage along with mutual aid.
Per day, two paid (6a.m. - 6 p.m.). At night, one volunteer, and one per diem paid (6 p.m. - 6 a.m.).
Paid ALS and BLS during the daytime, seven days a week, with a volunteer scheduled at night.
It is hit or miss during the day - duty sections at night.
We provide two ALS ambulances 24/7. Office staff supplements the third truck throughout the weekdays.
We currently cover sixteen hours a day.
Multiple variations of shift change times.
We do run a paid crew seven days a week from 6 a.m.-6p.m.; from 6 p.m.-6 a.m., we run duty crews filled by volunteers.

Question Ten Narrative Response Results
YES (PLEASE PROVIDE DETAILS):
Rotating "on call" EMSVO and EMT.
Modified Dupont schedule (12-hour shifts). Rotating one month night turn / one-month daylights.
Paid staff Monday thru Friday 7 a.m. to 5 p.m. Duty Section crew 8 p.m. to 5 a.m. Volunteer crew at other times.
Six 24-hour vehicles, 24-hours on 48-hours off. One 16-hour vehicle each weekday.
Monday through Thursday, 20-hour paid, 4-hour volunteer. Friday through Sunday, 24-hour paid.
Twenty-four hour and 16-hour shifts.
We have individuals identified that are available during the working hours of the day, evening, and overnights that will respond.
Staffed 6:00 a.m. to 6:00 p.m. by mostly retired BLS responders, supplemented by several responders employed in the immediate area and 6:00 p.m. to 6:00a.m. by a scheduled duty crew.
We have a dual dispatch Monday through Friday, from 6:00 a.m. – 6:00 p.m., with a mutual aid ambulance that is staffed Monday through Friday 6:00 a.m. - 4:00 p.m., then volunteers the rest of the time.
Using active 911 and if no personnel are available, we have to mark as out of service.
Twenty-four hours.

Question Eleven: How many ALS/BLS/QRS crews are scheduled: Day / Middle / Overnight -or- Day/Night?

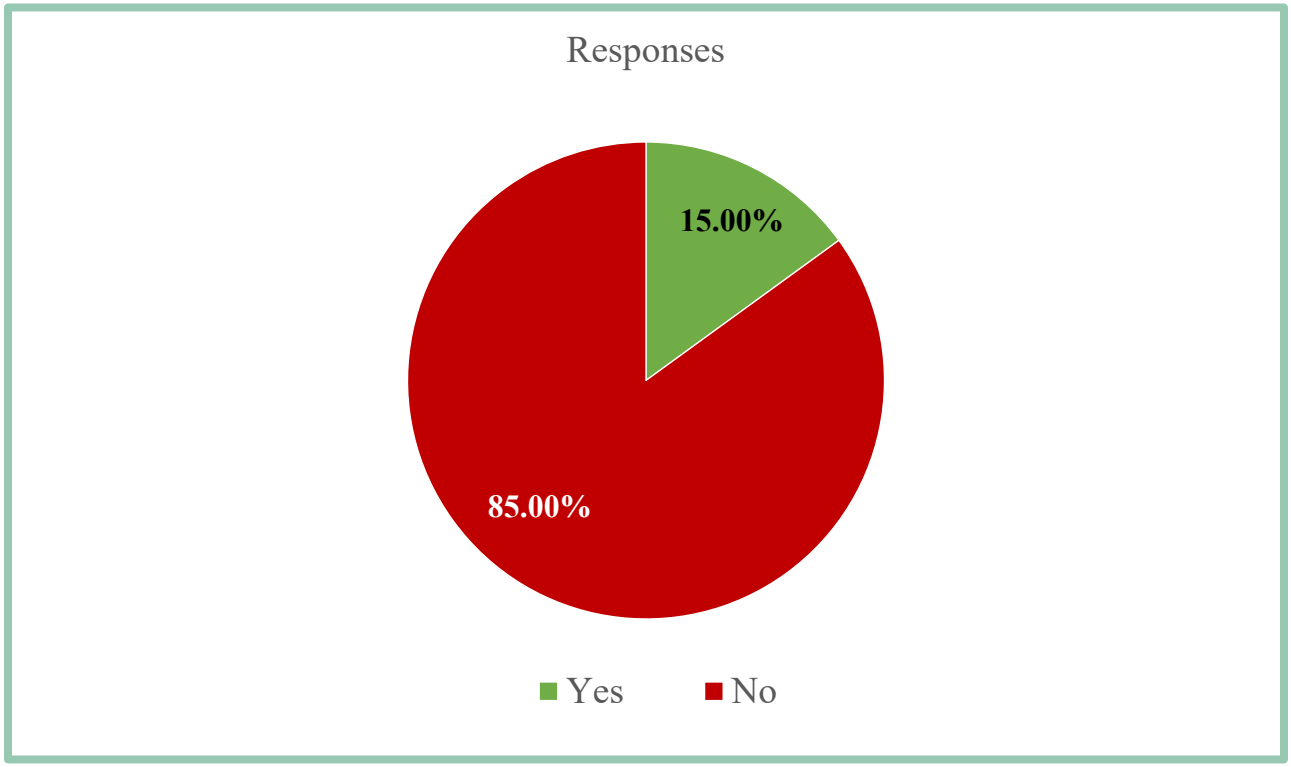
Answered: 37 Skipped: 8

ANSWER CHOICES	RESPONSES	
Day:	70.27%	26
Middle:	56.76%	21
Overnight:	64.86%	24
Day (for Day/Night):	59.46%	22
Night (for Day/Night):	59.46%	22



Question Twelve: Do any of your scheduled crews overlap schedules?

Answered: 40 Skipped: 5



ANSWER CHOICES	RESPONSES	
No	85.00%	34
Yes	15.00%	6
TOTAL		**40**

Question Twelve Narrative Responses
YES (PLEASE PROVIDE DETAILS):
We do have an hour overlap on crews.
If on a call that goes over the normal schedule, yes.
Our start times are 6:00 a.m. and 8:00 p.m. for the two 24-hour trucks.

Question Twelve Narrative Responses
YES (PLEASE PROVIDE DETAILS):
All of us.
At 6:00, 7:00, and 8:00 (a.m. and p.m.)
Sixteen-hour crews start on 7:00 a.m. schedule. Twenty-four-hour crews start at 8:00 a.m.

Question Thirteen: Where would your ALS/BLS scheduled crews be located during shifts?

Answered: 37 Skipped: 8

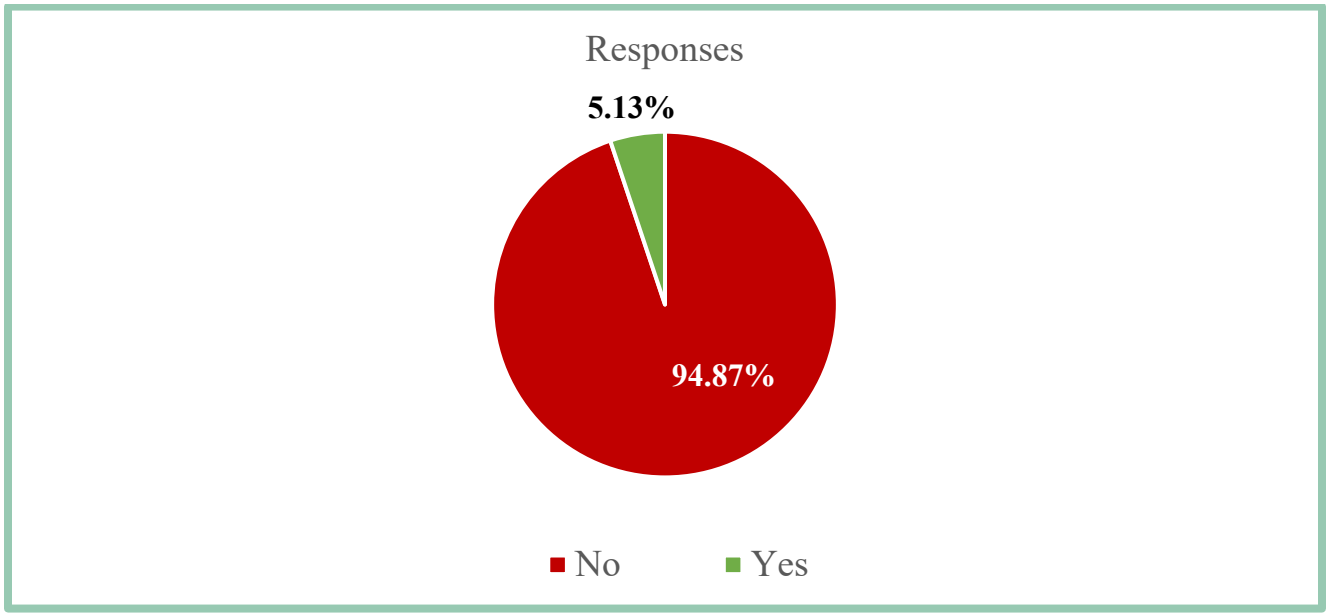
Question Thirteen Narrative Responses
RESPONSES
At two different stations that are ten miles apart.
At home.
Station 26, 1021 Locust Street, Sabinsville PA.
At home until we get called.
Coming from their home residence or in the coverage area.
At the station.
At home or station.
In the hospital and two local BLS stations.
In the station.
In the station.
At residences or at the station.
At home.

Question Thirteen Narrative Responses
RESPONSES
They respond from their homes.
Day hours are a rotation with the co-op of other stations. Night hours are at our station.
At the fire station.
QRS members respond from their homes or wherever they might be traveling about when we are dispatched.
N/A
At home.
We have one station for the crews.
At the station
Based at the hospital.
At the fire/EMS station.
At the fire station from which the ambulance is run that week.
At home.
At home and respond into the station.
At home.
At three different stations.
At the station during the day, and at home at night.
N/a
Hermitage, PA; New Castle, PA.
At our station.

Question Thirteen Narrative Responses
RESPONSES
In a physical station.
At home.
In their homes.
At home if covering a night shift.
At the station.
We have no scheduled crews. We are volunteers and we respond from our homes.

Question Fourteen: Do you have automation built into unit placement, and if yes, under what circumstances does your unit move, and to what locations?

Answered: 39 Skipped: 6



ANSWER CHOICES	RESPONSES	
No	94.87%	37
Yes (Please specify)	5.13%	2
TOTAL		**39**

Question Fourteen Narrative Responses
YES (PLEASE SPECIFY)
Only for move up assignments - go to station for which we need to cover.
To cover for another station's area when they are on a call.

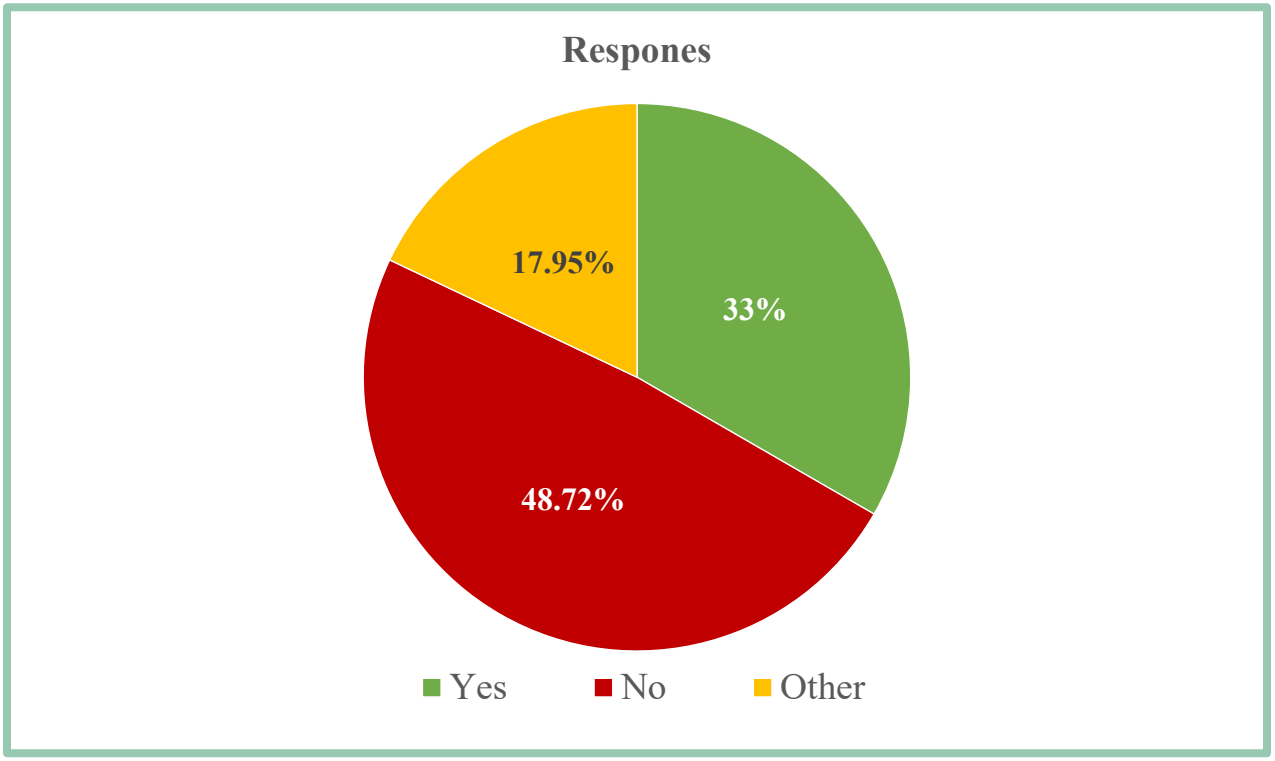
Question Fifteen: What triggers a unit moving back to the central location?

Answered: 2 Skipped: 43

Question Fifteen Narrative Responses
RESPONSES
Released by command.
Another unit getting back in service.

Question Sixteen: Do any of your crews participate in “move-ups” to other station locations during times of high call volume across the county/region?

Answered: 39 Skipped: 6



ANSWER CHOICES	RESPONSES	
No	48.72%	19
Yes	33.33%	13
Other (please specify)	17.95%	7
TOTAL		**39**

Question Sixteen Narrative Responses
OTHER (PLEASE SPECIFY)
No to move-ups, but we do respond to many mutual aid locations when they are out of service or unable to respond.
Only on request.
If dispatched by 911 as a move up.
Only when requested by the county PSAP.
We respond to other areas in the county when the crews in those areas are on other calls or do not respond when dispatched by 911.
We respond to other areas as requested by the responding ambulance.
We just man our own station.

Question Seventeen: Describe your operation relative to back-up crews and/or call-out procedures for times of high call volume.

Answered: 35 Skipped: 10

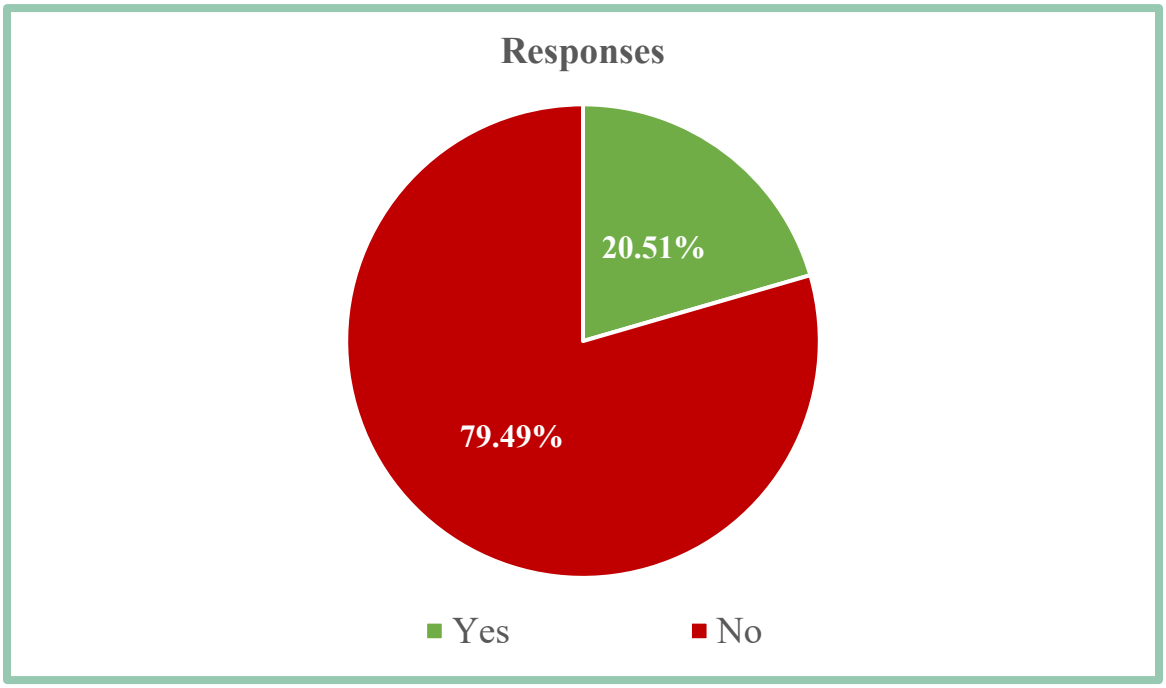
Question Seventeen Narrative Responses
RESPONSES
Our in-house dispatch handles all needed call-ins or move-ups per company policies or direction from Chief.
We rely on mutual aid from the surrounding departments when an ambulance crew is unavailable and or on a call when one of our ambulances are out.
N/A
We have mutual aid agreements with four other departments.
Automatic mutual aid via the 911 center.
Have a pager system and pay out call in pay for off duty medics and EMT's.
We have two BLS ambulances. We are fortunate that we have dedicated personnel who can get both trucks out when needed, be it volunteer crews, or paid staff.
We schedule a second crew during high volume times, otherwise we rely on mutual aid.
Our BLS?QRS crews are requested outside our first due area during transporting EMS high volume times to cover QRS in these areas when an extended ETA for the next due transporting unit.
We respond if crew is available.
We request mutual aid from neighboring departments.
Volunteers are paged for second due calls.
We utilize volunteers.
If we have a second due call in the district, we will attempt to try and get our second QRS unit to that location.
Our unit is strictly volunteer and any move up assignments are handled by the 911 dispatch center.
County 911 dispatches the next closest town.

Question Seventeen Narrative Responses
RESPONSES
We rely on mutual aid and ALS squads from the health systems.
N/A
We are a backup.
Predetermined "run cards" through Butler County 911.
We utilize whoever is available (we are volunteers with full time jobs).
County 911.
N/A
Automatic assistance from Station 56.
We no longer utilize a "back-up" crew.
We utilize volunteer crew when paid staff or duty crew are not on.
We use mutual aid depts.
We move our trucks to whichever area is low on vehicles. For call-out, we use a paging system.
We utilize our crew, then volunteer crew, then next Dept paid crew, then volunteers from other crews.
Crews will move to staging location at the county or borough lines when neighboring areas become depleted of EMS coverage.
We go to next due EMS.
Our responders monitor dispatches in our response area and others will respond if they know the duty crew is out.
If we notice a high call volume with neighboring departments, we will try to establish a crew to standby in quarters.
We call as needed.

Question Seventeen Narrative Responses
RESPONSES
We use our box cards & the next station closest to the call if there is a large incident that requires more equipment/manpower.

Question Eighteen: Is your agency the primary provider in any Butler County municipalities?

Answered: 39 Skipped: 6



ANSWER CHOICES	RESPONSES	
No	79.49%	31
Yes	20.51%	8
TOTAL		**39**

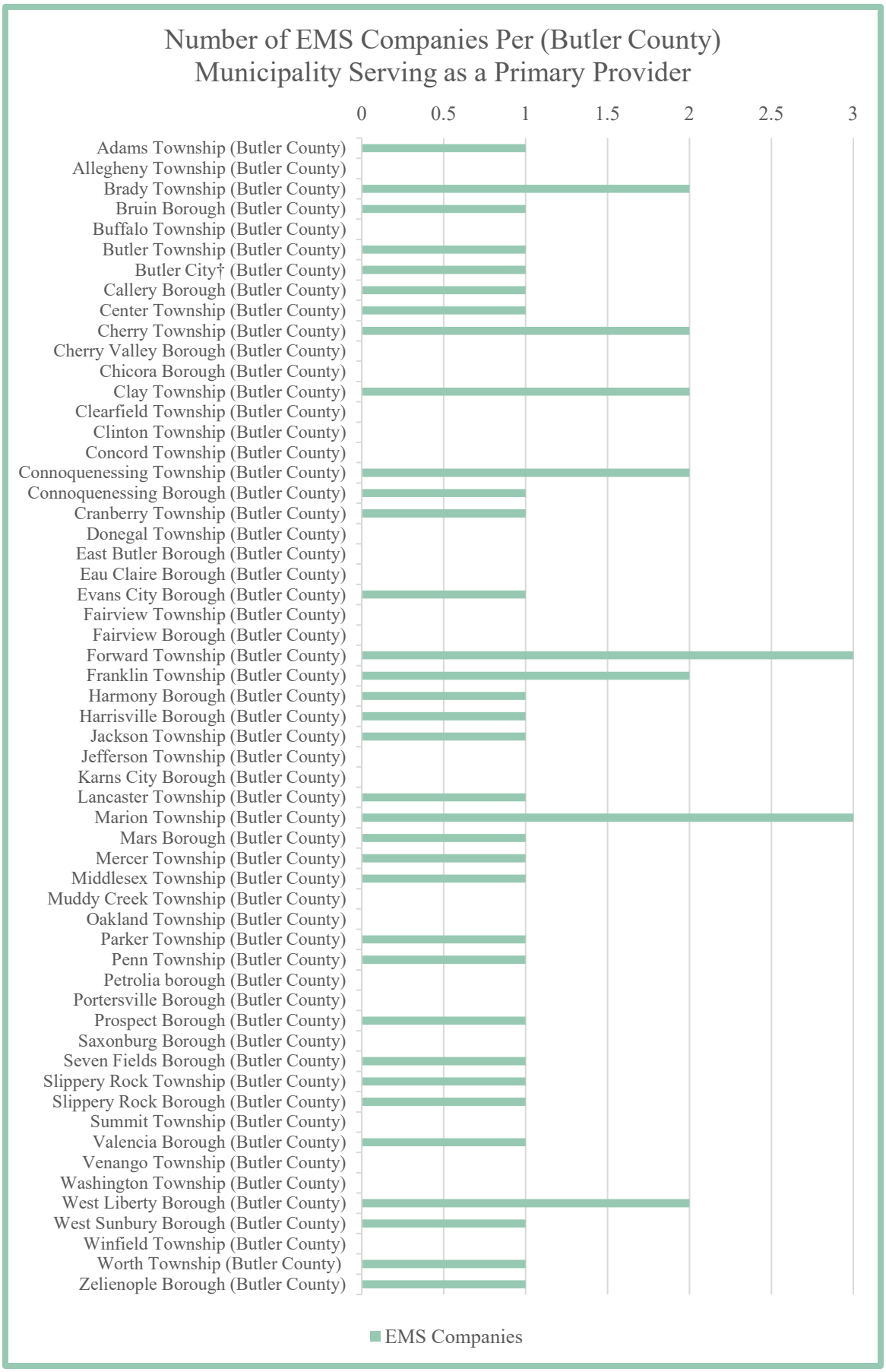
Question Nineteen: What Butler County municipalities have chosen your agency as a primary provider?

Answered: 7 Skipped: 38

ANSWER CHOICES	RESPONSES	NUMBER
Adams Township (Butler County)	14.29%	1
Allegheny Township (Butler County)	0.00%	0
Brady Township (Butler County)	28.57%	2
Bruin Borough (Butler County)	14.29%	1
Buffalo Township (Butler County)	0.00%	0
Butler Township (Butler County)	14.29%	1
Butler City† (Butler County)	14.29%	1
Callery Borough (Butler County)	14.29%	1
Center Township (Butler County)	14.29%	1
Cherry Township (Butler County)	28.57%	2
Cherry Valley Borough (Butler County)	0.00%	0
Chicora Borough (Butler County)	0.00%	0
Clay Township (Butler County)	28.57%	2
Clearfield Township (Butler County)	0.00%	0
Clinton Township (Butler County)	0.00%	0
Concord Township (Butler County)	0.00%	0
Connoquenessing Township (Butler County)	28.57%	2
Connoquenessing Borough (Butler County)	14.29%	1

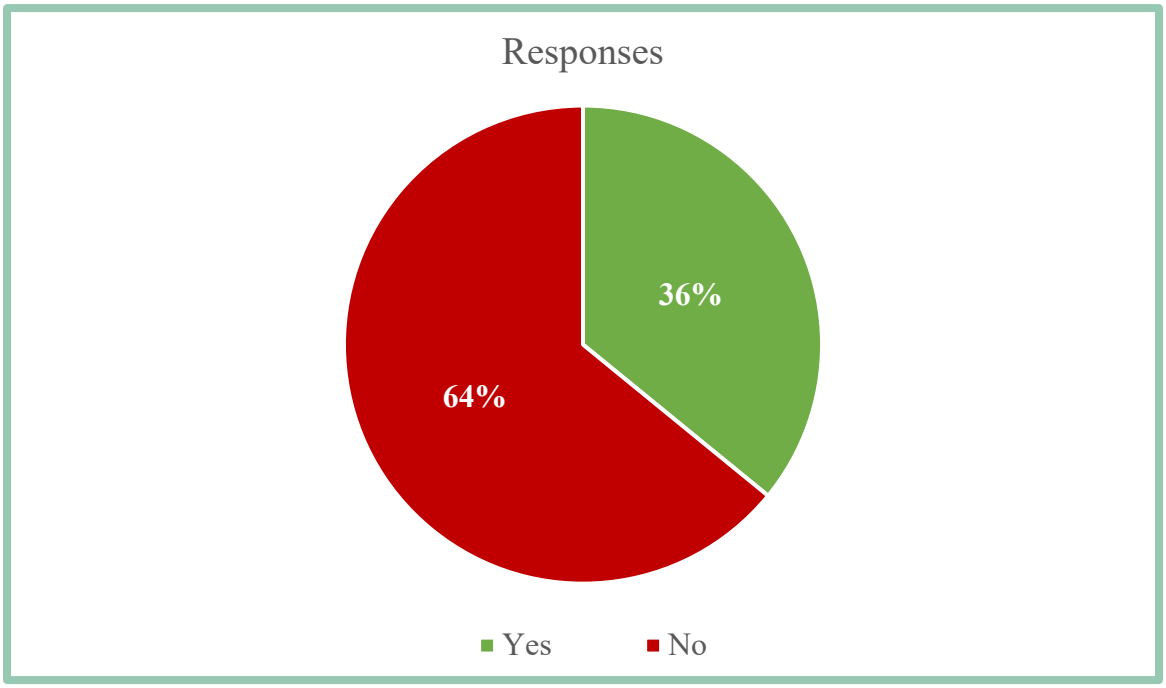
ANSWER CHOICES	RESPONSES	NUMBER
Cranberry Township (Butler County)	14.29%	1
Donegal Township (Butler County)	0.00%	0
East Butler Borough (Butler County)	0.00%	0
Eau Claire Borough (Butler County)	0.00%	0
Evans City Borough (Butler County)	14.29%	1
Fairview Township (Butler County)	0.00%	0
Fairview Borough (Butler County)	0.00%	0
Forward Township (Butler County)	42.86%	3
Franklin Township (Butler County)	28.57%	2
Harmony Borough (Butler County)	14.29%	1
Harrisville Borough (Butler County)	14.29%	1
Jackson Township (Butler County)	14.29%	1
Jefferson Township (Butler County)	0.00%	0
Karns City Borough (Butler County)	0.00%	0
Lancaster Township (Butler County)	14.29%	1
Marion Township (Butler County)	42.86%	3
Mars Borough (Butler County)	14.29%	1
Mercer Township (Butler County)	14.29%	1
Middlesex Township (Butler County)	14.29%	1
Muddy Creek Township (Butler County)	0.00%	0

ANSWER CHOICES	RESPONSES	NUMBER
Oakland Township (Butler County)	0.00%	0
Parker Township (Butler County)	14.29%	1
Penn Township (Butler County)	14.29%	1
Petrolia borough (Butler County)	0.00%	0
Portersville Borough (Butler County)	0.00%	0
Prospect Borough (Butler County)	14.29%	1
Saxonburg Borough (Butler County)	0.00%	0
Seven Fields Borough (Butler County)	14.29%	1
Slippery Rock Township (Butler County)	14.29%	1
Slippery Rock Borough (Butler County)	14.29%	1
Summit Township (Butler County)	0.00%	0
Valencia Borough (Butler County)	14.29%	1
Venango Township (Butler County)	0.00%	0
Washington Township (Butler County)	0.00%	0
West Liberty Borough (Butler County)	28.57%	2
West Sunbury Borough (Butler County)	14.29%	1
Winfield Township (Butler County)	0.00%	0
Worth Township (Butler County)	14.29%	1
Zelienople Borough (Butler County)	14.29%	1


Number of EMS Companies Per (Butler County) Municipality Serving as a Primary Provider
0
0.5
1
1.5
2
2.5
3
Adams Township (Butler County)
Allegheny Township (Butler County)
Brady Township (Butler County)
Bruin Borough (Butler County)
Buffalo Township (Butler County)
Butler Township (Butler County)
Butler City† (Butler County)
Callery Borough (Butler County)
Center Township (Butler County)
Cherry Township (Butler County)
Cherry Valley Borough (Butler County)
Chicora Borough (Butler County)
Clay Township (Butler County)
Clearfield Township (Butler County)
Clinton Township (Butler County)
Concord Township (Butler County)
Connoquenessing Township (Butler County)
Connoquenessing Borough (Butler County)
Cranberry Township (Butler County)
Donegal Township (Butler County)
East Butler Borough (Butler County)
Eau Claire Borough (Butler County)
Evans City Borough (Butler County)
Fairview Township (Butler County)
Fairview Borough (Butler County)
Forward Township (Butler County)
Franklin Township (Butler County)
Harmony Borough (Butler County)
Harrisville Borough (Butler County)
Jackson Township (Butler County)
Jefferson Township (Butler County)
Karns City Borough (Butler County)
Lancaster Township (Butler County)
Marion Township (Butler County)
Mars Borough (Butler County)
Mercer Township (Butler County)
Middlesex Township (Butler County)
Muddy Creek Township (Butler County)
Oakland Township (Butler County)
Parker Township (Butler County)
Penn Township (Butler County)
Petrolia borough (Butler County)
Portersville Borough (Butler County)
Prospect Borough (Butler County)
Saxonburg Borough (Butler County)
Seven Fields Borough (Butler County)
Slippery Rock Township (Butler County)
Slippery Rock Borough (Butler County)
Summit Township (Butler County)
Valencia Borough (Butler County)
Venango Township (Butler County)
Washington Township (Butler County)
West Liberty Borough (Butler County)
West Sunbury Borough (Butler County)
Winfield Township (Butler County)
Worth Township (Butler County)
Zelienople Borough (Butler County)
EMS Companies

Question Twenty: Is your agency the primary provider in any Lycoming County municipalities?

Answered: 39 Skipped: 6



ANSWER CHOICES	RESPONSES	
No	64.10%	25
Yes	35.90%	14
TOTAL		**39**

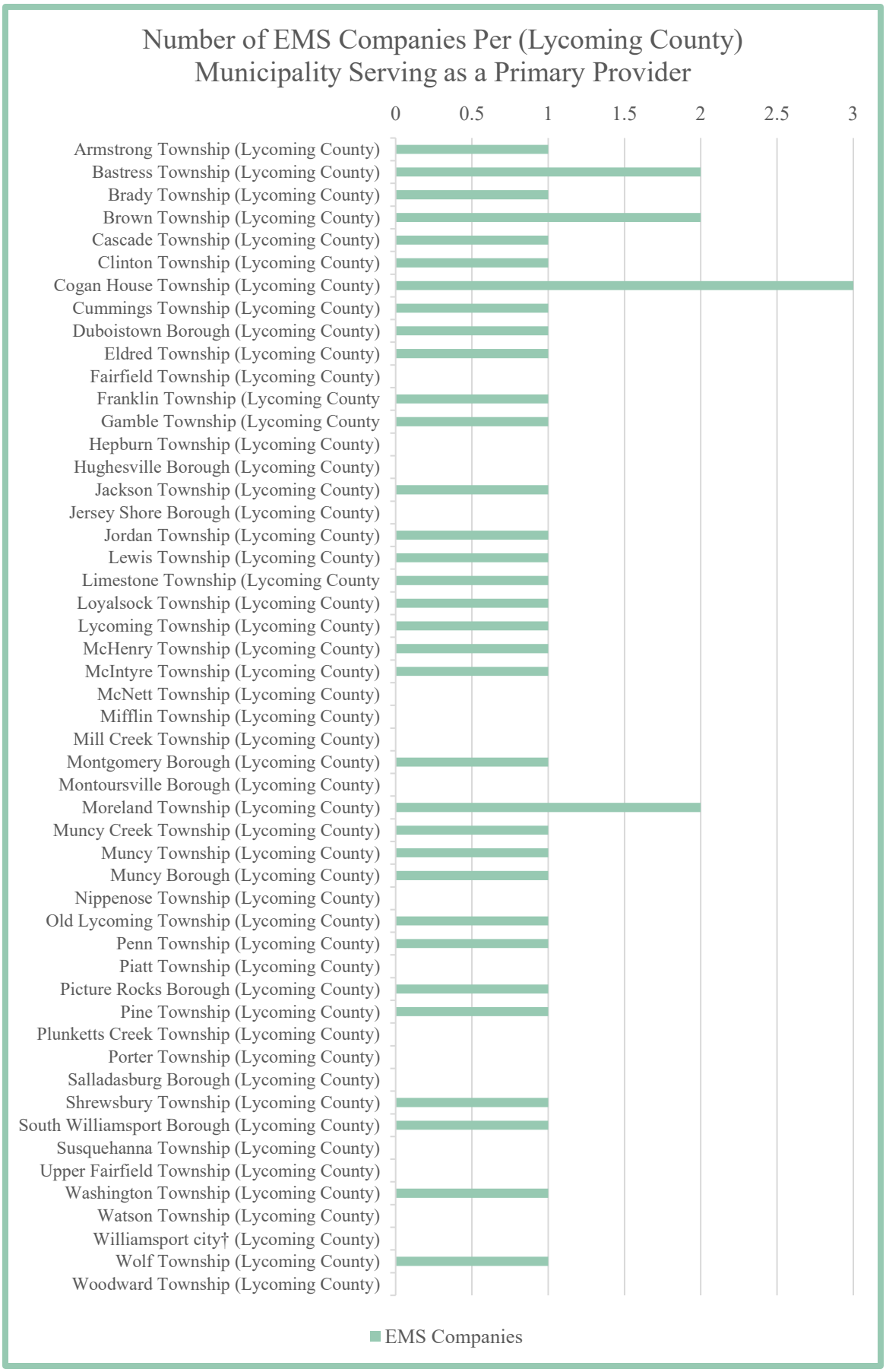
Question Twenty-One: What Lycoming County municipalities have chosen your agency as a primary provider?

Answered: 14 Skipped: 31

ANSWER CHOICES	RESPONSES	Number
Armstrong Township (Lycoming County)	7.14%	1
Bastress Township (Lycoming County)	14.29%	2
Brady Township (Lycoming County)	7.14%	1
Brown Township (Lycoming County)	14.29%	2
Cascade Township (Lycoming County)	7.14%	1
Clinton Township (Lycoming County)	7.14%	1
Cogan House Township (Lycoming County)	21.43%	3
Cummings Township (Lycoming County)	7.14%	1
Duboistown Borough (Lycoming County)	7.14%	1
Eldred Township (Lycoming County)	7.14%	1
Fairfield Township (Lycoming County)	0.00%	0
Franklin Township (Lycoming County	7.14%	1
Gamble Township (Lycoming County	7.14%	1
Hepburn Township (Lycoming County)	0.00%	0
Hughesville Borough (Lycoming County)	0.00%	0
Jackson Township (Lycoming County)	7.14%	1
Jersey Shore Borough (Lycoming County)	0.00%	0
Jordan Township (Lycoming County)	7.14%	1

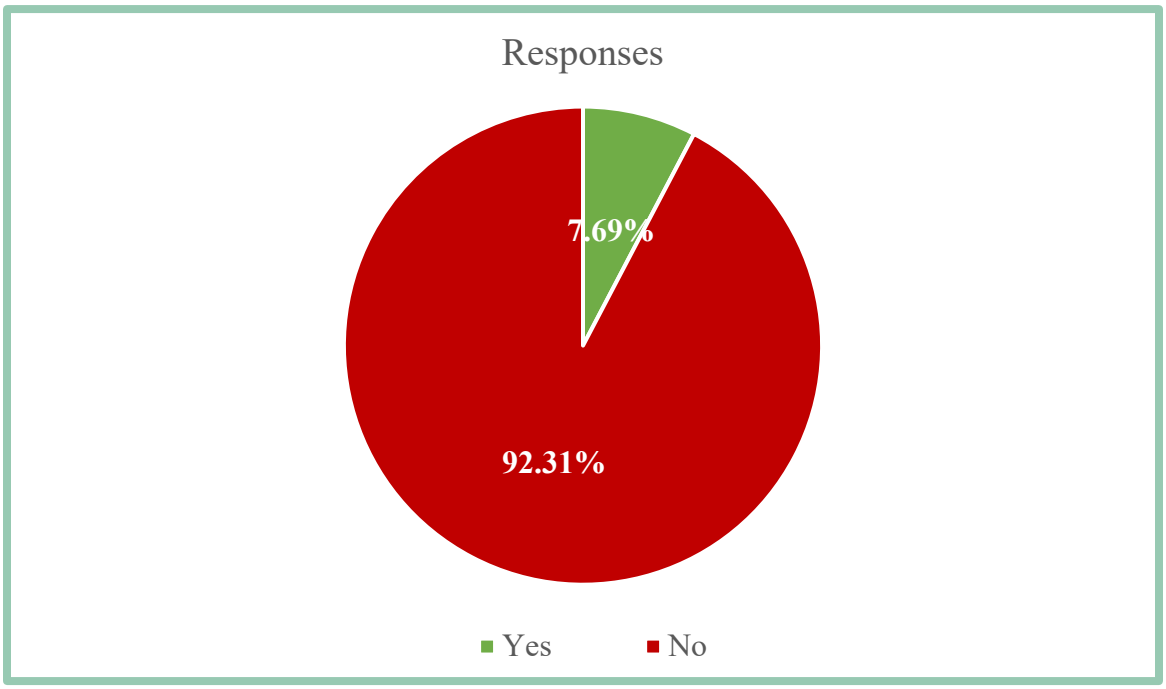
ANSWER CHOICES	RESPONSES	Number
Lewis Township (Lycoming County)	7.14%	1
Limestone Township (Lycoming County	7.14%	1
Loyalsock Township (Lycoming County)	7.14%	1
Lycoming Township (Lycoming County)	7.14%	1
McHenry Township (Lycoming County)	7.14%	1
McIntyre Township (Lycoming County)	7.14%	1
McNett Township (Lycoming County)	0.00%	0
Mifflin Township (Lycoming County)	0.00%	0
Mill Creek Township (Lycoming County)	0.00%	0
Montgomery Borough (Lycoming County)	7.14%	1
Montoursville Borough (Lycoming County)	0.00%	0
Moreland Township (Lycoming County)	14.29%	2
Muncy Creek Township (Lycoming County)	7.14%	1
Muncy Township (Lycoming County)	7.14%	1
Muncy Borough (Lycoming County)	7.14%	1
Nippenose Township (Lycoming County)	0.00%	0
Old Lycoming Township (Lycoming County)	7.14%	1
Penn Township (Lycoming County)	7.14%	1
Piatt Township (Lycoming County)	0.00%	0
Picture Rocks Borough (Lycoming County)	7.14%	1

ANSWER CHOICES	RESPONSES	Number
Pine Township (Lycoming County)	7.14%	1
Plunketts Creek Township (Lycoming County)	0.00%	0
Porter Township (Lycoming County)	0.00%	0
Salladasburg Borough (Lycoming County)	0.00%	0
Shrewsbury Township (Lycoming County)	7.14%	1
South Williamsport Borough (Lycoming County)	7.14%	1
Susquehanna Township (Lycoming County)	0.00%	0
Upper Fairfield Township (Lycoming County)	0.00%	0
Washington Township (Lycoming County)	7.14%	1
Watson Township (Lycoming County)	0.00%	0
Williamsport city† (Lycoming County)	0.00%	0
Wolf Township (Lycoming County)	7.14%	1
Woodward Township (Lycoming County)	0.00%	0


Number of EMS Companies Per (Lycoming County) Municipality Serving as a Primary Provider
0
0.5
1
1.5
2
2.5
3
Armstrong Township (Lycoming County)
Bastress Township (Lycoming County)
Brady Township (Lycoming County)
Brown Township (Lycoming County)
Cascade Township (Lycoming County)
Clinton Township (Lycoming County)
Cogan House Township (Lycoming County)
Cummings Township (Lycoming County)
Duboistown Borough (Lycoming County)
Eldred Township (Lycoming County)
Fairfield Township (Lycoming County)
Franklin Township (Lycoming County
Gamble Township (Lycoming County
Hepburn Township (Lycoming County)
Hughesville Borough (Lycoming County)
Jackson Township (Lycoming County)
Jersey Shore Borough (Lycoming County)
Jordan Township (Lycoming County)
Lewis Township (Lycoming County)
Limestone Township (Lycoming County
Loyalsock Township (Lycoming County)
Lycoming Township (Lycoming County)
McHenry Township (Lycoming County)
McIntyre Township (Lycoming County)
McNett Township (Lycoming County)
Mifflin Township (Lycoming County)
Mill Creek Township (Lycoming County)
Montgomery Borough (Lycoming County)
Montoursville Borough (Lycoming County)
Moreland Township (Lycoming County)
Muncy Creek Township (Lycoming County)
Muncy Township (Lycoming County)
Muncy Borough (Lycoming County)
Nippenose Township (Lycoming County)
Old Lycoming Township (Lycoming County)
Penn Township (Lycoming County)
Piatt Township (Lycoming County)
Picture Rocks Borough (Lycoming County)
Pine Township (Lycoming County)
Plunketts Creek Township (Lycoming County)
Porter Township (Lycoming County)
Salladasburg Borough (Lycoming County)
Shrewsbury Township (Lycoming County)
South Williamsport Borough (Lycoming County)
Susquehanna Township (Lycoming County)
Upper Fairfield Township (Lycoming County)
Washington Township (Lycoming County)
Watson Township (Lycoming County)
Williamsport city† (Lycoming County)
Wolf Township (Lycoming County)
Woodward Township (Lycoming County)
EMS Companies

Question Twenty-Two: Is your agency the primary provider in any Mercer County municipalities?

Answered: 39 Skipped: 6



ANSWER CHOICES	RESPONSES	
No	92.31%	36
Yes	7.69%	3
TOTAL		**39**

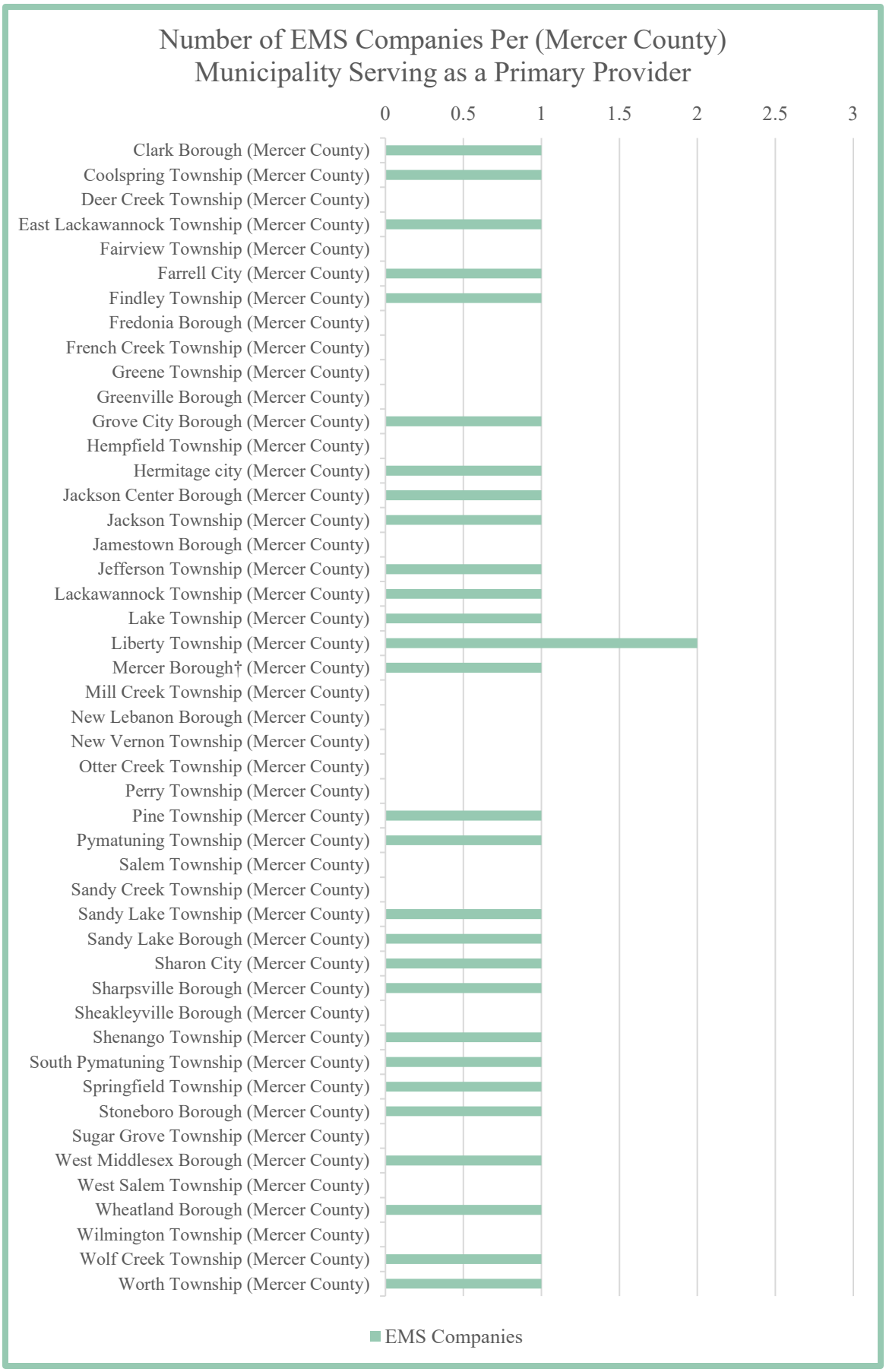
Question Twenty-Three: What Mercer County municipalities have chosen your agency as a primary provider?

Answered: 3 Skipped: 42

ANSWER CHOICES	RESPONSES	
Clark Borough (Mercer County)	33.33%	1
Coolspring Township (Mercer County)	33.33%	1
Deer Creek Township (Mercer County)	0.00%	0
East Lackawannock Township (Mercer County)	33.33%	1
Fairview Township (Mercer County)	0.00%	0
Farrell City (Mercer County)	33.33%	1
Findley Township (Mercer County)	33.33%	1
Fredonia Borough (Mercer County)	0.00%	0
French Creek Township (Mercer County)	0.00%	0
Greene Township (Mercer County)	0.00%	0
Greenville Borough (Mercer County)	0.00%	0
Grove City Borough (Mercer County)	33.33%	1
Hempfield Township (Mercer County)	0.00%	0
Hermitage city (Mercer County)	33.33%	1
Jackson Center Borough (Mercer County)	33.33%	1
Jackson Township (Mercer County)	33.33%	1
Jamestown Borough (Mercer County)	0.00%	0
Jefferson Township (Mercer County)	33.33%	1

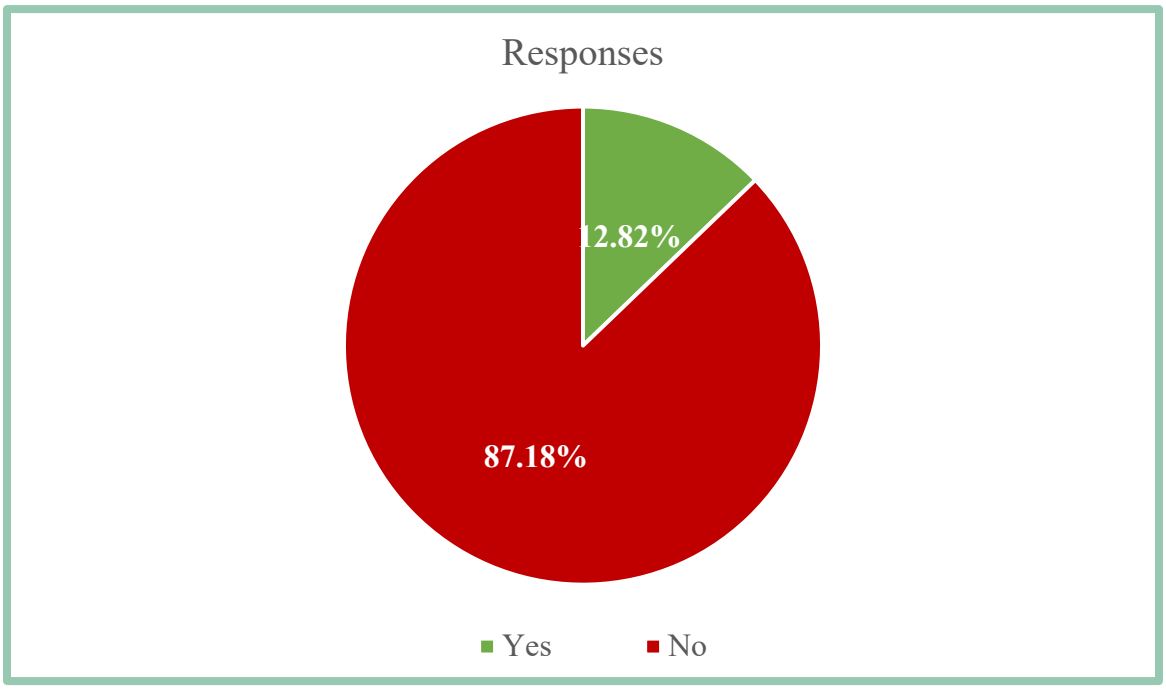
ANSWER CHOICES	RESPONSES	
Lackawannock Township (Mercer County)	33.33%	1
Lake Township (Mercer County)	33.33%	1
Liberty Township (Mercer County)	66.67%	2
Mercer Borough† (Mercer County)	33.33%	1
Mill Creek Township (Mercer County)	0.00%	0
New Lebanon Borough (Mercer County)	0.00%	0
New Vernon Township (Mercer County)	0.00%	0
Otter Creek Township (Mercer County)	0.00%	0
Perry Township (Mercer County)	0.00%	0
Pine Township (Mercer County)	33.33%	1
Pymatuning Township (Mercer County)	33.33%	1
Salem Township (Mercer County)	0.00%	0
Sandy Creek Township (Mercer County)	0.00%	0
Sandy Lake Township (Mercer County)	33.33%	1
Sandy Lake Borough (Mercer County)	33.33%	1
Sharon City (Mercer County)	33.33%	1
Sharpsville Borough (Mercer County)	33.33%	1
Sheakleyville Borough (Mercer County)	0.00%	0
Shenango Township (Mercer County)	33.33%	1
South Pymatuning Township (Mercer County)	33.33%	1

ANSWER CHOICES	RESPONSES	
Springfield Township (Mercer County)	33.33%	1
Stoneboro Borough (Mercer County)	33.33%	1
Sugar Grove Township (Mercer County)	0.00%	0
West Middlesex Borough (Mercer County)	33.33%	1
West Salem Township (Mercer County)	0.00%	0
Wheatland Borough (Mercer County)	33.33%	1
Wilmington Township (Mercer County)	0.00%	0
Wolf Creek Township (Mercer County)	33.33%	1
Worth Township (Mercer County)	33.33%	1


Number of EMS Companies Per (Mercer County) Municipality Serving as a Primary Provider
0
0.5
1
1.5
2
2.5
3
Clark Borough (Mercer County)
Coolspring Township (Mercer County)
Deer Creek Township (Mercer County)
East Lackawannock Township (Mercer County)
Fairview Township (Mercer County)
Farrell City (Mercer County)
Findley Township (Mercer County)
Fredonia Borough (Mercer County)
French Creek Township (Mercer County)
Greene Township (Mercer County)
Greenville Borough (Mercer County)
Grove City Borough (Mercer County)
Hempfield Township (Mercer County)
Hermitage city (Mercer County)
Jackson Center Borough (Mercer County)
Jackson Township (Mercer County)
Jamestown Borough (Mercer County)
Jefferson Township (Mercer County)
Lackawannock Township (Mercer County)
Lake Township (Mercer County)
Liberty Township (Mercer County)
Mercer Borough† (Mercer County)
Mill Creek Township (Mercer County)
New Lebanon Borough (Mercer County)
New Vernon Township (Mercer County)
Otter Creek Township (Mercer County)
Perry Township (Mercer County)
Pine Township (Mercer County)
Pymatuning Township (Mercer County)
Salem Township (Mercer County)
Sandy Creek Township (Mercer County)
Sandy Lake Township (Mercer County)
Sandy Lake Borough (Mercer County)
Sharon City (Mercer County)
Sharpsville Borough (Mercer County)
Sheakleyville Borough (Mercer County)
Shenango Township (Mercer County)
South Pymatuning Township (Mercer County)
Springfield Township (Mercer County)
Stoneboro Borough (Mercer County)
Sugar Grove Township (Mercer County)
West Middlesex Borough (Mercer County)
West Salem Township (Mercer County)
Wheatland Borough (Mercer County)
Wilmington Township (Mercer County)
Wolf Creek Township (Mercer County)
Worth Township (Mercer County)
EMS Companies

Question Twenty-Four: Is your agency the primary provider in any Sullivan County municipalities?

Answered: 39 Skipped: 6

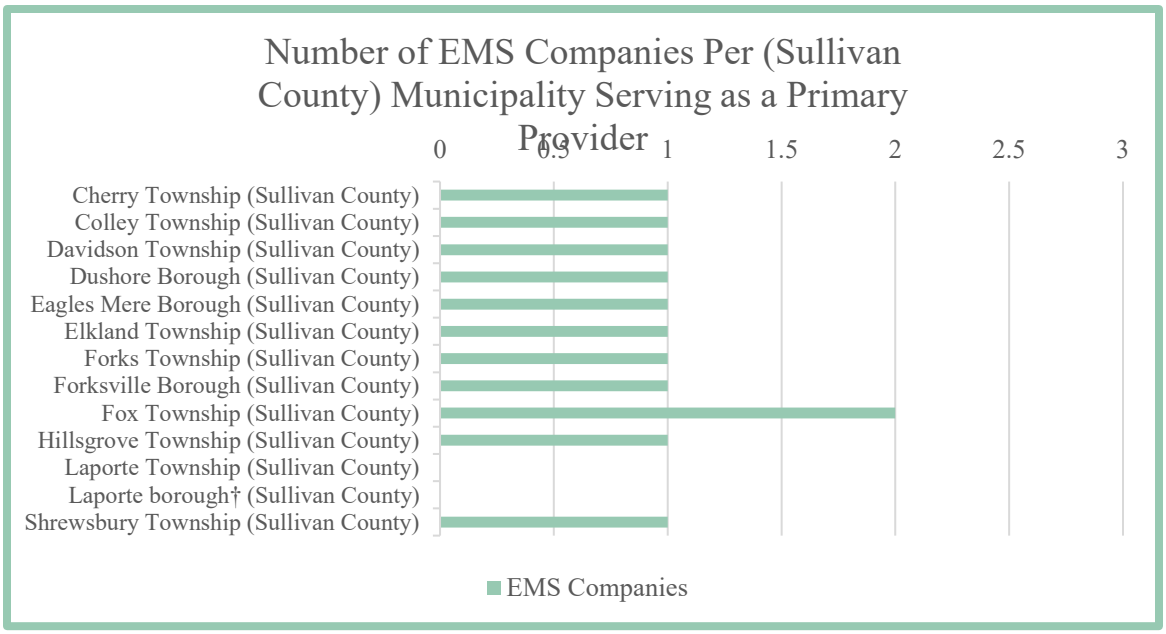


ANSWER CHOICES	RESPONSES	
No	87.18%	34
Yes	12.82%	5
TOTAL		**39**

Question Twenty-Five: What Sullivan County municipalities have chosen your agency as a primary provider?

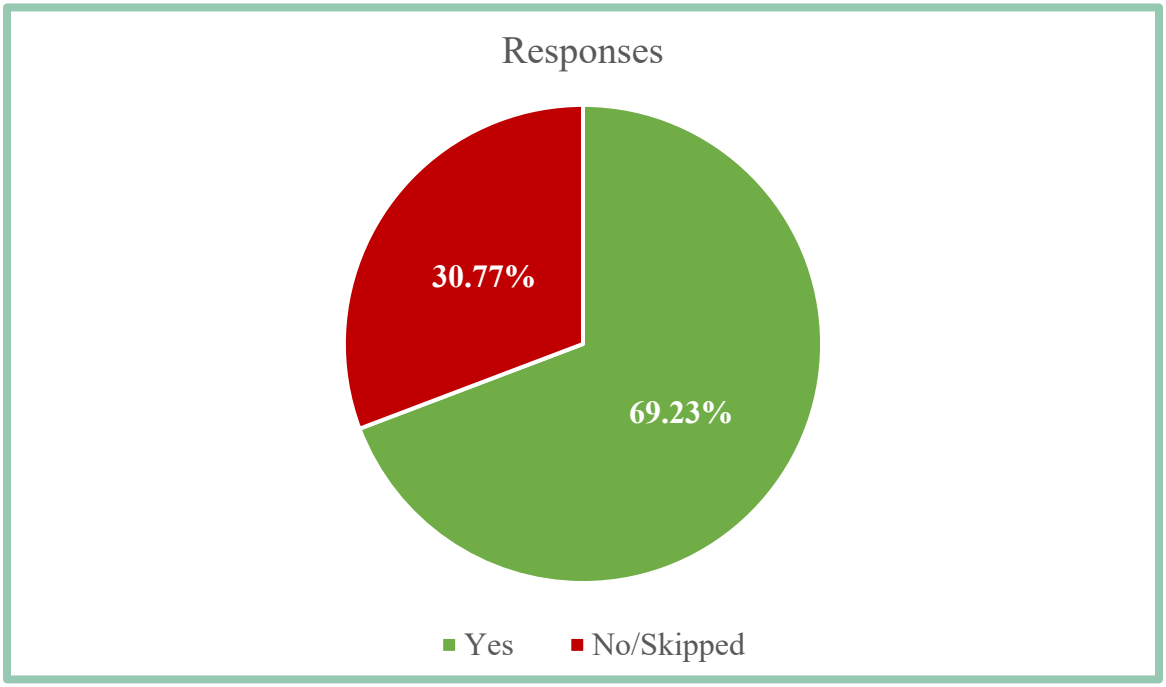
Answered: 5 Skipped: 40

ANSWER CHOICES	RESPONSES	
Cherry Township (Sullivan County)	20.00%	1
Colley Township (Sullivan County)	20.00%	1
Davidson Township (Sullivan County)	20.00%	1
Dushore Borough (Sullivan County)	20.00%	1
Eagles Mere Borough (Sullivan County)	20.00%	1
Elkland Township (Sullivan County)	20.00%	1
Forks Township (Sullivan County)	20.00%	1
Forksville Borough (Sullivan County)	20.00%	1
Fox Township (Sullivan County)	40.00%	2
Hillsgrove Township (Sullivan County)	20.00%	1
Laporte Township (Sullivan County)	0.00%	0
Laporte borough† (Sullivan County)	0.00%	0
Shrewsbury Township (Sullivan County)	20.00%	1
Total Respondents: 5		



Question Twenty-Six: Is your agency the primary provider in any Tioga County municipalities?

Answered: 39 Skipped: 6



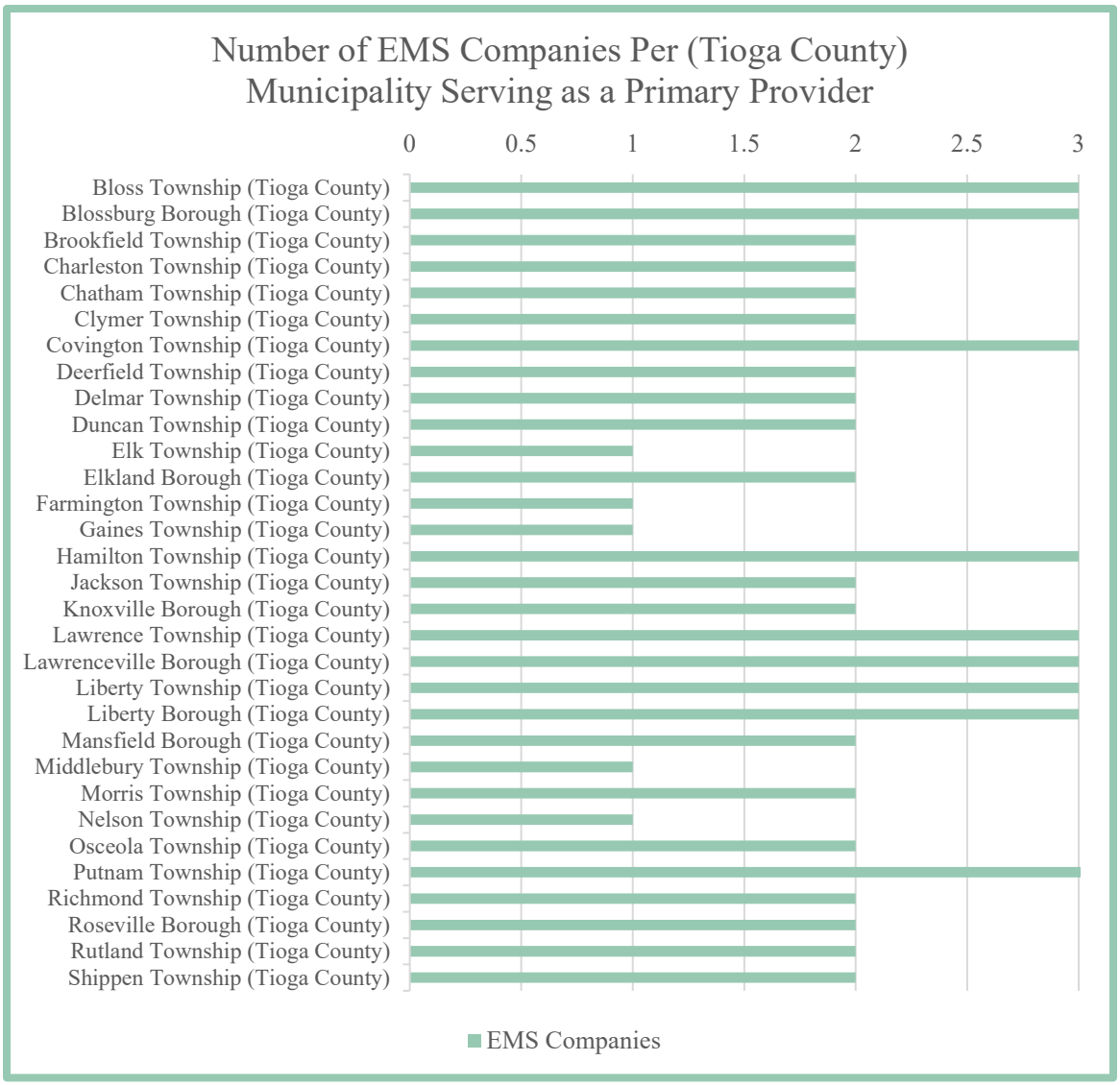
ANSWER CHOICES	RESPONSES	
No	69.23%	27
Yes	30.77%	12
TOTAL		**39**

Question Twenty-Seven: What Tioga County municipalities have chosen your agency as a primary provider?'

Answered: 11 Skipped: 34

ANSWER CHOICES	RESPONSES	
Bloss Township (Tioga County)	27.27%	3
Blossburg Borough (Tioga County)	27.27%	3
Brookfield Township (Tioga County)	18.18%	2
Charleston Township (Tioga County)	18.18%	2
Chatham Township (Tioga County)	18.18%	2
Clymer Township (Tioga County)	18.18%	2
Covington Township (Tioga County)	27.27%	3
Deerfield Township (Tioga County)	18.18%	2
Delmar Township (Tioga County)	18.18%	2
Duncan Township (Tioga County)	18.18%	2
Elk Township (Tioga County)	9.09%	1
Elkland Borough (Tioga County)	18.18%	2
Farmington Township (Tioga County)	9.09%	1
Gaines Township (Tioga County)	9.09%	1
Hamilton Township (Tioga County)	27.27%	3
Jackson Township (Tioga County)	18.18%	2
Knoxville Borough (Tioga County)	18.18%	2
Lawrence Township (Tioga County)	27.27%	3

ANSWER CHOICES	RESPONSES	
Lawrenceville Borough (Tioga County)	27.27%	3
Liberty Township (Tioga County)	27.27%	3
Liberty Borough (Tioga County)	27.27%	3
Mansfield Borough (Tioga County)	18.18%	2
Middlebury Township (Tioga County)	9.09%	1
Morris Township (Tioga County)	18.18%	2
Nelson Township (Tioga County)	9.09%	1
Osceola Township (Tioga County)	18.18%	2
Putnam Township (Tioga County)	36.36%	4
Richmond Township (Tioga County)	18.18%	2
Roseville Borough (Tioga County)	18.18%	2
Rutland Township (Tioga County)	18.18%	2
Shippen Township (Tioga County)	18.18%	2
Total Respondents: 11		



Question Twenty-Eight: To what counties/municipalities does your service provide second due coverage?

Answered: 35 Skipped: 10

RESPONSES
Other areas in Venango County (Primary and Second due) Lawrence County (Primary and Second due) Mercer and Butler (Second due).
Mansfield coverage area.

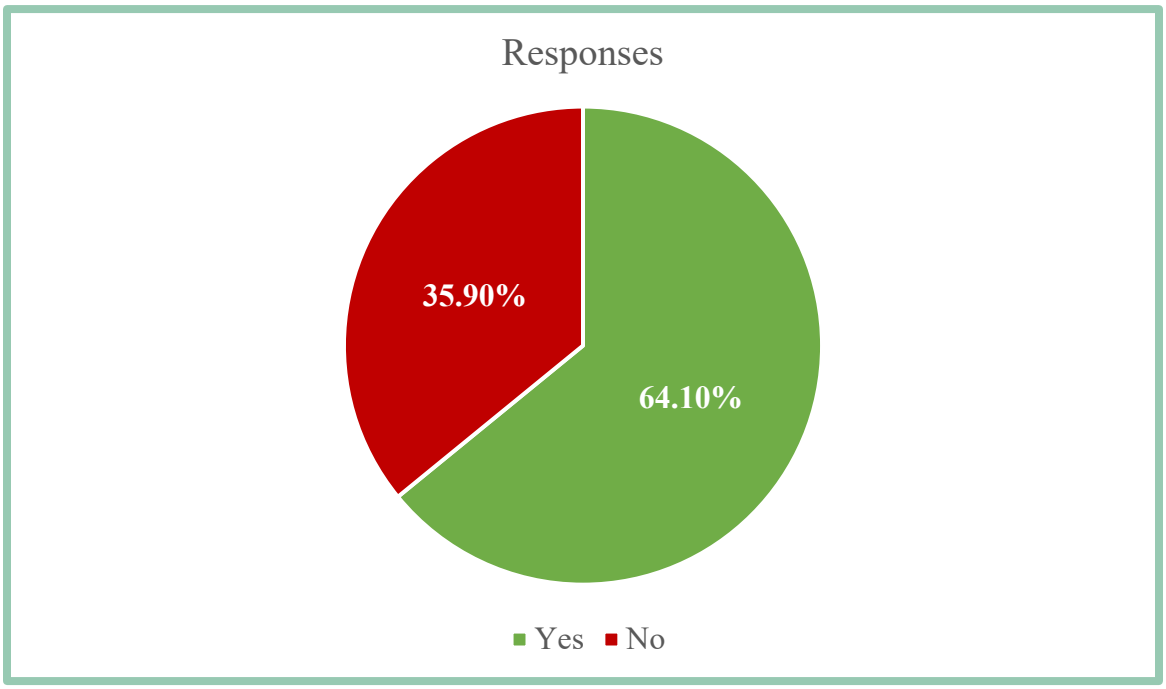
RESPONSES
Potter county, Harrison Township, Galeton Township, Gains Township, Deerfield Township, Knoxville Borough, and Osceola Township.
Tioga Borough/Township.
Hughesville Borough, Greenwood (Columbia County), and Muncy Creek.
Williamsport, Hepburn, Lewis, McIntyre, Loyalsock, and Woodward in Lycoming County.
Potter and Galeton Borough.
All Lycoming County municipalities when requested. Also, Northern Northumberland County and Northern Union County, and Southern Sullivan County.
Centre/State College, College Township, Ferguson, Patton, and Harris.
Perry Township and Armstrong County.
If crew is available, we will go to Elkland, Nelson, and Osceola.
Blossburg Borough, Blossburg Township, Hamilton Township, Morris Township, and Morris.
Union, Montour, and Columbia.
Lycoming, Sullivan, and Tioga counties - multiple municipalities.
Clinton County - Gallagher Township
Lycoming County - McNett Township and Jackson Township; Tioga County - Union Township; Bradford County - Canton Township and Canton Borough.
N/A
Beaver, Butler, and Allegheny Counties.
Bradford County - we provide service to Cherry Township, Colley Township, Albany Township, Albany Borough, Wilmot Township, Overton Township, Forks Township, Elkland Township.
Beaver and Allegheny.

RESPONSES
Lawrence County, PA.
Davidson Township and Hughesville Borough.
Clinton Township, Brady Township, and Washington Township, Lycoming County and Delaware; Watsontown Borough, and Turbotville Borough, Northumberland County.
Crawford Township, Clinton County (1st due); Nippenose Township, Lycoming County (2nd due); Greene Township, Clinton County (2nd due).
Elkland Township.
East Butler Borough, Summit Township, Donegal Township, Slippery Rock Township, Slippery Rock Borough, Chicora Borough, Karns City, Petrolia Township, Fairview Township, Clearfield Township, Saxonburg Borough, Winfield Township, Clinton Township, Concord Township, Oakland Township, Portersville Township, Muddy Creek Township, and Jefferson Township.
Wherever dispatched in Tioga County.
Westfield and Nelson.
All of Mercer County and western Lawrence County.
Potter County and All of Tioga County. In the previous question, Wellsboro Borough was not available as a choice.
Cranberry Township, Muddycreek Township, Ellwood City, New Brighton Township, Portersville Borough, Callery Borough, New Sewickley Township (1/2 primary 1/2 secondary), Connoquenessing Township (1/2 primary 1/2 secondary), Prospect Borough, Franklin Township (1/2 primary 1/2 secondary), Lawrence County, Butler County, and Beaver County.
We cover a portion of Ward Township in Tioga County as well. We also provide cover to Liberty, Liberty Township, Jackson Township (Route 15 in Lycoming County), and very few times Union Township in Bradford County.
Liberty Township and Borough, Wellsboro Borough, Delmar Township, and Charleston Township.

RESPONSES
Additional first due to Forkston Township – Wyoming County; Second due to Dushore Borough, Laporte Township, Laporte Borough, Forks Township – Sullivan County; Second due to Wilmot Township in Bradford County.
Davidson Township, Muncy Valley, Laporte, and Laporte Borough.

Question Twenty-Nine: Do you have a public education program in place (First Aid/CPR/EMT/etc.)?

Answered: 39 Skipped: 6



ANSWER CHOICES	RESPONSES	
No	35.90%	14
Yes (Please provide details):	64.10%	2
TOTAL		**39**

YES (PLEASE PROVIDE DETAILS):
We are an accredited EMS & AHA Training center providing Community and First Responder education/certification courses. EMR, EMT, AEMT, Paramedic, CPR, First Aid, ACLS, PALS, Agriculture Emergencies/Rescue, and various other education programs. We have a full time education director with eight instructors.

YES (PLEASE PROVIDE DETAILS):
Our assistant chief is able to provide a class on this when needed.
CPR.
First Aid/CPR/EMT/Stop the Bleed.
We provide CPR/AED training and AHA First Aid to the general public, the school district, and multiple businesses in our jurisdiction.
We have three EMT's certified to provide CPR and first aid. Methodology class is not available to new participants locally or during evening hours/weekends.
CPR training is held at the firehall.
We have instructors in house for CPR and first aid. Anyone who wants EMT or EMR training must sign up for a class offered in the county.
We have offered Community CPR and First Aid classes at the Station for Township residents. To help recruit more DOH certified members, we have also held an EMR class at our Station. However, out of the eight students, only three of them tested, and only one was able to pass the National Exam to be certified. The largest mistake the state has made was to make the Emergency Responder Course to be held to the National Registry Standards when PA EMR's do not function to that standard. So instead, they are forced to take a test that does not fit the scope of their practice, giving a poor success rate to potential providers that would be more than capable to render appropriate care to patients. We need to allow Emergency Responders to become certified like they had in the past by organizations like the Red Cross or ASHI.
We have monthly CPR and First Aid courses for the public. We also offer education during car seat checks. Lastly, we have a patent on Safe Landings, which is a program in which we do home inspections, CPR, and car seat checks for new and expecting mothers. We try and stay very engaged with the community every chance we can.
We provide CPR/AED class on a yearly basis.
We provide education to local EMS crews - CPR, ACLS, PALS, ITLS, and continuing education.
In cooperation with Ellwood City Fire Department, we offer community CPR classes at our Fire/EMS station.
We have this set up with mutual aid departments.

YES (PLEASE PROVIDE DETAILS):
We provide community civic group education upon request to include first aid, CPR, and AED training.
We offer CPR training.
We offer training for first aid and CPR.
We provide EMS con-ed CPR/first aid.
Yes, we teach CPR, ACLS, PALS, EMT-B, EMT-A, and Paramedic courses. This is in partnership with Penn State Fayette.
Twice a year we have CPR classes for first responders and community. We participate in Penn College EMT program as a ride along service. We sponsor EVDT class once per year.
We train residents and businesses in AED, CPR, Stop the Bleed and First Aid. We also provide medical training for healthcare providers IE Pediatric Advanced Life Support, and Advance Cardiac Life Support
We do not publish when our classes are. However, if someone from our community wants to participate, we welcome them. We also share information via our social media platforms as well.
Yes, when requested we provide CPR, AED, first aid, and some in house EMT con-ed
Depending on instructor availability, we have provided CPR/first aid to community members.
We officer CPR and car seat check.

Question Thirty: How often do you provide public education and to what audiences?

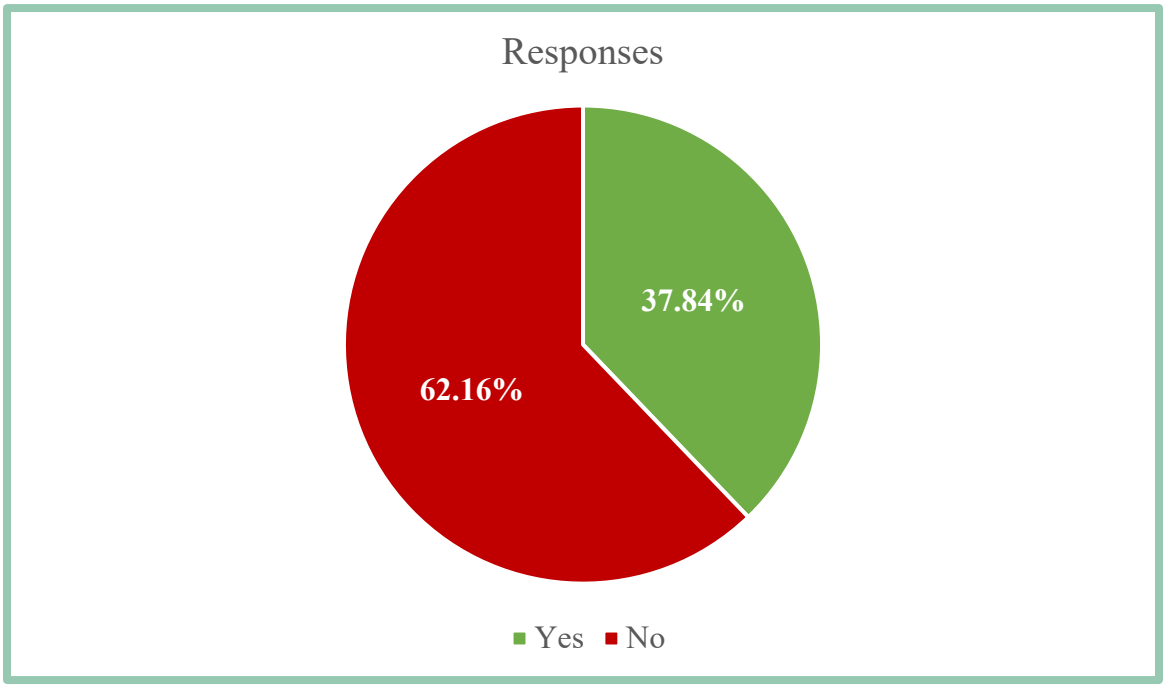
Answered: 34 Skipped: 11

RESPONSES
Public education is available anytime and most of it is scheduled in advance.
N/A
Two to four times a year for fourth through twelfth grade and pre-k.
Typically for members, and as needed.
When called.
Several times a year in various open house situations, and via social media and web site.
Education is offered for the community as needed.
It varies, but generally occurs twice a quarter.
Education is offered annually to the Karns City School District
We offer education when requested.
We host education two times per year for EMS providers.
We provide education for schools.
N/A
Once or twice a year at our festivals we hold training at the firehouse. We set-up a public education table for hands-only CPR and Stop the Bleed. Every other year we have offered the Community CPR courses as discussed above.
We offer training as time and funds permit, and we train the general population.
The county has classes every month. Our department has five CPR instructors.
Please see above for a description.

RESPONSES
N/A
We train EMS crews as needed.
We offer education once per month.
We provide training once per month for all departments
Training occurs three to four times per year to community civic groups.
We host training when requested by local church groups and scouting groups, and we offer basic first aid and fire prevention.
We provide education when re-certification is required.
Training happens a couple times a year and is for the Boys Scouts doctor offices and various child summer camps.
Education is a few times a year and offered to EMS providers.
Education is offered for all audiences in the following schedule: CPR monthly, EMT-B classes two times per year, and AEMT and Paramedic one time per year.
CPR training is offered twice per year.
Education is offered monthly, as needed.
Education is as needed.
Public education is offered occasionally to public and con-ed to EMS providers.
Education opportunities are offered as needed and by instructor availability.
It occurs weekly for community, police, and businesses.
We would like to do once a year, at least, for the seniors. We had to cancel last years due to Covid.

Question Thirty-One: Do you coordinate your public education sessions with any other public safety groups?

Answered: 37 Skipped: 8



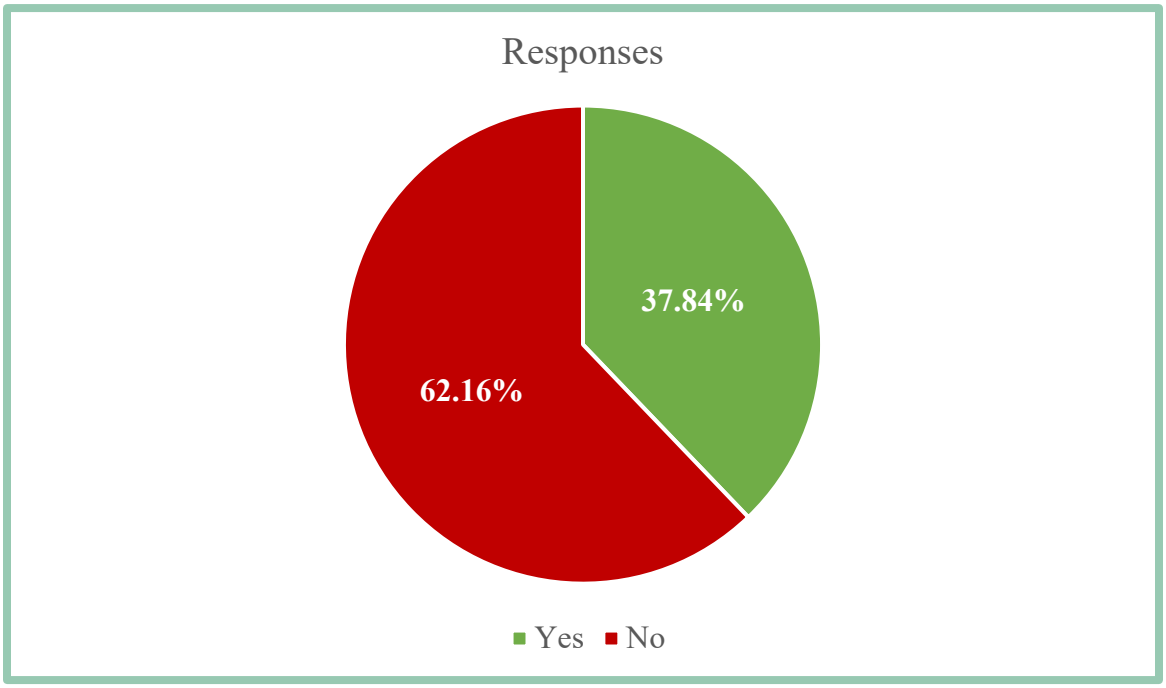
ANSWER CHOICES	RESPONSES	
No	62.16%	23
Yes	37.84%	14
TOTAL		**37**

YES (PLEASE SPECIFY)
We work with various LE/Fire/EMS agencies, a couple hospitals, and Butler County & PA Farm Bureau.
We coordinate FFA farm safety day and career day at high school, and we also do safety day at daycares.
We coordinate with Old Lycoming Police and Susquehanna Regional EMS.
We work with Tioga County EMA.

YES (PLEASE SPECIFY)
We coordinate with Chicora Volunteer Fire Department.
We coordinate with the fire department because our QRS is affiliated through them.
We coordinate with anyone who wants to come.
We have worked with police on some of the public relation projects.
We coordinate with local EMS services, fire services, and police services.
We coordinate with surrounding fire/EMS agencies.
We coordinate with fire stations.
We coordinate with other fire and AMB services.
We work with the county EMA.
We coordinate with fire and police.

Question Thirty-Two: Does your public education material include when to call and what constitutes an emergency?

Answered: 37 Skipped: 8



ANSWER CHOICES	RESPONSES	
No	62.16%	23
Yes (please specify)	37.84%	14
TOTAL		**37**

YES (PLEASE SPECIFY)
We push what is a true emergency and how when to call 911. These programs are presented to elementary schools and adult groups.
It is discussed with students.
N/A
We have a flyer as well as advise the students on the proper use of calling 9-1-1.

YES (PLEASE SPECIFY)
It includes when to call for emergencies.
We have instructions on how to start the chain of survival and when to call 911 for other types of emergencies.
It includes explanations on what constitutes an emergency call and what to expect when we are called.
Yes, when doing elementary school trainings.
It includes the basics to calling 911.
It is in coloring books for kids.
In a pamphlet.
In social media posts.
CPR, AED, and first aid includes activating 911 as a step in the training.
We have flyers on calling 911, address sign placement, and AHA early recognition of cardiac arrest.

Question Thirty-Three: What are the busiest times of the day and busiest day(s) of the week for your agency?

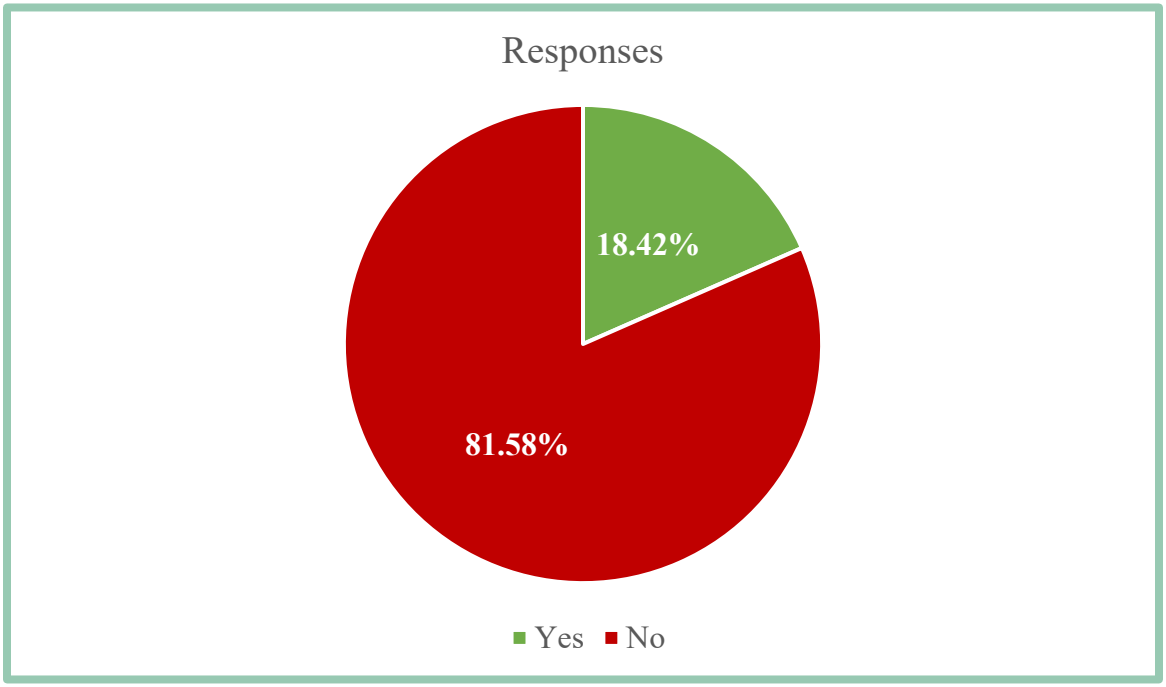
Answered: 35 Skipped: 10

RESPONSES
Typically, the business is Friday between 1:00 p.m. and 6:00 p.m. However, lately every day seems to be busy.
Friday through Sunday and mid-day to mid- to late- afternoon are busiest.
The busiest is 6:00 a.m. through 5:00 p.m., Monday through Friday.
The busiest times vary.
The busiest times are in the evening.
We are fairly constant, as we do second due BLS only in our community.
The busiest is Tuesday through Friday, 8:00 a.m. through 8:00 p.m.
Unknown - it varies from week to week. Some weeks we will not have much activity, and during others we will have ten or more calls in a twenty-four-hour period.
At 8:00 p.m. hours and 12:00 a.m. to 2:00 a.m., with Saturday being the busiest day.
The busiest is the afternoon and evening.
The busiest is from 6:00 a.m. through 10:00 a.m. and 8:30 p.m. through 2:00 a.m.
The busiest times are 5:00 a.m. through 7:00 am or 5:00 p.m. through 7:00 p.m.
The busiest time is 8:00 a.m. through 11:00 a.m. and 4:00 p.m. through 6:00 p.m.
It varies.
Our fire department runs 125 fire and EMS calls. We can go for two weeks without a call or have one to two calls a day for three days in a row.
The busiest are afternoons, evenings, Friday, Saturday, and Sunday.
11:00 a.m. and 4:00 p.m. Fridays then Wednesdays, but this rotates month to month.

RESPONSES
10:00 p.m. through 1:00 a.m. and 11 a.m. 2 p.m. Tuesday and Wednesday.
Weekends and evenings are the busiest.
Weekends and the three through eleven shift.
It varies.
Monday through Friday, 10:00 a.m. to 6:00 p.m.
Thursday and Friday during the B Shift.
No specific day or time, but calls are heavier in spring and summer when vacationers come to their cabins.
The busiest is 11:00 a.m. thorough 8:00 p.m., Tuesday through Thursday.
It varies.
Weekdays from 7:00 a.m. through 7:00 p.m.
Weekdays from 10:00 a.m. through 8:00 p.m.
The busiest times are 9:00 a.m. through 2:00 p.m. during weekdays.
The busiest is 3:00 p.m. through 11:00 p.m., and the days of the week do not matter.
During holiday weekends and hunting seasons.
The busiest is 4:00 p.m. through 6:00 p.m., Monday and Saturday.
During daylight hours.
The busiest is late morning and early afternoon during the week.
Friday from 3:00 p.m. – 11:00 p.m.

Question Thirty-Four: Do you up-staff for these known busy times?

Answered: 38 Skipped: 7



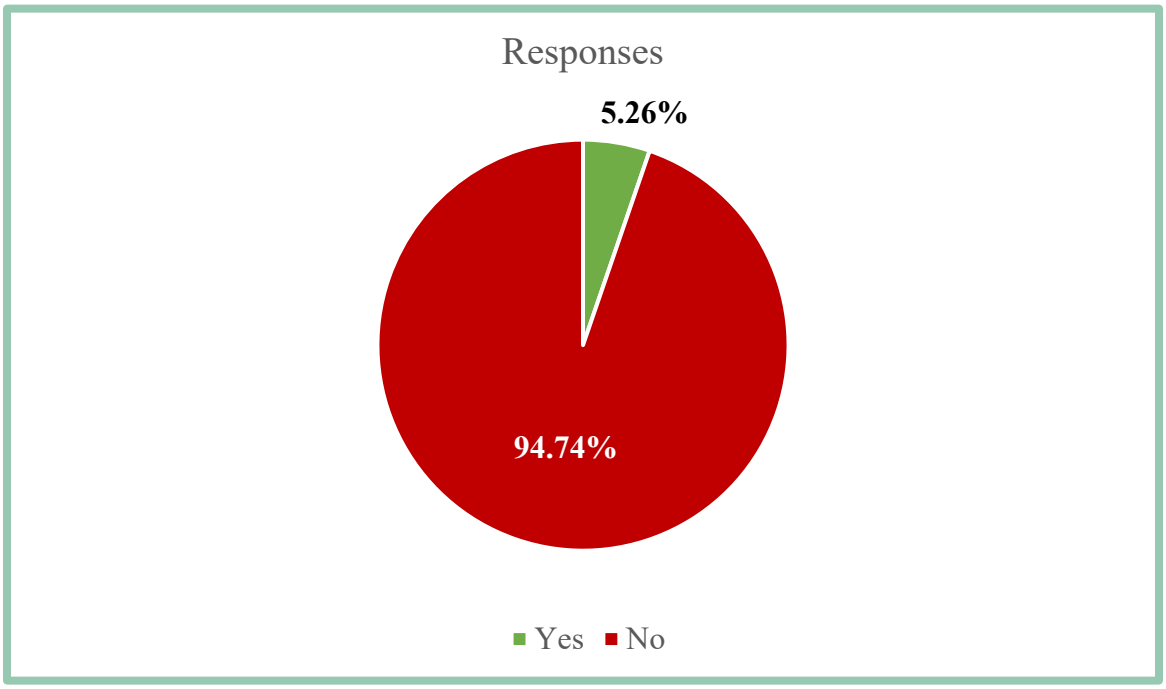
ANSWER CHOICES	RESPONSES	
No	81.58%	31
Yes (how much staff do you add?):	18.42%	7
TOTAL		**38**

YES (HOW MUCH STAFF DO YOU ADD?):
Call in/extra crews are utilized.
One to two EMTS, or one EMT and 1 EMR is utilized.
There is an extra medic on call.
Yes, for overnight Friday and Saturday only, for a total of one additional unit.

Office staff supplements during the busy hours. We also monitor missed calls and UHUs to help make staffing decisions.
Yes, one extra crew member.
During daylight, there is one truck.

Question Thirty-Five: Has your organization ever participated in a busy study, or heat map, predictive call location study?

Answered: 38 Skipped: 7



ANSWER CHOICES	RESPONSES	
No	94.74%	36
Yes	5.26%	2
Other (please specify)	0.00%	0
TOTAL		**38**

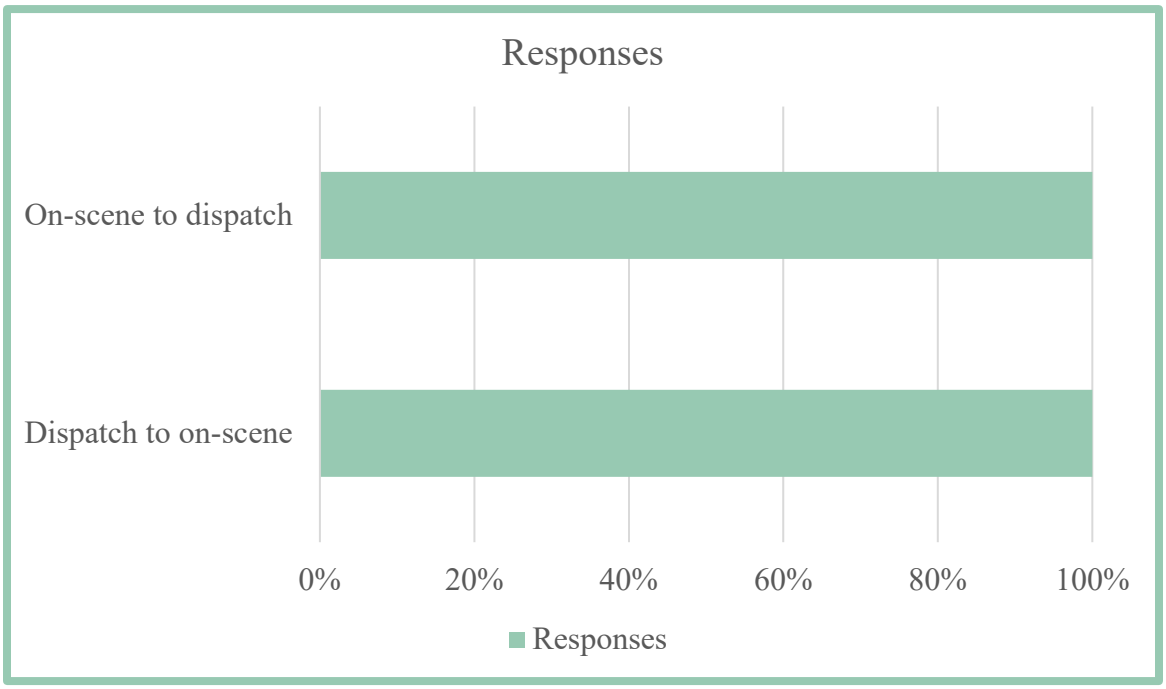
Question Thirty-Six: What were the recommendations, and how have you responded to the information related to staffing and/or unit placement?

Answered: 2 Skipped: 43

RESPONSES
At one point, we were overstaffed based on UHUs and an independent study from JR Henry. We have since corrected this.
Unfortunately, as we know we need more help, we do not currently have the staffing or money to do any more than we currently are.

Question Thirty-Seven: How much time does a “typical” call take from dispatch to on-scene, and from on-scene to available?

Answered: 37 Skipped: 8



ANSWER CHOICES	RESPONSES	
Dispatch to on-scene:	100%	37
On-scene to available:	100%	36

DISPATCH TO ON-SCENE:
5 - 12 minutes.
15 - 30 minutes.
10 - 30 minutes.
5 minutes.
10 minutes.

DISPATCH TO ON-SCENE:
3 – 5 minutes.
6 minutes and 16 seconds.
18 minutes.
Less than 10 minutes.
6.
8 minutes.
5-20 minutes.
25 minutes.
5 - 10 minutes.
Up to 5 – 10 minutes.
20 minutes (at minimum due to our rural area).
It can be as quick as 10 minutes or as long as 20-30 minutes depending on location.
10 minutes.
10.29.
8 minutes.
5 - 10 mins.
10 - 20 minutes.
12 - 14 minutes.
12 minutes.
5-10 minutes.

DISPATCH TO ON-SCENE:
3 - 8 minutes.
5 – 15.
15 minutes.
8 minutes.
10 minutes.
10 minutes.
It could be up to 20 minutes.
Depends on location, as some of our coverage area is over 20 miles away.
27:10.
12 - 16 minutes - very rural area.
10 minutes.
10 minutes.

ON-SCENE TO AVAILABLE:
20 to 75 minutes.
1 hour to 3 hours.
2 - 3 hours.
40.
2.5 hours.
10 minutes to 2 hours.
26:13.

ON-SCENE TO AVAILABLE:
42.
60 - 90 minutes.
62.
20 minutes.
1-3 hours.
2 hours.
45 minutes to an hour and a half.
1 hour.
1 hour (at minimum due to our rural area).
Typically, 1.5 hours.
An hour and a half.
58.99.
45.
1 to 1.5 hours.
As much as 30 minutes or more.
45 - 75 minutes.
28 minutes.
This depends on the type of call.
25 - 40 minutes.
15 – 90.

ON-SCENE TO AVAILABLE:
60 minutes.
30 minutes.
45 minutes.
2 hours.
Anywhere between 1 to 2 hours.
See above response. Travel to a hospital is over an hour in some parts of our response area.
128.
2-3 hours - nearest hospital ½ + hours away.
45 minutes plus, depending on from where the ambulance is responding.
45 minutes.

Question Thirty-Eight: In the past 6 months, how often have the calls in your primary territory gone:

Answered: 29 Skipped: 16

ANSWER CHOICES	Question Participation	
2nd Due?	100.00%	29
3rd Due?	71.43%	21
4th Due?	60.71%	18
5th Due?	50.00%	15
6th Due?	46.43%	14
7th Due?	46.43%	14
8th Due?	46.43%	14

2ND DUE?
159
4
36%
20, but we are the 1st and 2nd due with two ambulances.
57
0
Frequently.
40%
4-5

2ND DUE?
0
40%
76 (84% of missed calls).
20%
10
Approximately 8
10
0
1
72
20-30
Very often.
5
70
We do not keep track of these numbers.
0
40%
3
60

3RD DUE?
1
5%
1 - Had three calls within 8 minutes.
Unknown.
0
0
4-5
0
21 (16% of missed calls).
1%
5
0
0
0
10
Often.
0
10
5%
0

4TH DUE?
1%

4TH DUE?
0
Unknown.
0
0
3
0
0
1
0
1
0
Sometimes.
0
6
1%
0

5TH DUE?
0
0
Unknown.
0
0

5TH DUE?
1
0
0
0
0
0
0
0
0

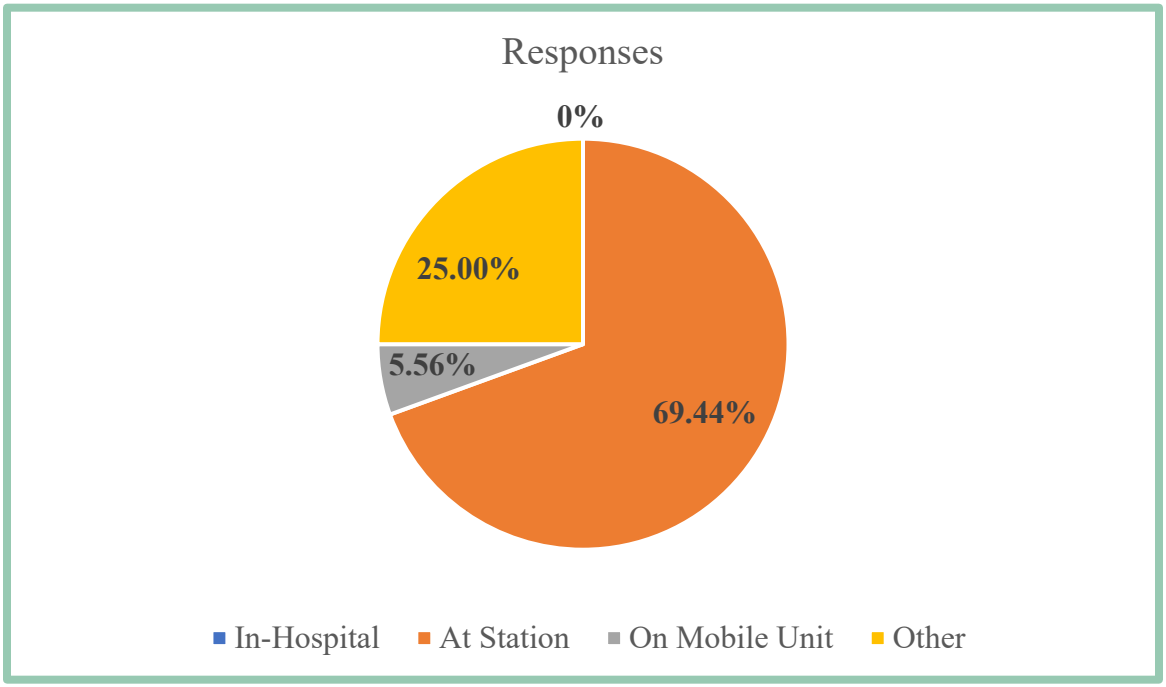
6TH DUE?
0
0
Unknown.
0
0
0
0
0
0
0
0
0

6TH DUE?
0

Question Thirty-Nine: Do you complete your PCR in-hospital, at station, or on a mobile unit?

Answered: 36 Skipped: 9

ANSWER CHOICES	RESPONSES	
In-hospital	0.00%	0
At station	69.44%	25
On mobile unit	5.56%	2
Other (please specify)	25.00%	9
TOTAL		**36**



OTHER (PLEASE SPECIFY)
At home.
Some staff utilize the tablets in the units. Others will wait until they arrive back to the station.

OTHER (PLEASE SPECIFY)
QRS does paper PCR and it is complete as soon as the crew returns to station to restock.
During and after call, depending on call severity.
At home.
At stations D mobile.
At home.
At station, work, home.
At home.

Question Forty: How many critical care facilities exist in your primary coverage area?

Answered: 35 Skipped: 10

RESPONSES
6
0
0
0
1
0
0
0
1
0
3
2
0
0
0
1
0
3

RESPONSES
0
0
0
2
0
0
0
1
0
0
1
0
0
1
0
0
0

Question Forty-One: What is the closest/farthest critical care facility to which you transport patients?

Answered: 36 Skipped: 9

RESPONSES
It is five minutes to forty-five minutes.
Wellsboro Hospital.
It is 23 to 120 miles.
Williamsport
The closest is Muncy Valley Critical access at thirty minutes, and the farthest is Geisinger Medical Center level 1 trauma at sixty-five minutes.
Fifteen minutes.
UPMC Williamsport.
Williamsport - 45 miles and Robert Packard – seventy-five minutes.
Closest is 10 miles and the farthest is 35 miles.
The nearest is 2 miles and the farthest 44 miles.
We are non-transporting.
The closest is 25 miles and the farthest 55 miles or greater.
Wellsboro UPMC Guthrie/Troy Hospital.
It is 17 miles.
Usually, five to ten minutes and thirty to forty-five minutes, respectively.
We do not transport. The closest hospital to our district is Geisinger Jersey Shore, which is primary stroke and level IV trauma. UPMC Williamsport would be the closest hospital with critical care services including level II trauma and PCI capable.
It is 25 miles from the station.

RESPONSES
It is 40 miles.
It is 24 miles.
It is 8-20 miles.
The closest is AHN Grove City, and the farthest is Butler Health System.
The closest is GMC – Danville, and the farthest is UPMC – Williamsport.
The closest is UPMC Susquehanna, and the farthest is Geisinger Medical Center Danville.
The closest is UPMC Williamsport (average 13 miles), and the farthest is Geisinger Danville (average 39 miles).
UPMC Williamsport, Robert Packer Hospital Athens, Geisinger, Muncy.
It is 35 miles.
UPMC Wellsboro.
It is 23 miles to 62 miles.
St. Elizabeth.
UPMC Wellsboro is the closest, and UPMC Presbyterian in Pittsburgh is the farthest.
Closest is 10 and the farthest is 30 or more.
UPMC Williamsport is the closest at 38.5 miles, and Geisinger Medical Center is the farthest at 74 miles.
UPMC Wellsboro, a critical access hospital is typically closest depending on location of call. Geisinger Jersey Shore/Williamsport/Geisinger.
The closest hospital is 26 miles to the station. The closest trauma center is 41 miles to the station. The closest stroke facility is 48 miles to the station. The farthest transport facility is 49 miles to the station.
Three to four hours or more, and 45 minutes or more.

RESPONSES
Pittsburgh.

Question Forty-Two: What kind of critical care hospitals do you have in your coverage area?

Answered: 33 Skipped: 12

RESPONSES
Cardiac and Stroke (2) Sharon Regional & Butler Memorial Trauma Level IV (1) AHN Grove City OB/Labor (2) UPMC Farrell & Butler Memorial Behavioral Health (2) Sharon Regional & Butler Memorial.
Critical access in Wellsboro.
None.
0
Class 2 trauma center.
None.
None.
One level I trauma center and one Level II trauma center.
One general hospital.
None.
Level IV trauma center and small, rural hospitals.
Critical access.
Level II trauma center.
Level II trauma center.
None.
Level II trauma center.
None.

RESPONSES
Small community hospital and two SNF.
0
None.
N/A
Regional and tertiary care centers.
None.
None.
N/A
None.
Community hospital.
N/A
UPMC Williamsport Robert Packer Hospital Geisinger Medical Center.
UPMC Wellsboro critical access, Geisinger Jersey Shore critical access, UPMC Williamsport is a level II trauma center, 7/24 cardiac, and designated stroke center.
0
UPMC Williamsport- level II trauma center and Geisinger- Danville - level I trauma center.

Question Forty-Three: Which 911 center(s)/PSAP(s) dispatch you?

Answered: 37 Skipped: 8

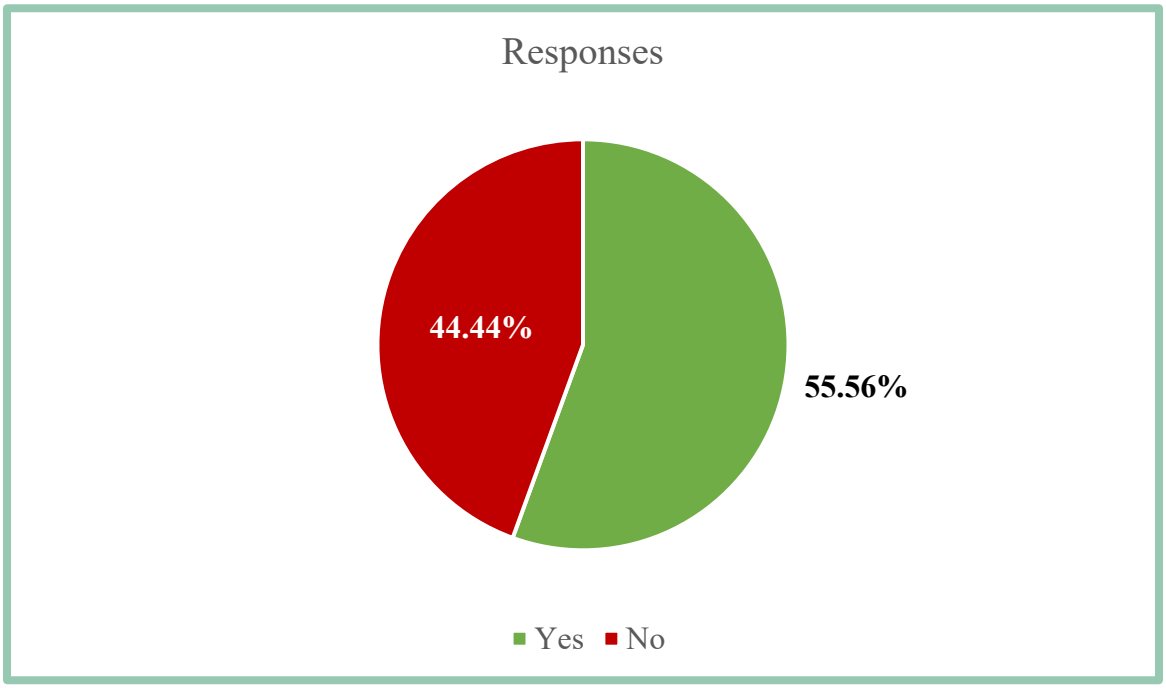
RESPONSES
Mercer, Butler, Venango, and Lawrence Counties. Plus, we have our own in house 24/7 dispatch.
Tioga County 911.
Tioga County.
Tioga County sometimes Stuben.
Lycoming County 911.
Lycoming.
Lycoming County.
Tioga County Dispatch.
Lycoming County Department of Emergency Services.
Centre County 911.
Butler County Emergency Services.
Tioga County.
Tioga County 911 Center.
Lycoming county department of public safety.
Lycoming.
Lycoming County 911.
Lycoming County 911.
Tioga County.
Beaver and Butler counties.

RESPONSES
Butler County.
Butler County, Lawrence County, and Mercer County.
Lycoming County 911 Center.
Lycoming County.
Lycoming.
Laporte 911 call center and Lycoming County 911 call center State Police Laporte.
Butler County.
Roofs County.
Tioga County.
Mercer County and Lawrence County.
Tioga/Potter County 911.
Butler County 911, Beaver County 911, Lawrence County, transfers through Butler County 911.
Tioga County Emergency Services.
Tioga County.
Lycoming County as primary and Sullivan County as backup.
Lycoming
Butler Control.
Butler.

Question Forty-Four: Are you dispatched by zone/area/region/coverage? If yes, are there "assigned" ESZ to each unit on shift?

Answered: 36 Skipped: 9

ANSWER CHOICES	RESPONSES	
No	44.44%	16
Yes (please specify)	55.56%	20
TOTAL		**36**



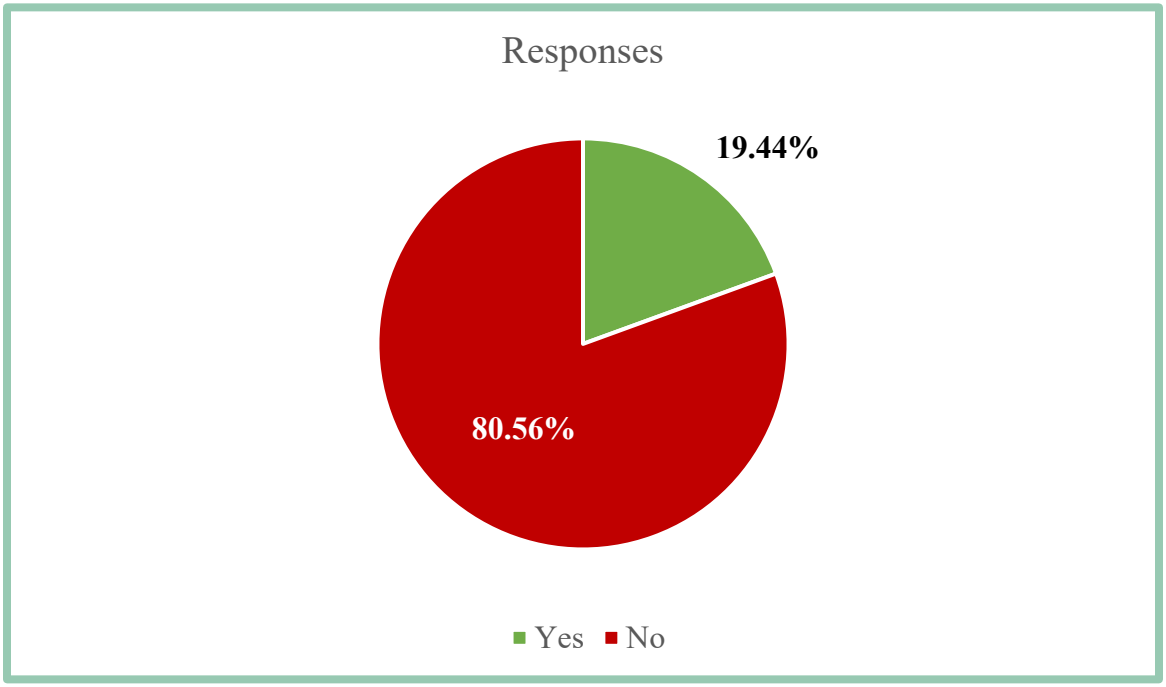
YES (PLEASE SPECIFY)
By designated municipality.
Each unit in Tioga County is dispatched by their location of the station and jurisdiction on the map.
No.
Municipal boundaries are used to determine which unit responds in Lycoming County.

YES (PLEASE SPECIFY)
Dispatched to primary coverage area as determined by 911 and regional EMS council.
Dispatched by coverage area.
Not sure how to answer this.
Municipal areas by box cards.
Unknown.
Dispatched by Municipality/Township.
Dispatched via primary coverage area and as second due call to other areas.
By area.
Municipality designated territory.
Areas are already drawn out by the fire chiefs. Each area has a box card assignment. Units are dispatched based on the box card request which is drafter mostly by the fire chief.
No.
By area.
I do not understand the question. We have municipalities based on who is closest.
There are primary apparatus assigned to ESZ by availability.
We are dispatched to cover Eagles Mere Borough and Shrewsbury Township only, unless the neighboring station cannot respond. We have no shifts.
By coverage area.

Question Forty-Five: Are you ever dispatched by proximity (closest unit regardless of zone)?

Answered: 36 Skipped: 9

ANSWER CHOICES	RESPONSES	
No	80.56%	29
Yes (How Often?):	19.44%	7
TOTAL		**36**



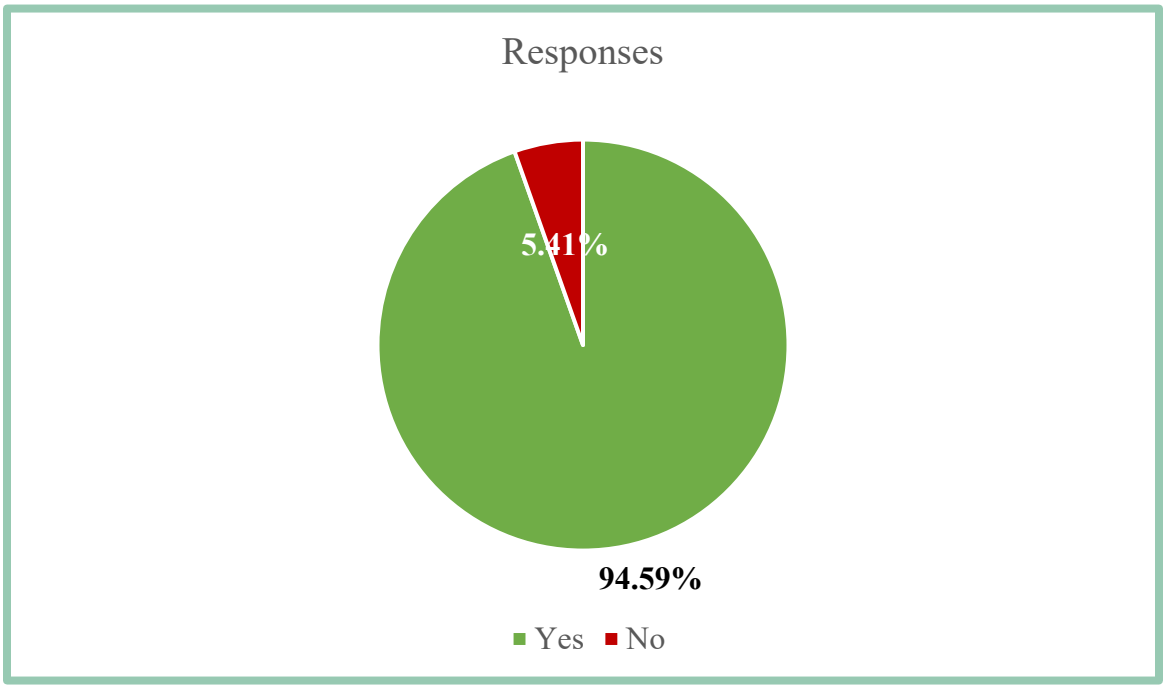
YES (HOW OFTEN?):
Yes, 9/10 times.
It depends on call volume at the time.
Every dispatch.
Yes, four to five times a week.

Occasionally.
Occasionally if we are returning from a call.
Second due.

Question Forty-Six: Are you ever dispatched to cover calls for other services?

Answered: 37 Skipped: 8

ANSWER CHOICES	RESPONSES	
No	5.41%	2
Yes (How Often?):	94.59%	35
TOTAL		**37**



YES (HOW OFTEN?):
Several times a week.
One to five times a week.
Most days.
Occasionally.

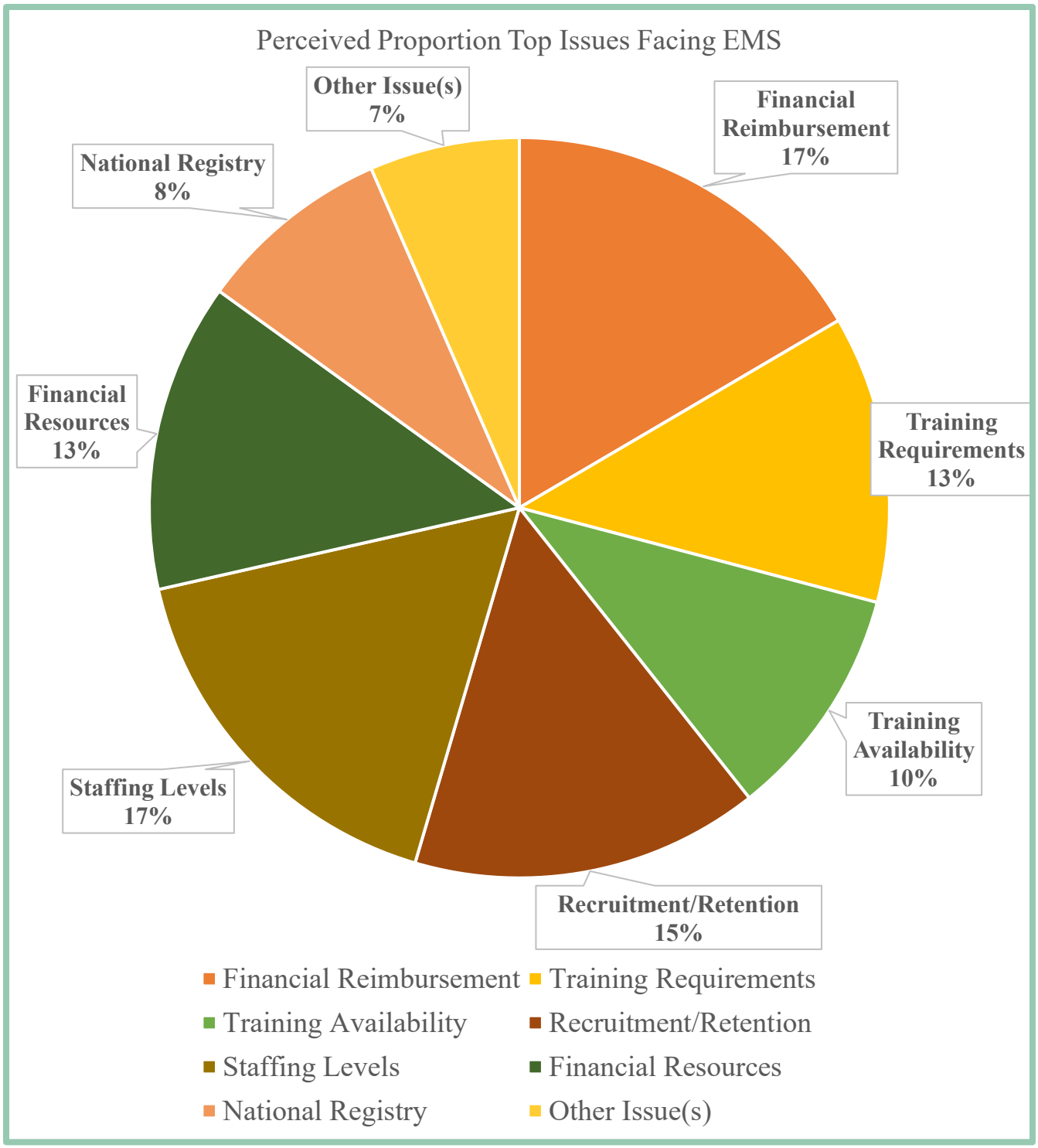
YES (HOW OFTEN?):
Fifteen times a month.
Several times a week due to units being listed out of service for no staffing.
Six or more times per month.
Several per week.
Fifteen per year.
Daily.
It varies. We are primarily a volunteer county.
A few times a month.
Yes, depending on call volume.
Maybe for one to two calls a year.
Depending on call volume, maybe 20% to 25% of our calls.
Five to six times a week.
16%
100% of the time. We are an ALS response squad.
Several times per week.
It varies with second due calls.
Two to three per month.
Occasionally.
Eldredsville Station 56 Elkland Township.
Several times per day.

YES (HOW OFTEN?):
Frequently.
A few times a week.
Multiple times a day.
Several times a week.
Daily.
Roughly three times a week.
Several times per month.
One or two per week.
Perhaps ten.
Ten to twenty times per year.
Five per month.

Question Forty-Seven: Please rank the following issues in order of what you feel is the biggest issue facing EMS response in your area currently?

Answered: 37 Skipped: 8

Response Rate by Priority Scoring	Financial Reimbursement	Training Requirements	Training Availability	Recruitment/Retention	Staffing Levels	Financial Resources	National Registry	Other Issue(s)
1	41.18%	0.00%	0.00%	10.81%	33.33%	8.33%	8.57%	5.00%
2	11.43%	17.14%	2.86%	18.92%	25.00%	19.44%	5.71%	0.00%
3	17.14%	11.43%	8.57%	24.32%	8.33%	22.22%	2.86%	10.00%
4	8.57%	20.00%	11.43%	21.62%	19.44%	8.33%	2.86%	5.00%
5	5.71%	31.43%	31.43%	10.81%	2.78%	2.78%	11.43%	5.00%
6	5.71%	11.43%	28.57%	13.51%	2.78%	27.78%	5.71%	5.00%
7	8.57%	2.86%	17.14%	0.00%	2.78%	11.11%	45.71%	10.00%
8	2.86%	5.71%	0.00%	0.00%	5.56%	0.00%	17.14%	60.00%
TOTAL	35	35	35	37	36	36	35	20
SCORE	6.06	4.60	3.74	5.57	6.19	4.94	3.11	2.40


Perceived Proportion Top Issues Facing EMS
Other Issue(s) 7%
Financial Reimbursement 17%
National Registry 8%
Financial Resources 13%
Training Requirements 13%
Training Availability 10%
Staffing Levels 17%
Recruitment/Retention 15%
Financial Reimbursement
Training Requirements
Training Availability
Recruitment/Retention
Staffing Levels
Financial Resources
National Registry
Other Issue(s)

Question Forty-Eight: If you answered "Other Issue" to the previous question, please elaborate

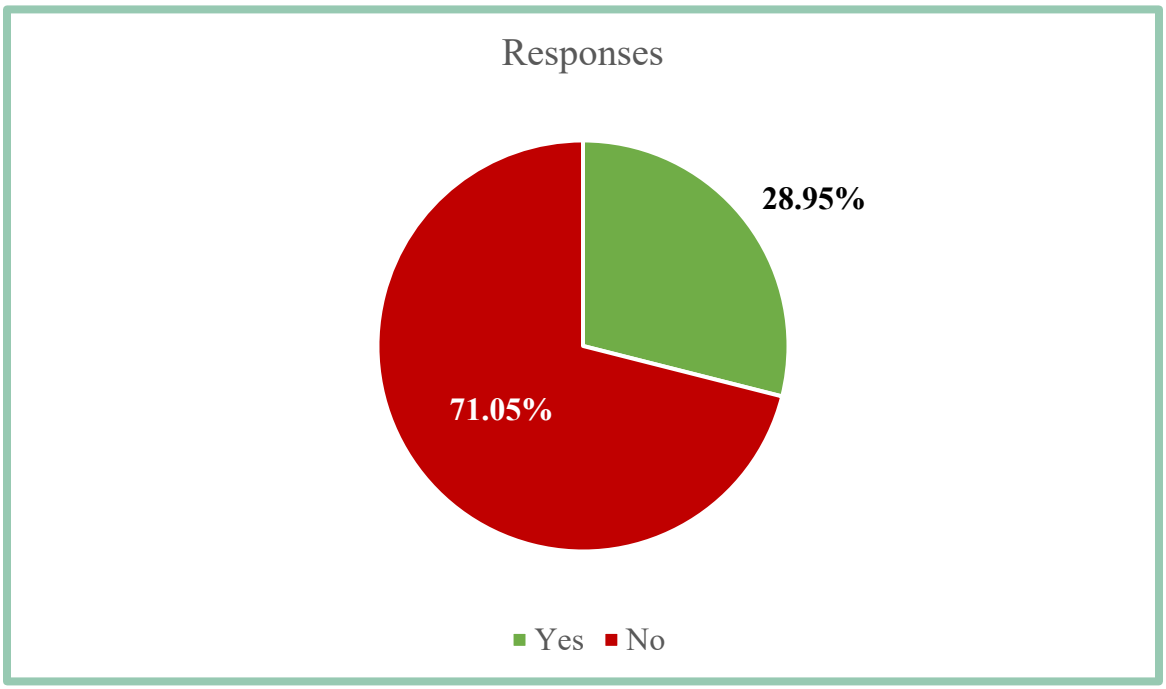
Answered: 7 Skipped: 38

RESPONSES
Personal availability.
Lack of funding and cooperation with local municipal government leaders who have no idea what it takes to operate an EMS service in their communities.
There are no new applicants in the area that are willing to volunteer their services.
To go along with recruitment and retention, the type of education and cost of education to bring new providers into the field.
Radio communications.
Folks in charge at Dept. of Health level have no comprehension of the requirements and coverage area in rural areas and appear to have little interest in learning.
The majority of our members work outside the county during the day and have limited time for training or calls on weekdays, evenings, and nights. Our ambulance is routinely diverted away from smaller hospitals to bigger facilities farther away, increasing our transport time by at least forty minutes round trip.

Question Forty-Nine: Do you have a recruitment program in your agency? (If so, what?)

Answered: 38 Skipped: 7

ANSWER CHOICES	RESPONSES	
No	71.05%	27
Yes (please specify)	28.95%	11
TOTAL		**39**



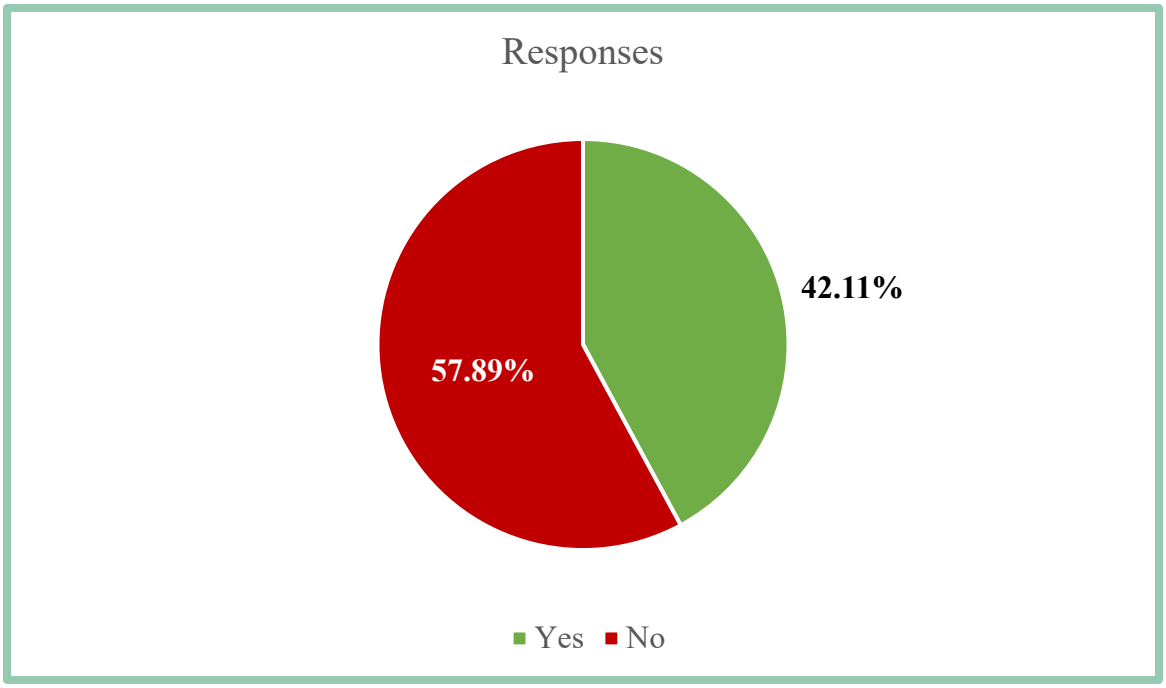
YES (PLEASE SPECIFY)
We offer payment for courses and continuing education along with working with work schedules.
Municipal board covers training cost, milage, and hourly wages to take EMT course.
Full time employees with a SAFER grant, and 50% of their job is R&R.
Social media, annual open house programs, and EMS Week programs.

YES (PLEASE SPECIFY)
We recruit from our EMT classes.
Continuous social media posts and annual school visitations.
Minimal: during career fairs, fire safety programs, and fundraising letters.
We do flyers, Facebook, job fairs, and public events.
We participate in county initiatives without success.
Recruitment/referral bonus program precepting program for local vo-tech and colleges.
Our agency is highly respected, and we pay for folks to become EMTs. We have a family attitude with multiple generation of families carrying on the tradition.

Question Fifty: Do you have a retention program in your agency (incentives, staff development, etc.)? (If so, what?)

Answered: 38 Skipped: 7

ANSWER CHOICES	RESPONSES	
No	57.89%	22
Yes (please specify)	42.11%	16
TOTAL		**38**



YES (PLEASE SPECIFY)
We offer incentives for provider involvement such as being an instructor or preceptor. We also offer flexible schedules. We offer incentives for providers to elevate in their certification EMT to AEMT, AEMT to Paramedic, and Paramedic to Critical Care Paramedic.
We offer incentives and encouragement.
We offer per diem, part, or full time pay.

YES (PLEASE SPECIFY)
We offer gift cards as incentives.
We have pay per call, members of the quarter, and developing others.
We have a call-in pay sign-on bonus.
We offer a good benefits package. Our wages are on the lower side of average. We do offer professional development to the staff. For us, it is only a matter of time before we are way behind the average.
We offer increased pay, benefits, and job satisfaction.
We are unable to afford such.
We offer tuition reimbursement, career advancement pathways, field training program, years of service recognition program, 401k employer matching retirement, free dental, free life insurance, and free short-term disability.
We have an incentive.
We run an incentive and purchase EMS items for members.
We have bonuses and offer company paid education for AEMT and Paramedic courses.
We offer nominal pay per call and annual awards.
We have an attitude of accepting whatever an individual is able to give. There are not a lot of demands of how much a provider must participate. We have EMTs that run 100+ calls per year.
We pay a stipend per transport.

Question Fifty-One: Do you believe that recruitment or retention of staff is an issue for your agency, and if so why?

Answered: 35 Skipped: 10

RESPONSES
Retention is due to ability to pay higher wages compared to other businesses. Our local Sheetz starts out at $14.00 for no experience. If we had better reimbursement or financial support, I do not think we would have any problems with staff recruitment or retention.
Yes, I feel the county is lacking the want of volunteers although the need is very high. The communities we serve are small and people are not interested in volunteering.
Yes, getting people able and willing to put in the time to train and or go on the calls.
No, we do it not for money, but for community in area.
Yes, hospital pays more and takes people away from volunteer station.
Not as much as three years ago.
Yes. There are no providers in the area and a lack of interest in EMS
People are getting burned out with all the regulations and the lack of common courtesy and respect from patients and government officials. National registry itself is keeping many people from even taking the EMS courses to become certified to help with our volunteer service. They take an EMT or EMR course, complete it and pass it, then they sit for National Registry testing and there are questions on the test that were never given any time during the course. And there are things in National Registry that as PA Certified responders, we are not allowed to perform at the BLS level because of an incompetent State Dept of Health and Medical Director.
We staff with college students who graduate and leave the area, and we constantly need to recruit.
Somewhat, due to the rural area, but currently our staffing levels are at a very high level. However, we are always looking to add staff.
Yes, as no one wishes to volunteer.
Yes, but our dept is small and people are getting tired.

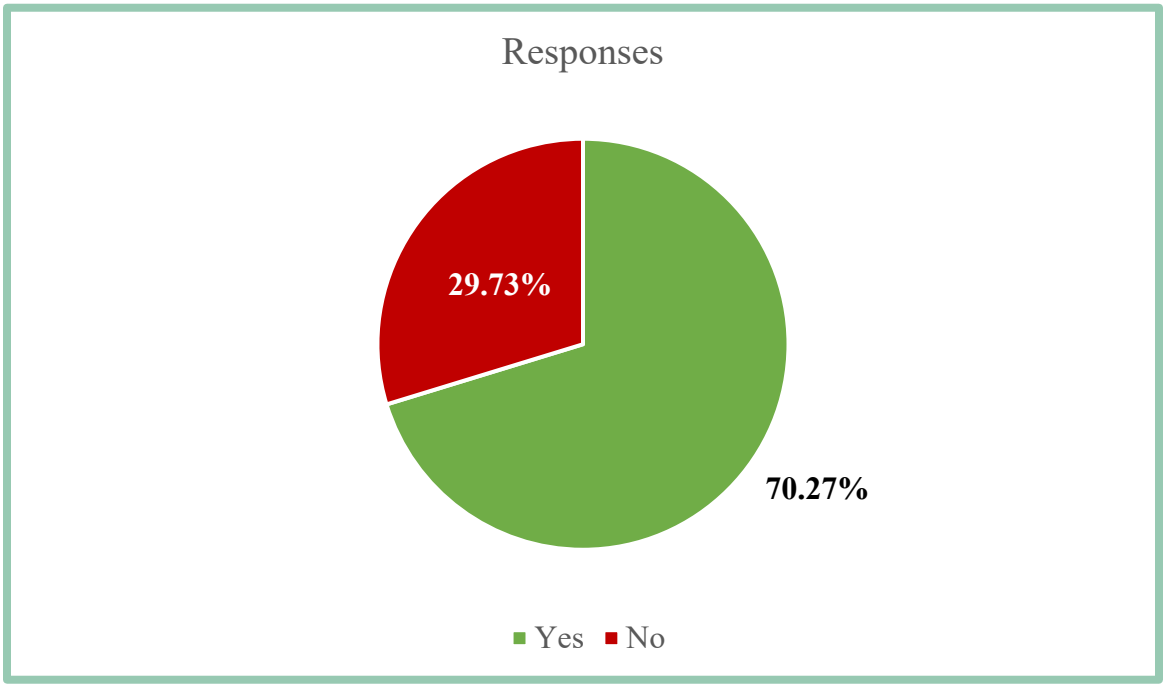
RESPONSES
Yes - call volume and not enough available time to volunteer. Paid staff retention difficult due to pay rates being so low, making it hard to keep them while asking to cover higher call volume with less staff due to shortage.
Yes, in terms of recruitment and competing with other agencies for EMT's.
Yes - we have a fire chief who does not take the issue seriously and we have a very small community to pull from.
Yes. Mostly due to training requirements and a lack of people willing to commit to helping the program.
Yes. In general, we are not seeing the number of applicants that we did five to ten years ago. The number of EMTs and paramedics is dwindling. We have embraced a model knowing that we are getting "rental" paramedics, meaning they will move to a different career path short-term.
No one wants to volunteer.
N/A
It is an issue for all regional agencies.
Yes, it is hard to get volunteers.
Unable to recruit new members due to training requirements, time, and finding value of volunteering one’s time. Retention includes maintaining training requirements, time, and finding value of volunteering.
N/A
No.
Yes, but its root cause is pay rates that are dictated by our reimbursements. Also, paramedic programs are extremely cost prohibitive.
Yes, it is difficult to get new volunteers due to amount of training required as many work full time.
Somewhat. The issue is finding certified providers. People do not want to join this field because they are not paid enough. Companies cannot pay more because of the lack of funding. If EMS agencies received better reimbursements, they would be able to pay staff more. This would fix everyone's problems.
Yes, for both paid and volunteer staff it is difficult to recruit. Then it is difficult to keep up interest.

RESPONSES
Yes. EMS does not have the financial resources to improve pay for our current employees. Employee retention issues are almost all related to people leaving EMS for other higher paying jobs. Coupled with lack of new providers in the field, we are drowning quick.
Low staffing levels do not allow us to cover calls. The perception in the community is very negative so there is no desire to join the department.
Not at this time.
Recruitment is tough due to the training requirements and retention is tough due to often four to five hour turn arounds with paperwork.
Some of my responders are over fifty years of age, but most are mid-sixties and early seventies. We are all retired, went back to school to help EMS and our communities. We have no young people in our area, as it is a retirement area. Without us there would be no ambulance.
Yes, volunteer fire and EMS has really no way to keep providers in the field with any type of benefits. Now with gas prices going up it will be harder to have members respond to calls.
Yes, there is a shortage of qualified personnel.

Question Fifty-Two: Based on your ranking of the biggest issues facing EMS service in your area currently, do you have any ideas on how to improve the current situation?

Answered: 37 Skipped: 8

ANSWER CHOICES	RESPONSES	
No	29.73%	11
Yes (please specify)	70.27%	26
TOTAL		**37**



YES (PLEASE SPECIFY)
We have just developed a task force of representatives from each of our municipalities that we serve, to look at potential financial funding to assist in improving things. Ideas have been a per capita tax or a property tax at this time. We want this to be a joint solution to the EMS crisis. As it stands today, we do not receive a penny from any of our municipalities (23) that we serve.
Incentives programs are more apt to attract people to be willing to partake in EMS as the workload is more.

YES (PLEASE SPECIFY)
Pennsylvania regulations need to allow people to test not at a national level.
Take the hospitals out of the BLS competing against volunteer station.
We are working several plans but retaining the driver as a CPR/First Aid and EVOC is a major issue. We have not seen many EMR classes in our region, and as an educator, the EMR program was never designed for a BLS crew member on a transport unit.
Increase salaries for EMS providers.
Several, but no time or space to type them all out.
Pay the cost of readiness, have adequate insurance reimbursement including Medicaid, and direct payment to EMS agencies from insurance carriers.
Offer incentives to be able to hire EMT's/EMR to staff rural communities.
The cost of training is high to get certified. Making more grant money available could help. Providing EMS classes in high school settings could help.
Higher pay, better benefits, and retirement deadlines - 20 years and done.
Increase reimbursements by all health care for EMS.
Get rid of National Registry - at least for EMR and EMT, allow for reimbursement for QRS, remove some of the red-tape to allow more providers to become educators (example: there was to be an EdMeth class in Wellsboro, but it was cancelled because the instructor did not have a Master's Degree -- despite it being okay if that same person taught the curriculum for other emergency services like fire or police. The class was cancelled and there have been no other classes in a close enough vicinity to enroll in.) And one thing that was not on the list is connectivity. We have recently become a part of a Stroke Telehealth program with Geisinger where our providers will be able to speak directly with neurology for stroke assessments. The biggest hurdle for the program when it comes to our entity, is that we have limited cell and internet in our area. Even with FirstNet, our mountains and lack of cell towers, gives us limited options to connect. For a possible back-up we hope to use the patient's own Wi-Fi, but even internet service is very limited. Comcast and other companies refuse to run high-speed internet cable to most of the residents because we do not have enough. Internet needs to stop being portrayed as a luxury and instead as an essential service. Telehealth is the next generation of EMS and our rural communities will not have access to the care that is readily available in urban settings because of the poor internet/cell phone access we currently have.

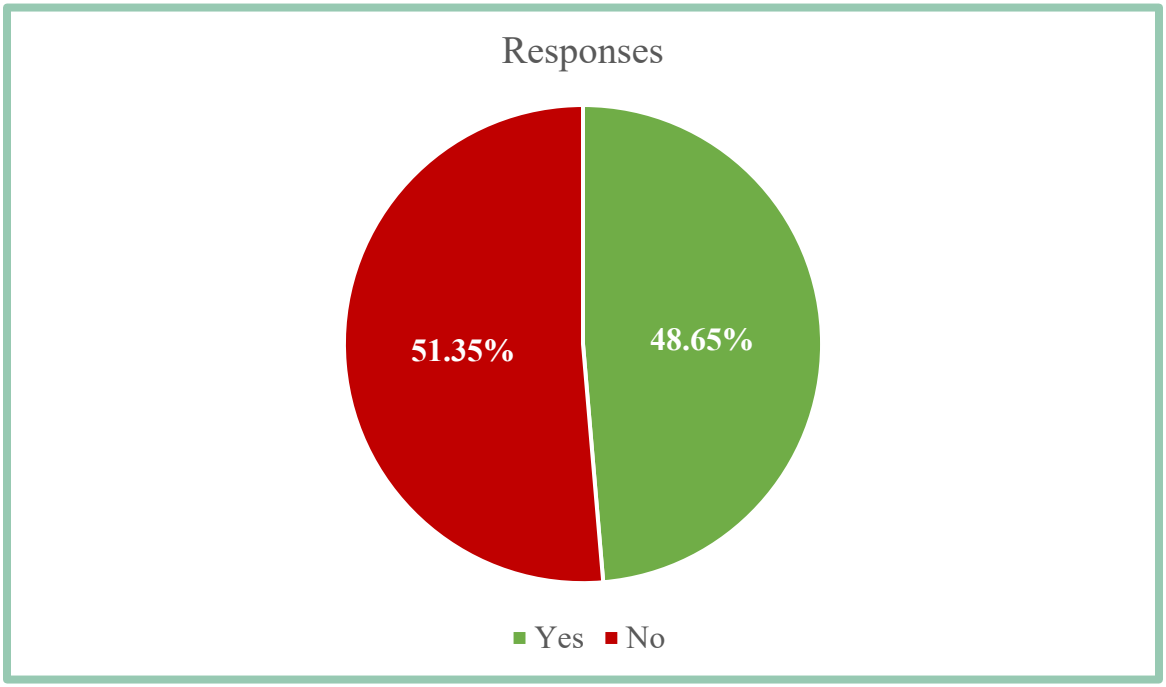
YES (PLEASE SPECIFY)
There needs to be funding for the agencies to make EMS more of a career-based model. I believe that writing checks to the ambulance services could make the problem worse. I would support a county-wide "staffing agency" to supply staffing to the agencies based on analytics and community needs, not what each service wants. We would have less competition, better pay, better benefits, better retirements, etc... Again, each service would supply data to support the staffing level that is warranted from an authority or county-driven system.
Legislation to increase Medicare/Medicaid reimbursement for EMS services. Insurance companies also follow CMC guidelines and make EMS services take less for services rendered.
Regionalized and county wide EMS systems not affiliated with fire departments. Most fire departments do not place EMS as a priority but rather a source of income for the fire department for expenses not related to EMS operations.
Call reimbursement by state officials and tower upgrade for communications.
Pass legislation to increase Medicare and Medicaid reimbursements and mandate all insurance carriers to pay for treat and release/lift assists/etc. It is absurd that reimbursements are not covering the basic costs to keep ambulances staffed and operational. Also, each municipality needs to pay a basic fee for having the service exactly how they pay for police or garbage pickup. Either directly from municipal funds or by a "membership" fee that gets imposed on each resident. It is time to stop saying there is a problem and fix the core root issue. Fix the money problem and recruitment and retention become easy.
Municipalities need to assist with funding like they do FD. This would allow for more paid services or a better collaborative effort amongst depts.
Yes. As stated above, EMS agencies are not able to pay their staffs a decent wage. This is caused by poor reimbursement rates from Medicaid, Medicare, and private insurances. If these rates were to increase, we could pay staff a competitive wage and would have more people interested. No one wants to work a tough job where they make less than if they worked for a gas station. If the state can fix reimbursement, they will fix the shortage of ambulances.
I would like to see a municipal tax like the fire depts are paid.
EMS deserves financial support on a government platform like that of the fire and police. Insurance companies should be made to reimburse EMS for the cost of doing services, not at the rate that they feel they want to pay. Initiatives to lower operating expenses for EMS like larger group (maybe county or state group rates) employee healthcare or workmen's comp rates would significantly reduce EMS overhead costs. Those cost could be deflected to improve employee salaries.
Regional EMS System with funding from the county and state to help get the program going.

YES (PLEASE SPECIFY)
Have the folks in charge at PA Dept of Health visit our areas and see where we respond and what is expected of us in the rural areas.
Have counties employ staffing to select volunteer agencies geographically spaced and allow PA EMS regs to staff BLS units with just a driver and EMT in rural areas.
Have training requirements for EMS personnel. Few new paramedics are entering the field due to pay and schooling requirements. There are fewer qualified medics to hire. Eliminate National Registry requirement for in state.

Question Fifty-Three: Does your agency receive support (financial/In-kind/Insurance/etc.) from your municipal or county governments?

Answered: 37 Skipped: 8

ANSWER CHOICES	RESPONSES	
No	51.35%	18
Yes (please provide details):	48.65%	18
TOTAL		**36**



YES (PLEASE PROVIDE DETAILS):
We have had municipalities donate for equipment and the municipal board has the training incentive.
Each have a fire tax of which we get a percentage.
For fire yes, but not for EMS.

YES (PLEASE PROVIDE DETAILS):
Our township provides our fleet insurance. That is all that is provided for EMS services. We receive $0 from our county commissioners.
Our university administration provides limited funding, but we are required to recover as much of our own funding as possible.
This is the first year that we have been given money from our township; we do not receive anything from county.
The borough and townships we cover provide funds.
Worker’s comp and maintenance money.
Cummings, McHenry and Brown all give some financial support when asked.
We are allotted $20k in fuel each year.
A small portion of our operating budget is funded by our municipalities that we serve and also our "fund/membership" drive.
This is done yearly by our municipalities; however, I personally am not involved, so I cannot give details.
Only what the state requires them to provide us; most of the time its only relief money.
Grants.
We are fire based QRS, so we receive our normal fire contract monies. The ambulance, on the other hand, is a different incorporation, so they only receive donations from the municipalities.
Our vehicle insurance and work comp is paid by the township.
Our commissioners reimburse a student for taking an EMR or EMT class along with the Eagles Mere/Laporte Lions Club who also contribute towards books and tests.
We received a small donation from our township who also pays truck insurance and workers comp.

Question Fifty-Four: What percentage of your agency's overall budget is provided by county(ies)/municipality(ies)?

Answered: 32 Skipped: 13

Question Fifty-Four Responses
0
25
10
50
0
10
0
0
10
45
75
0
50
0
1
0
25
30

Question Fifty-Four Responses
0
0
50
0
0
0
0
0
70
0
4
20
16
0

Question Fifty-Five: What is the amount needed financially to cover your per call costs?

Answered: 31 Skipped: 14

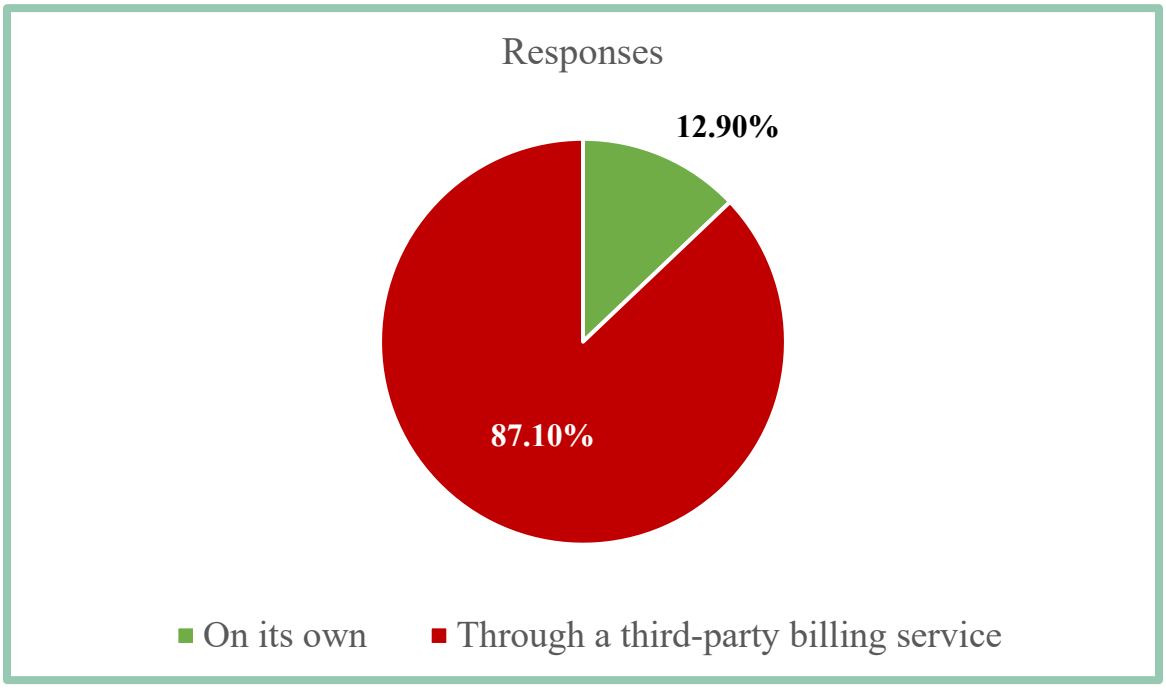
RESPONSES
$650.00
The per call would be approximately 100-150 dollars, unless you include staff payment which would increase the amount needed.
$400
$250 per call.
$47.00 hour.
Much more than is provided.
$435
$750
An average of approximately $150 per incident would support our BLS/QRS service.
1500.00 per call.
Not sure.
$300
$800.00
$100 - but we are unable to bill because we are QRS.
$150.00 - $200.00
$451.73
Approx. $45,000 per month.

RESPONSES
I have no clue.
$600
Unknown - varies from emergency to emergency.
$150. - $200.
Unknown.
$200.00
$350
Guessing $700.
100%
Do not understand question.
$500
$900.00
$75.00
$750 per call.

Question Fifty-Six: Your agency bills:

Answered: 31 Skipped: 14

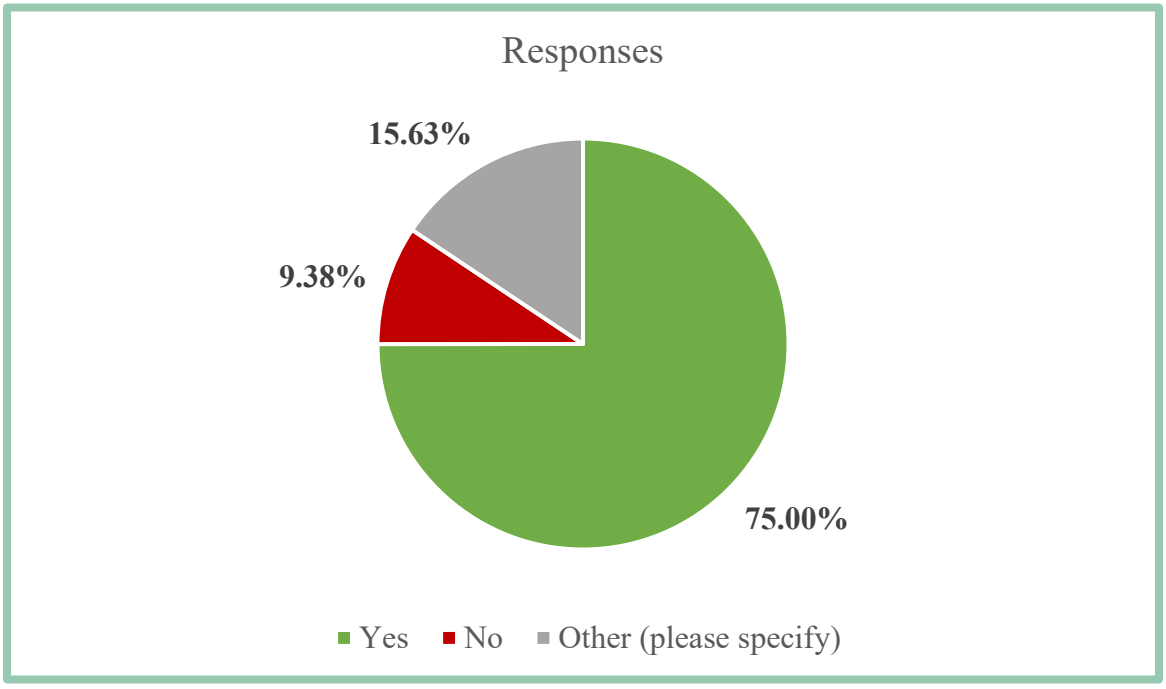
ANSWER CHOICES	RESPONSES	
On its own	12.90%	4
Through a third-party billing service	87.10%	27
TOTAL		**31**



Question Fifty-Seven: Is your agency satisfied with the billing service provided?

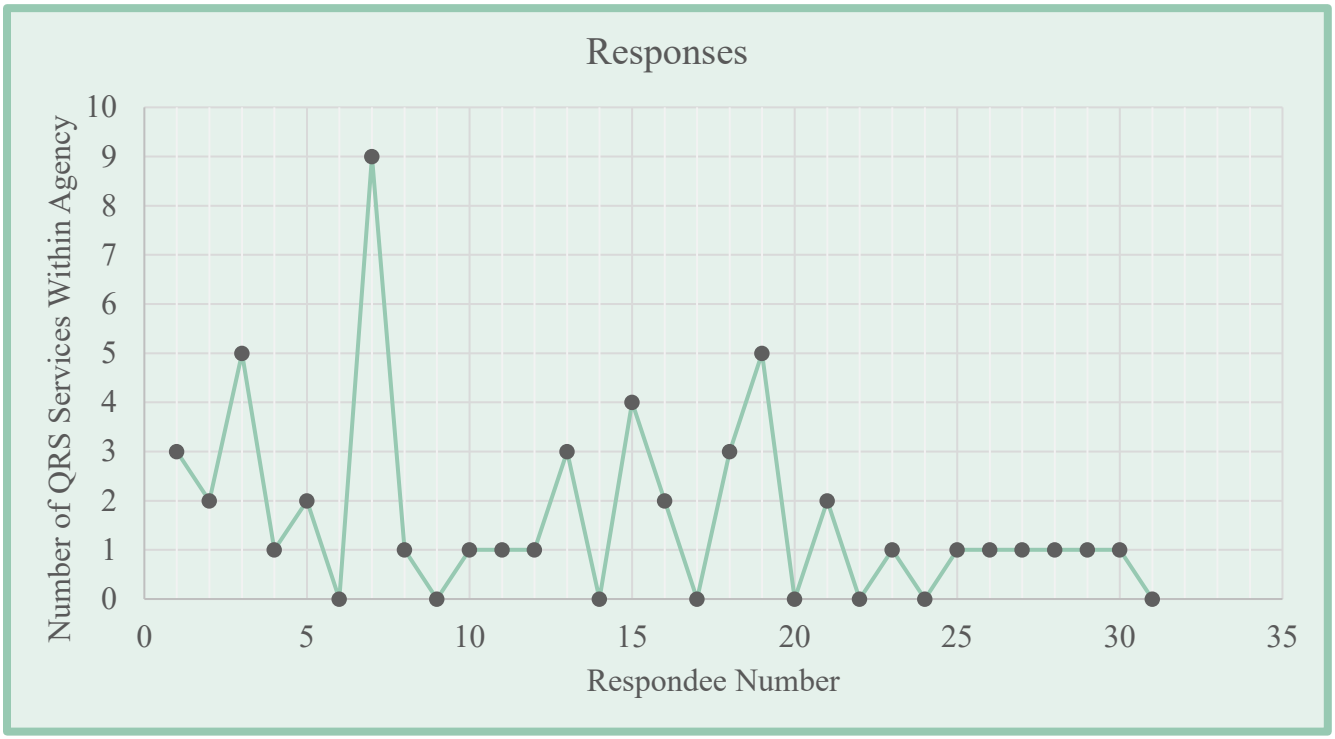
Answered: 32 Skipped: 13

ANSWER CHOICES	RESPONSES	
No	9.38%	3
Yes	75.00%	23
Other (please specify)	15.63%	5
TOTAL		**31**



Question Fifty-Eight: How many QRS services work with your agency?

Answered: 32 Skipped: 13



Average Number of QRS Services Within Responding Services
1.69

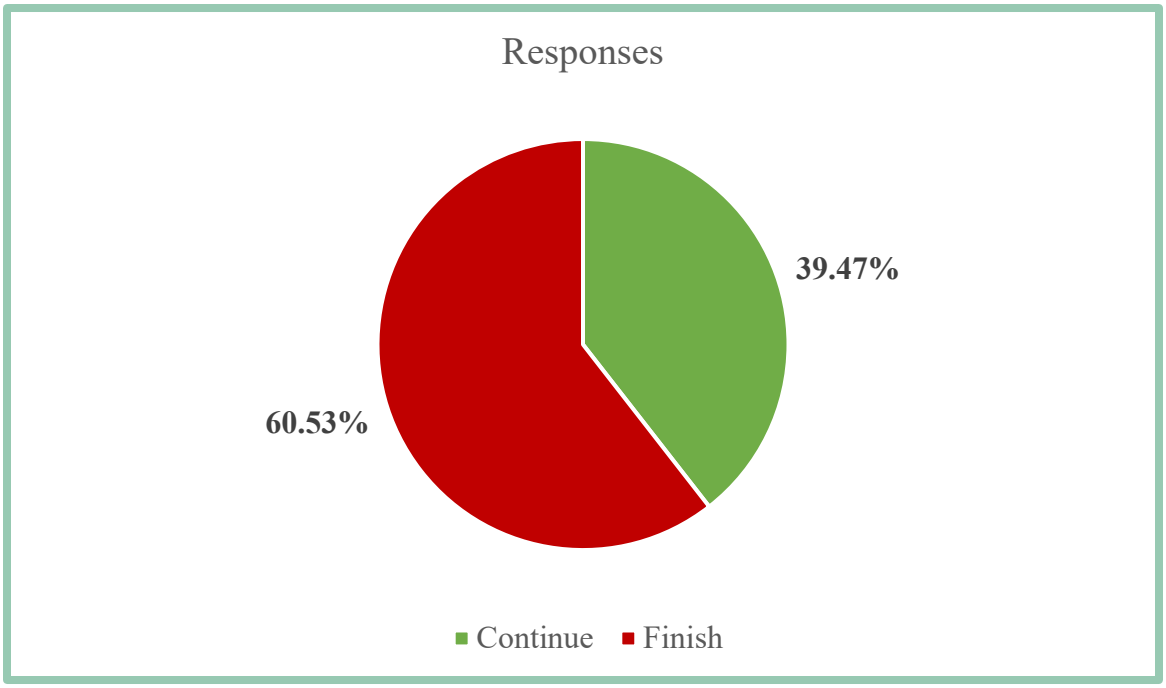
Question Fifty-Eight Individual Responses
3
2
5
1
2

Question Fifty-Eight Individual Responses
0
9
1
0
1
1
1
3
0
4
2
0
3
5
0
2
0
1
0
1

Question Fifty-Eight Individual Responses
1
1
1
1
1
0
2

Question Fifty-Nine: The following questions are for fire services that provide quick response services (QRS). If this applies to you, please select "Continue." If not, please select "Finish" to complete survey.

Answered: 38 Skipped: 7



ANSWER CHOICES	RESPONSES	
Continue	39.47%	15
Finish	60.53%	23
TOTAL		**38**

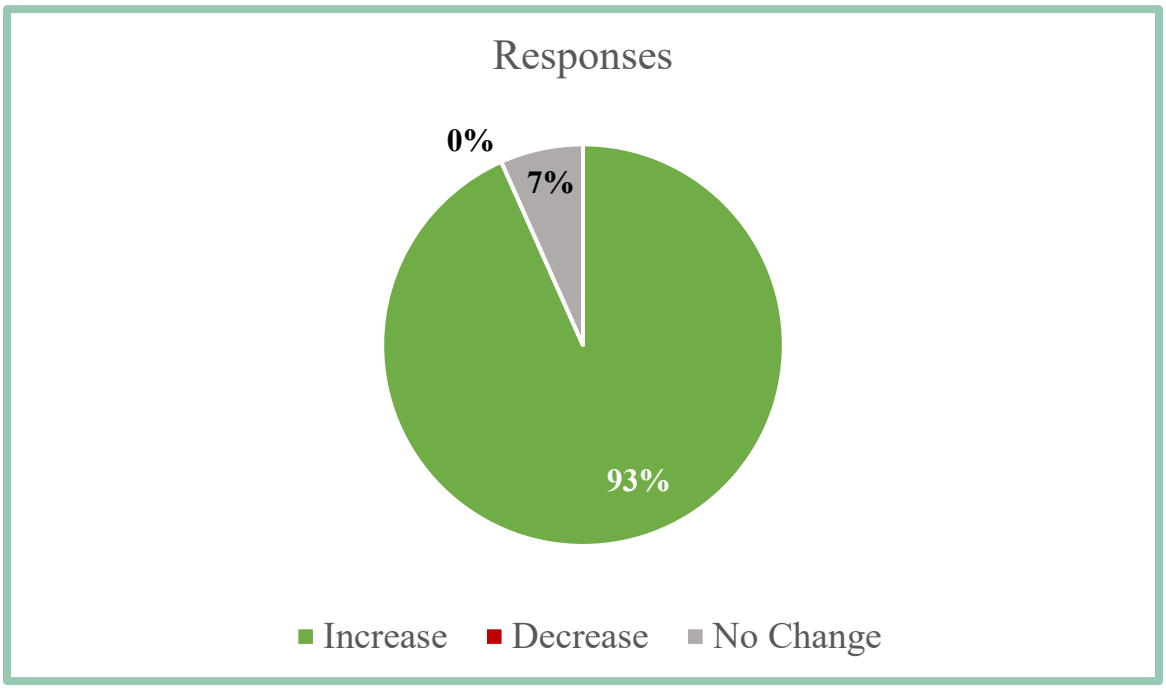
Question Sixty: What is the average number of medical calls your fire service has responded to over the past five years?

Answered: 14 Skipped: 31

Question Sixty Narrative Responses
400
489
25 per month (we run a MICU first due out of our station and provide QRS for priority calls).
We average 125 incidents per year, so 625 for the past five years.
100
20-30
250-300
40-50/year.
100
182
45
10 total (fairly new service).
15/YEAR.
150

Question Sixty-One: Have you seen an increase or decrease in number of medical calls?

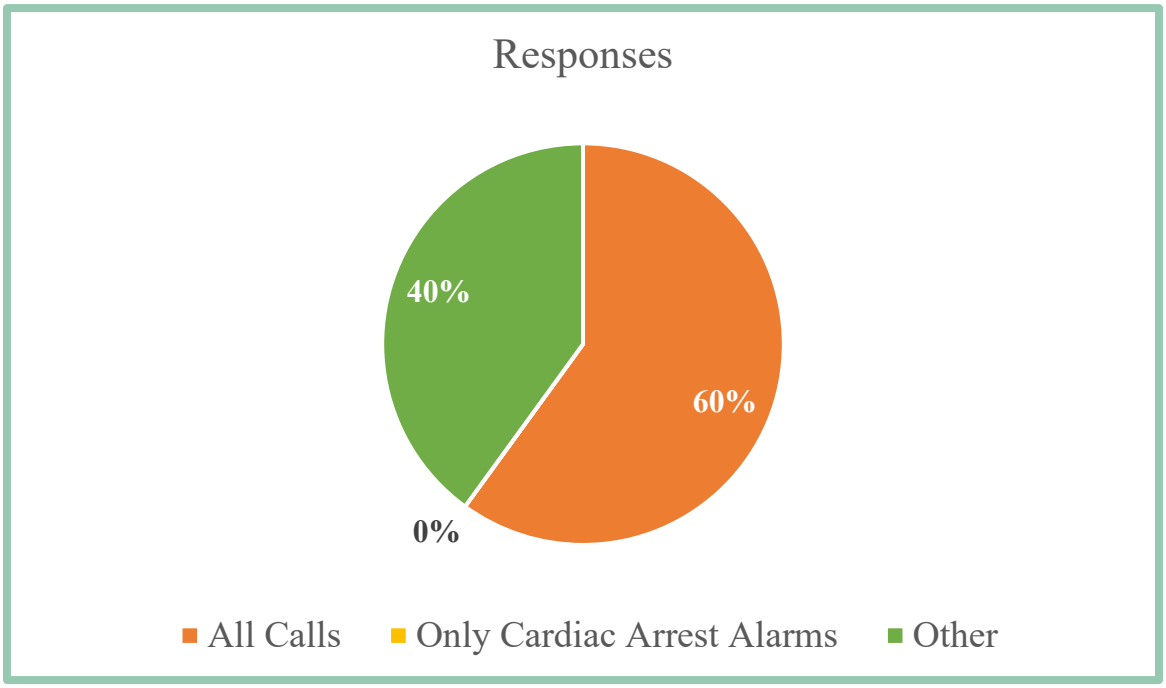
Answered: 15 Skipped: 30



ANSWER CHOICES	RESPONSES	
Increase	93.33%	14
Decrease	0.00%	0
No change	6.67%	1
TOTAL		**15**

Question Sixty-Two: Does your fire service provide QRS on all types of medical calls or only cardiac arrest alarms?

Answered: 15 Skipped: 30



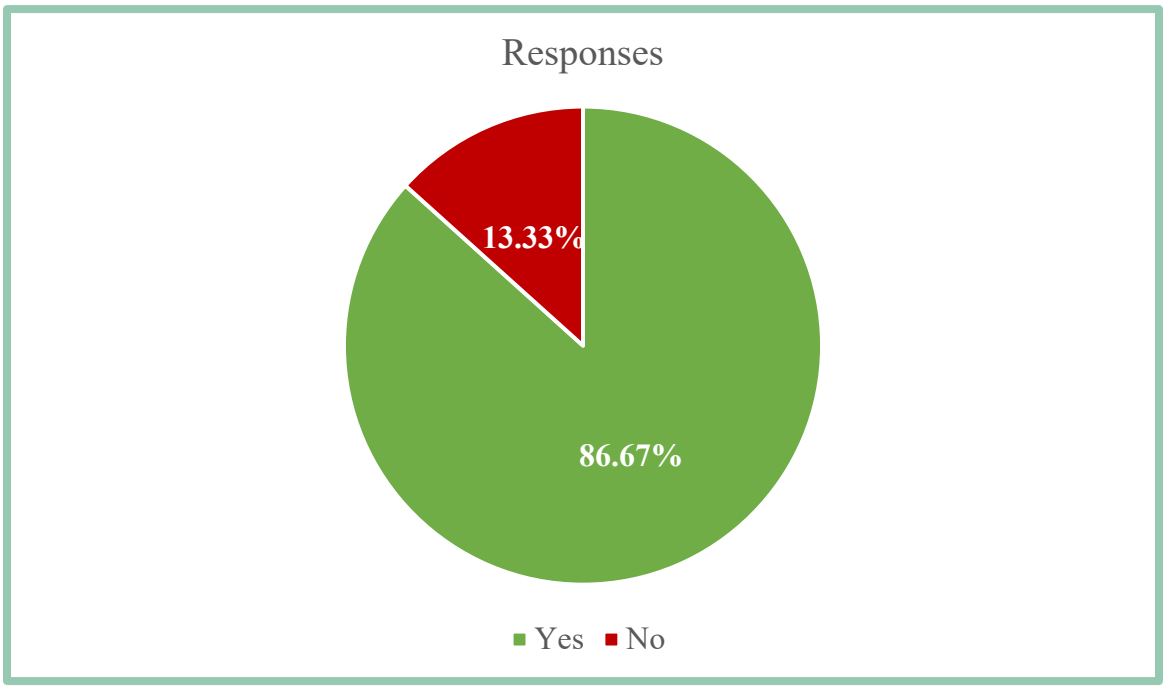
ANSWER CHOICES	RESPONSES	
All calls	60.00%	9
Only cardiac arrest alarms	0.00%	0
Other (please specify)	40.00%	6
TOTAL		**15**

Question Sixty-Two Narrative Response Results
Codes, chest pain, unresponsive, and manpower request.
We house an ambulance in our station for the neighboring department, so we often take that instead of

Question Sixty-Two Narrative Response Results
QRS.
Only when ambulance is unable to respond or on another call.
Provided when volunteers are available.
We provide services on MVA responses and if no ambulance available.
For cardiac arrest calls or when the ambulance is OOD/unavailable.

Question Sixty-Three: Does your fire service provide QRS coverage outside your service area if requested?

Answered: 15 Skipped: 30



ANSWER CHOICES	RESPONSES	
No	13.33%	2
Yes	86.67%	13
Other (please specify)	0.00%	0
TOTAL		**15**

Question Sixty-Four: How many of your fire service personnel are cross trained medically (e.g., F.R., EMT, EMT-A, EMT-Paramedic, PHRN, others)?

Answered: 15 Skipped: 30

Question Sixty-Four Narrative Response Results
5
75%
40%
12
5
15
5
7
4
14
2
1
Half of our responders...roughly.
7
6

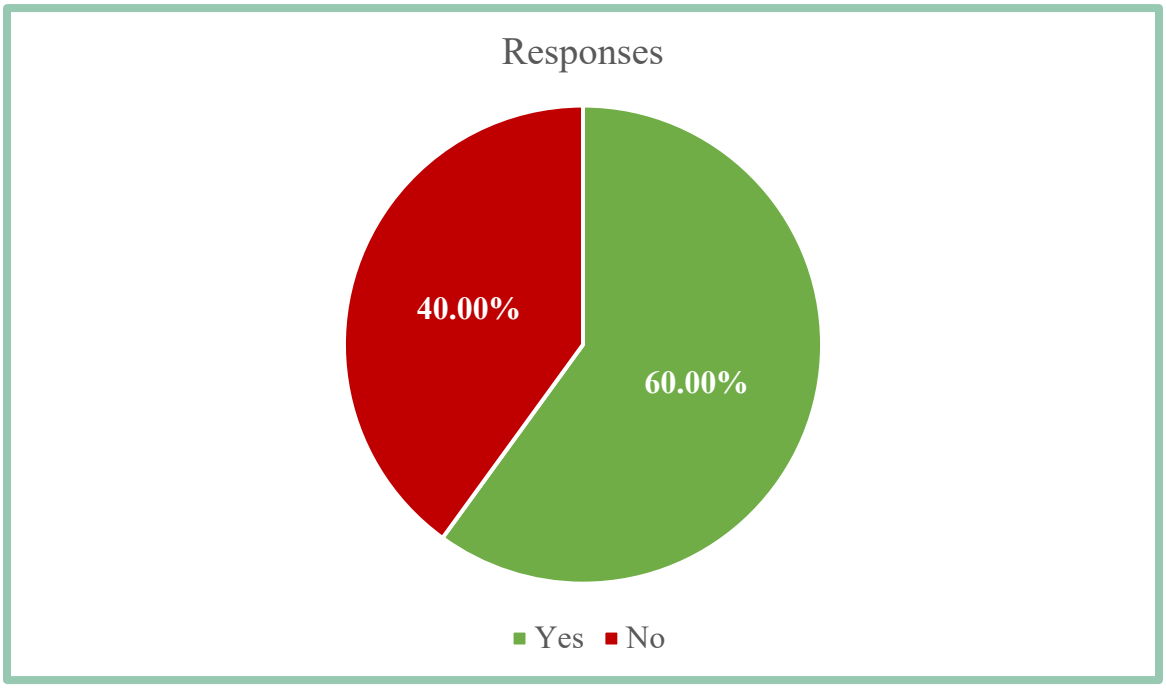
Question Sixty-Five: Of these who are cross trained medically, how many have a National Registry Certification?

Answered: 13 Skipped: 32

Questions Sixty-Five Narrative Response Results
1
8%
25%
6
2
2
3
0
2
4
2
3
3

Question Sixty-Six: Has your fire service ever had to decline/turnover a call for QRS in the past five years?

Answered: 15 Skipped: 30



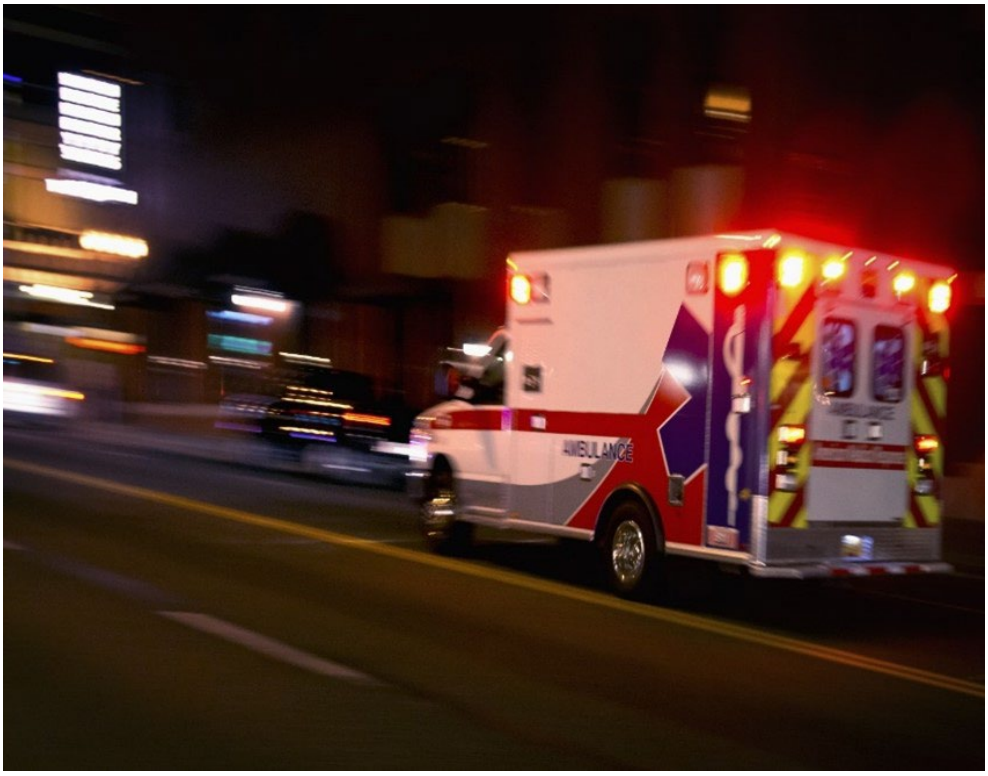
ANSWER CHOICES	RESPONSES	
No	40.00%	6
Yes (Please provide details):	60.00%	9
TOTAL		**15**

Question Sixty-Six Narrative Response Results
Yes, when staff unavailable.
Yes, manpower situations.
Yes, in the past five years we have not staffed eight incidents. All the other incidents we have staffed

Question Sixty-Six Narrative Response Results
100%.
Yes, staffing issues or out of service vehicle.
Yes, maybe five or six times over the last five years.
Yes, only three due to lack of manpower.
No - loungers available to take call.
Yes, no staffing.
Yes, approximately forty.

APPENDIX B

TOOLKIT



January 2023 | Toolkit and Recommendations

TOOL #1

TRAINING AND CERTIFICATION: ACCESSIBILITY

EMS Tool Kit		Applicability:
Focus Group:	Training and Certification	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Accessibility	R-S-U/V-P
Type:	Recommendations	

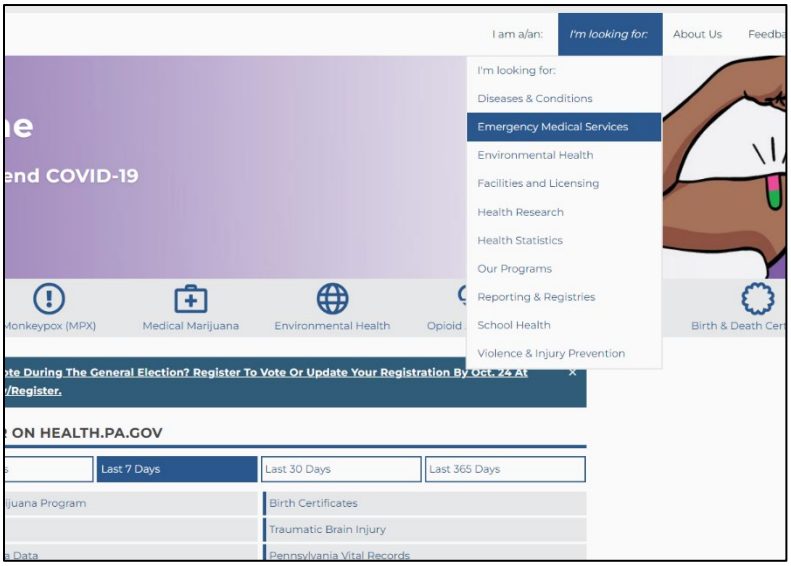
Introduction:

Training and certification of emergency medical services personnel can be generally divided into categories of initial certification and continued education and training. The certification requirements are outlined and well defined by the Pennsylvania Department of Health for each level of emergency medical services certification. However, information regarding location of, and registration for, initial certification courses is difficult to find. Routine internet search results do not provide straightforward access to sites that allow the user to locate or register for the intended course(s).

Discussion:

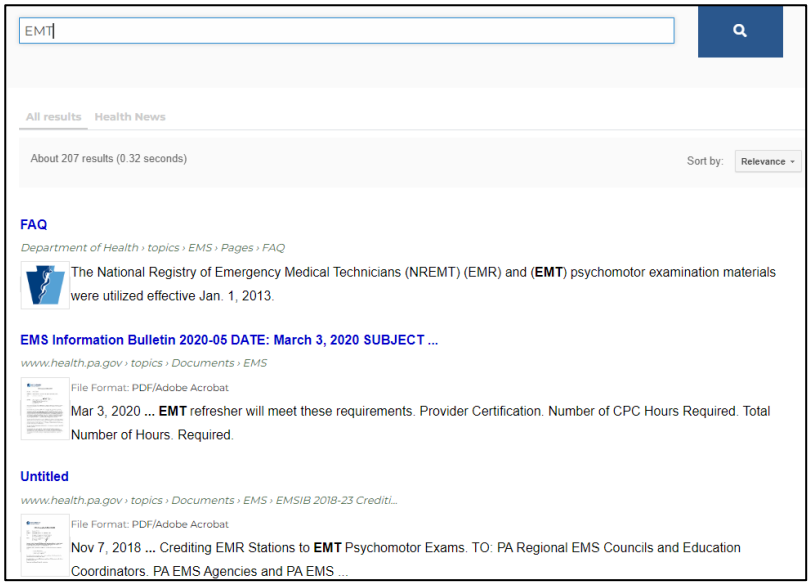
A search of the Pennsylvania Department of Health website results in returns of keyword articles and publications which are difficult to navigate. Individuals who are familiar with the intended content would find navigation through the returned information to be cumbersome and irrelevant. Prospective trainees without knowledge of applicable search terminology are unlikely to locate relevant links for requesting additional certification information.

Figure 1 – www.health.pa.gov



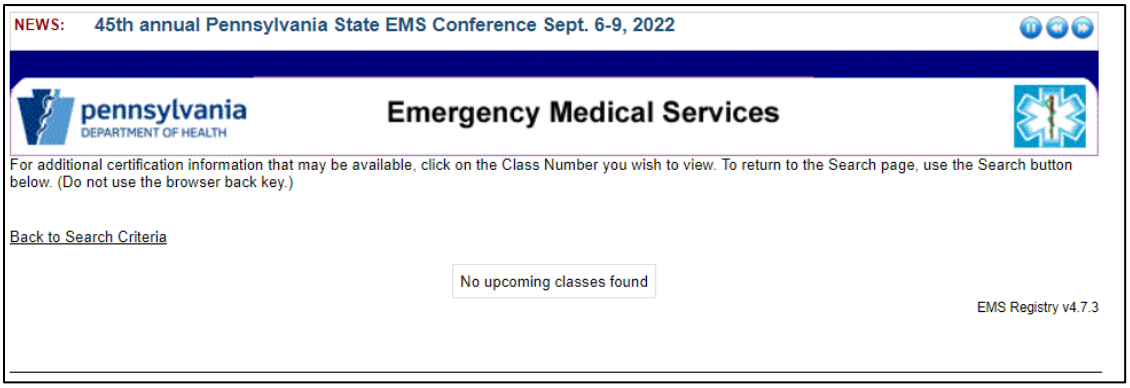
EMS Tool Kit		Applicability:
Focus Group:	Training and Certification	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Accessibility	R-S-U/V-P
Type:	Recommendations	

Figure 2 – Screen Capture – Website Search Functionality



Additionally, the EMS registry that allows users to search through all available certification classes will only return information with the input of specific criteria. In the absence of available classes within the county(ies) searched, no related or suggested nearby classes are provided to the user.

Figure 3 – Screen Capture – Certification Class Search



EMS Tool Kit		Applicability:
Focus Group:	Training and Certification	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Accessibility	R-S-U/V-P
Type:	Recommendations	

Recommendations:

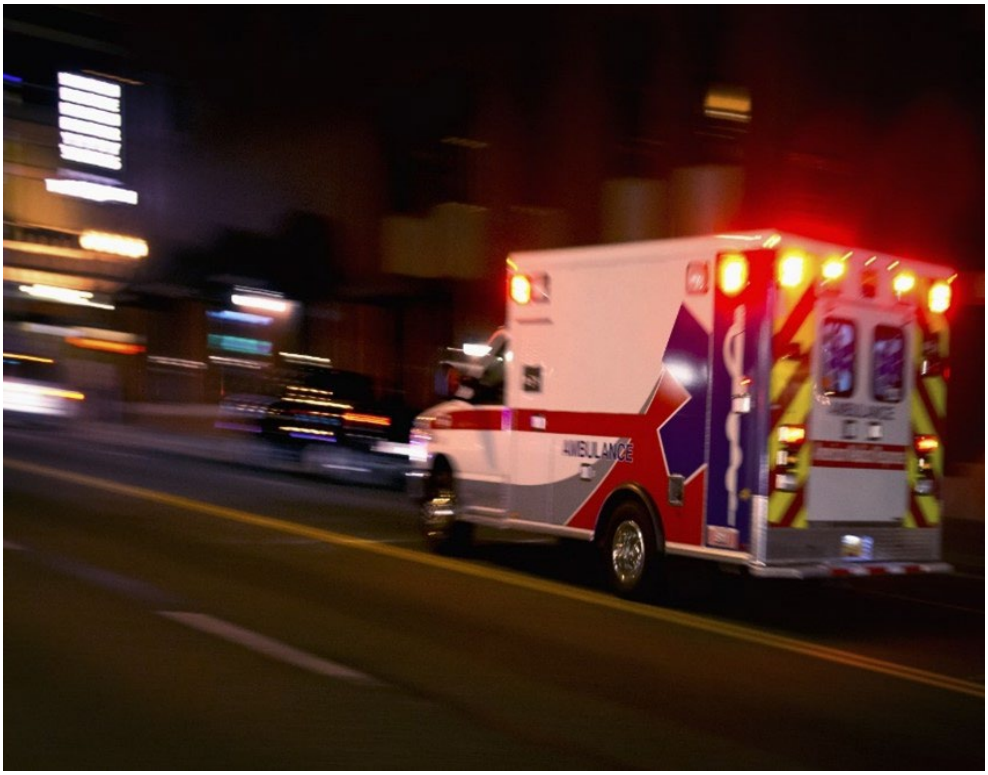
PA Department of Health

- Revise the set of Emergency Medical Services (EMS) (pa.gov) website pages related to emergency medical services certification with a more user-friendly and graphical user interface by the responsible entity.

- Increase web functionality on the EMS Registry page for geographic proximity when no direct search results are found.

- Include an aggregation engine on the certification webpage for interested individuals to search their immediate geographic area or region for emergency medical service providers, as well as links to Department of Health approved training facilities.

- Provide for a link, banner, pop-up window, or other mechanism initiated from the landing page of the Department of Health site linked to the above noted aggregation page. Links should also be included on other state, county, and municipal government websites with public-safety related information, i.e. – PEMA.



January 2023 | Toolkit and Recommendations

TOOL #2

TRAINING AND CERTIFICATION: TRAINING AVAILABILITY

EMS Tool Kit		Applicability:
Focus Group:	Training and Certification	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Training Availability	R-S-U/V-P
Type:	Recommendations	

Introduction:

Pursuing a volunteer or career path in emergency medical services requires individuals to affiliate with a state accredited training facility or emergency medical services agency.

Discussion:

Ease of locating available training classes is discussed in the accessibility toolkit. However, prospective trainees and current emergency medical service agencies searching for scheduled classes must successfully complete multiple searches in their county and adjacent counties and collect the class information independently. Once identified, prospective trainees and/or emergency medical services agencies must sort the classes in start date order.

Across the Commonwealth of Pennsylvania, paramedic programs are offered at only eighteen locations. Seven of the locations are concentrated in the southeast region of the state while another seven are concentrated in the southwest region. Of the remaining locations, one paramedic program is based in the northeast while the central region of the state is served by the final three locations. Due to the length of the program, averaging one year up to eighteen months, locations may only host one offering annually, potentially removing the opportunity for a significant period based upon the prospective student's location.

Recommendations:

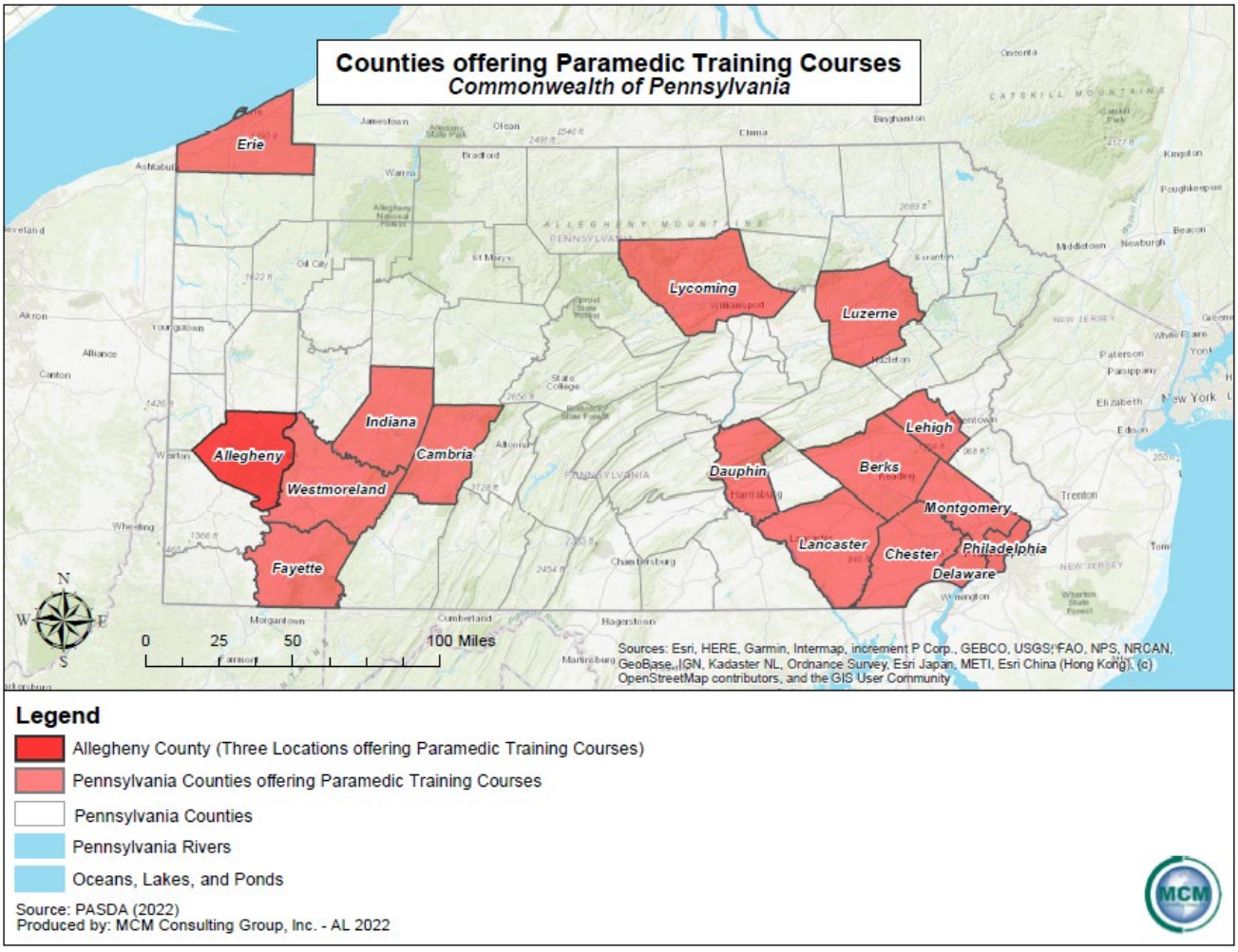
Counties, Municipalities and Agencies

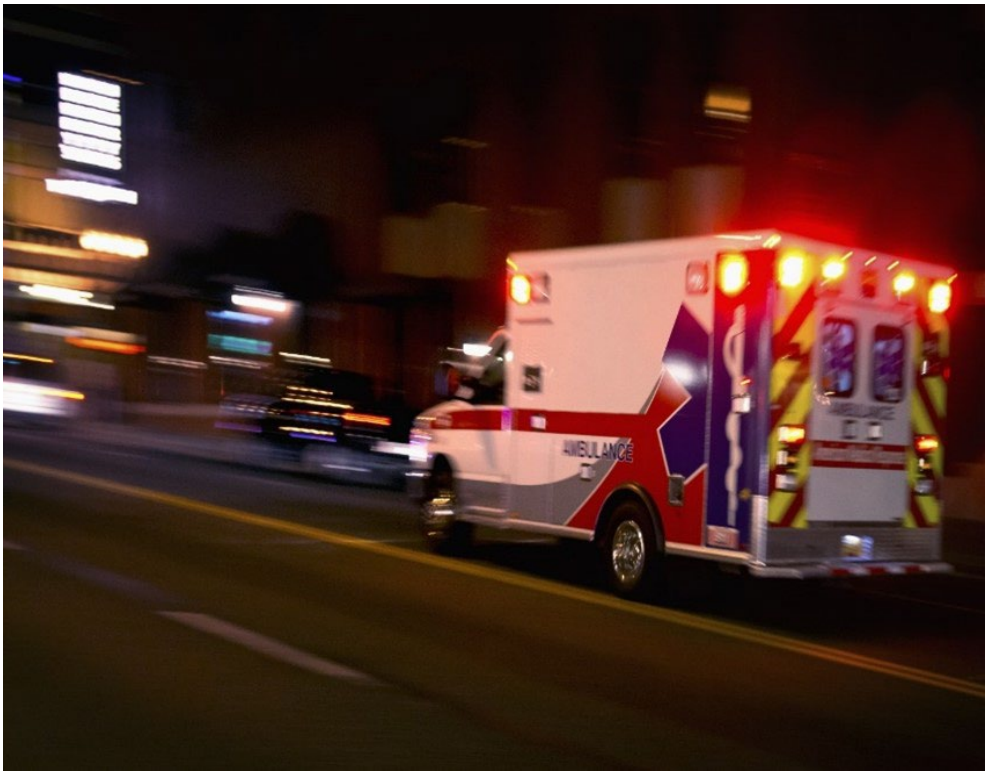
- Encourage the PA Department of Health to develop a diversification plan to incorporate additional paramedic program training locations throughout the Commonwealth.
    - Develop partnerships with community colleges, hospitals, and health networks to increase the available locations of program offerings.
    - Maintain partnerships with training facilities by incentivizing the organizations through direct and indirect funding.
- Encourage the PA Department of Health to consider the recommendations presented below.

EMS Tool Kit		Applicability:
Focus Group:	Training and Certification	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Training Availability	R-S-U/V-P
Type:	Recommendations	

PA Department of Health

- Increase oversight of the training facilities course offerings, coordinating program starting dates that provide for choice in location for students.
- Include a graphical representation of the state with links identifying paramedic program training facilities as a component of the Department of Health website.
- Maintain the EMS Registry page with current and future program offerings.





January 2023 | Toolkit and Recommendations

TOOL #3

RECRUITMENT AND RETENTION: HIGH SCHOOL EMS PROGRAMS

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention	R: Rural / S: Suburban / U:Urban P:Paid / V:Volunteer
Area:	Recruitment - High School EMS Programs	R-S-U/V-P
Type:	Model Program/Best Practices	

Introduction

The results of the survey of EMS providers in the five study counties indicated that it is getting harder to find people that want to volunteer or work in EMS. In today's world there are myriad activities vying for peoples' attention and time. Getting youth involved in EMS is a good way to take advantage of an energetic demographic that may be overlooked and foster in them a lifelong commitment to giving back and helping their communities.

Discussion

Teenagers often bring a fresh perspective, passion, and energy to organizations. They tend to be more technologically savvy and more open to new ideas, meaning they can help drive positive change and create new opportunities for improvement. One way to encourage youth to participate in EMS is to offer EMT training as high school or college-level credit courses.

Best Practice: Las Vegas area high school programs

*Like other EMS agencies, private ambulance services in the Las Vegas area have faced ongoing recruiting challenges for EMTs and paramedics. Enrollment in EMT education programs in their area has been down since the pandemic, meaning fewer potential paramedic candidates later on. By supporting the high school programs, Guardian Elite and Community Ambulance hoped to ensure a stream of new EMTs who would be interested in starting their careers there, and who had the potential to become paramedics. Community Ambulance and Guardian Elite provide ride-alongs and internship opportunities for high school EMS students. Scheller also sits on Veterans Tribute's advisory board for technical education. The EMS curriculum begins in 9th grade with a foundation of public safety course, followed by health sciences, anatomy and physiology courses for sophomores and juniors. Seniors can then take the 180-day EMT course, including clinical rotations with local EMS agencies. The school also brings in EMS, law enforcement and medical professionals from the community as speakers. The EMS class uses a mock ambulance, stretchers, CPR mannequins and other medical equipment for hands-on skills. There's also a mock 911 call center for emergency dispatch students, a forensics lab and a cybersecurity lab.**

*National Association of Emergency Medical Technicians "Innovative Recruitment Strategies for EMS Agencies". For the full article: https://naemt.org/docs/default-source/2017-publication-docs/recruitment-strategies-02-04-2022-1.pdf?sfvrsn=2bade893_2

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention	R: Rural / S: Suburban / U:Urban P:Paid / V:Volunteer
Area:	Recruitment - High School EMS Programs	R-S-U/V-P
Type:	Model Program/Best Practices	

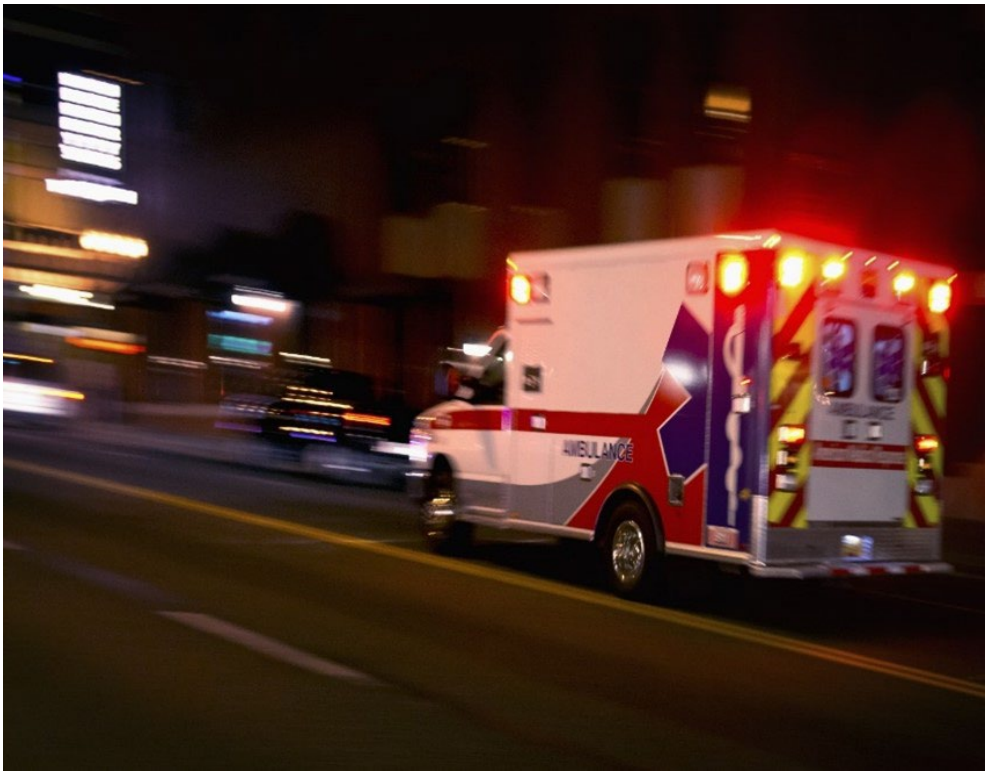
Recommendations

Agencies:

- Determine if the local high schools/Vo-Tech schools offer EMT training.
- Determine if the local community colleges/colleges offer EMT or Paramedic training programs.
- If training is offered, explore working with the educational facility to support the program as much as possible with the goal of recruiting the students to your agency once they successfully complete the program.
    - Provide education materials
    - Offer ride-alongs
    - Provide volunteer instructors
    - Offer signing bonuses after graduation
- If training is not offered, work with high schools/Vo-Tech school to explore the feasibility of developing local programs.

County Considerations

- Assist EMS agencies in outreach to schools if needed.
- Provide assistance on integrating EMS training into curriculums if needed.



January 2023 | Toolkit and Recommendations

TOOL #4

RECRUITMENT AND RETENTION: FINANCIAL INCENTIVES

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention	R: Rural / S: Suburban / U:Urban P:Paid / V:Volunteer
Area:	Recruitment and Retention - Financial Incentives	R-S-U/V-P
Type:	Model Program/Best Practices	

Introduction

One method of recruiting and retaining EMS volunteers and paid staff is to offer cash incentives or free training.

Discussion

Washington County, Maryland has instituted a county-funded program that provides cash incentives for every call a volunteer responds to, above the initial 40 calls per year that is required for the county's length of service awards program (LOSAP). The amount of the incentive would depend on the volunteer's fire or EMS certification level and officer status. The intent is not only to help volunteers who go on calls, but also to get them to increase their training levels and step up for leadership positions. The incentives are:

- An Emergency Support Services (air/rehab unit) or fire police volunteer would get $4 per call.
- A Firefighter I or emergency medical technician (EMT) would get $5 per call.
- A Firefighter I who also is either an emergency medical responder (EMR) or EMT would get $6 per call.
- A Firefighter II would get $7 per call.
- A Firefighter II who also is an EMR or EMT would get $8 per call.
- A captain or lieutenant would get an additional $1 per call.
- A chief officer (such as a chief, deputy chief or assistant chief) would get an additional $2 per call.
- A paramedic would get an additional $1 per call.

In addition to the per call incentives, the county also provides:

- Fire and EMS volunteer responders are eligible for a $125 quarterly stipend if they complete 18 duty shifts in a quarter, with a $500 annual maximum.
- Through the Length of Service Awards Program (LOSAP), an income-tax break is available to fire and EMS volunteers if they meet a minimum amount of volunteer hours over a three-year period.
- Through LOSAP, retirement benefits are also available.

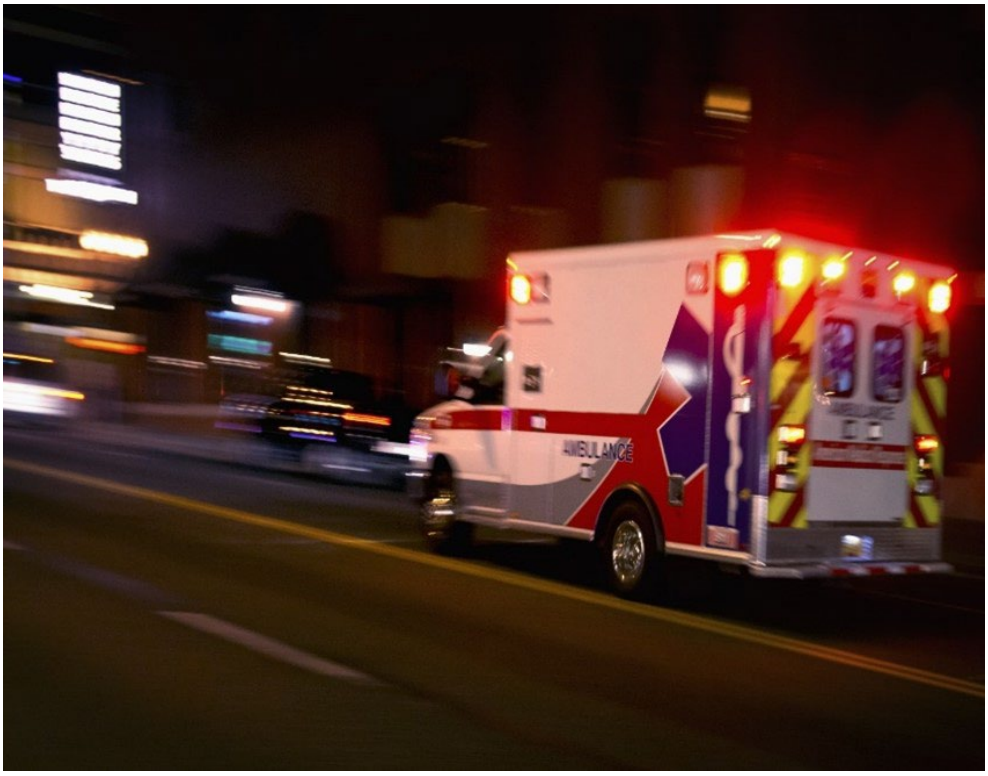
There are many similar programs in place across the country.

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention	R: Rural / S: Suburban / U:Urban P:Paid / V:Volunteer
Area:	Recruitment and Retention - Financial Incentives	R-S-U/V-P
Type:	Model Program/Best Practices	

There are several examples of municipalities and EMS agencies in Pennsylvania that offer free training and certification, sometimes in turn for commitments of service for set time periods. Manor Township in Armstrong County for example, will pay the total cost (approximately $12,000.00) for paramedic training and certification in turn for a three-year commitment to the municipal EMS system.

County and Municipal Considerations

- Facilitate discussions with EMS agencies to determine if a per-call incentive program would be feasible in terms of record keeping and funding.
- Consider funding a program with county funds.
- Petition Congress to provide federal tax exemptions for any state or local benefits that volunteers receive.
- Consider paying for EMS training and certification for new hires in return for a service commitment.



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TOOL #5

RECRUITMENT AND RETENTION: LIVE-IN PROGRAMS

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Live-in Programs	R-S-U/V
Type:	Recommendations	

Introduction:

Live-in programs for college students, trained in emergency medicine (i.e., EMR, EMT, etc.) provide a response agency with increased, in-house, trained personnel.

Discussion:

Live-in programs are opportunities available to college students or other interested individuals. In exchange for being available for responses a set number of hours per week, attending training, and performing other tasks as needed, live-ins are provided with free housing.

Benefits:

- Provides larger staffing pool at low- or no-cost.
- Incentivizes students to participate, by saving on housing costs.
- Provides staff on-station during over-night hours, which decreases response times.
- Return on investment for agencies offering live-in programs through completion of daily and weekly tasks by the live-ins.

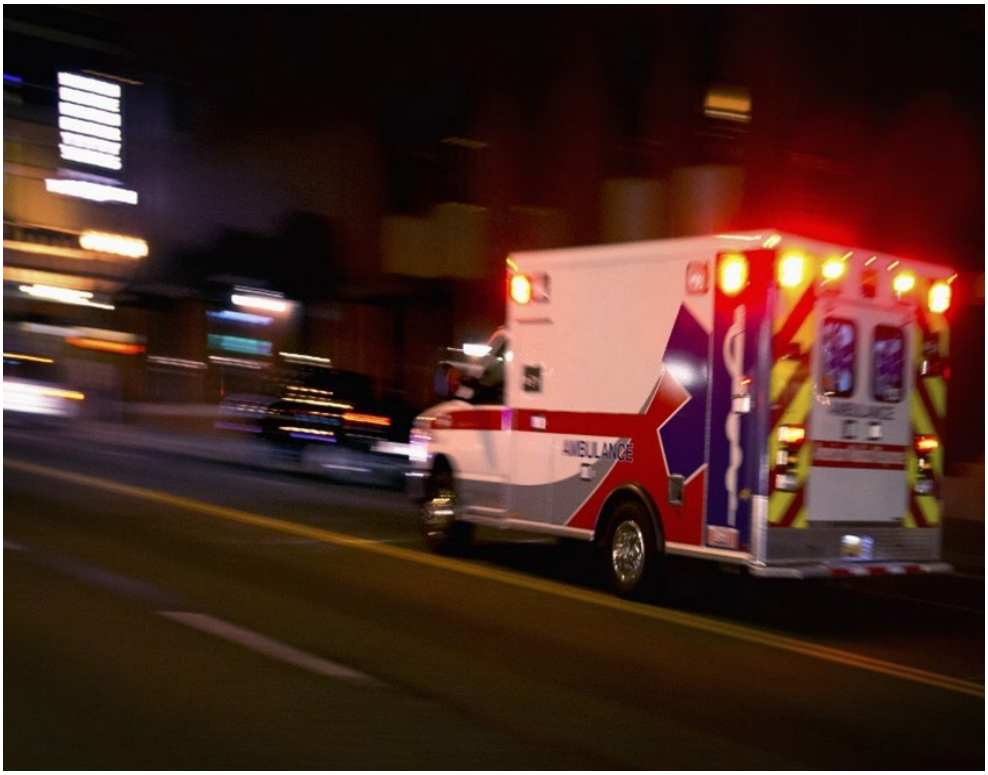
Recommendations:

Agencies:

- Consider offering live-in programs.
- Develop policies and procedures for the live-in program.
- EMS agencies (that have available space) should work with a college or university in their primary response area should work with the higher education system to advertise that they can provide housing for students with the understanding that they provide a certain number of hours per week/day running on emergency calls and completing duties at the station.
- Live-in programs can also be offered to non-college students if the agencies desire.

Loyalsock Fire Department, Williamsport, has a working relationship with Pennsylvania College of Technology.

Alpha Volunteer Fire Company, State College, provides this opportunity to students at Penn State University Main Campus.



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TOOL #6

RECRUITMENT AND RETENTION: REFERENCE ARTICLES

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention	R: Rural / S: Suburban / U:Urban P:Paid / V:Volunteer
Area:	Recruitment and Retention	R-S-U/V-P
Type:	Reference Articles	

Introduction

There are Numerous articles and white papers pertaining to EMS recruitment and retention that can be found on the internet. There is too much content in the articles/papers to include full copies in this report. Links to some of the articles/papers of interest are listed below.

- https://www.firerescue1.com/recruitment/articles/do-something-different-why-its-time-to-question-everything-about-recruitment-vEnmflrPWecqn4ea/
- https://www.jems.com/special-topics/jems-at-fdic/jems-con-2022-preview-modern-ems-recruitment-and-retention/
- https://www.ruralhealthinfo.org/rural-monitor/ems-recruitment-retention/
- https://amuedge.com/why-ems-recruitment-and-retention-remain-ongoing-problems
- https://www.jems.com/administration-and-leadership/recruitment-and-retention-a-perennial-problem-in-ems/
- https://pubmed.ncbi.nlm.nih.gov/16252678/
- https://www.providentins.com/reshifting-focus-from-recruitment-to-retention-in-ems/
- https://www.health.state.mn.us/facilities/ruralhealth/emskit/recruit.html
- https://www.vdh.virginia.gov/emergency-medical-services/chatr/recruitment-retention/
- https://emsleadershipacademy.com/why-retention-is-the-key-to-recruitment/
- https://www.lexipol.com/resources/blog/pandemic-woes-funding-recruitment-and-retention-efforts-for-rural-ems-agencies/
- www.naemt.org/docs/default-source/member-resources-documents/Emergency_Medical_Services_Recruitment_and_Retention_Manual.pdf?sfvrsn=d2def07c_4
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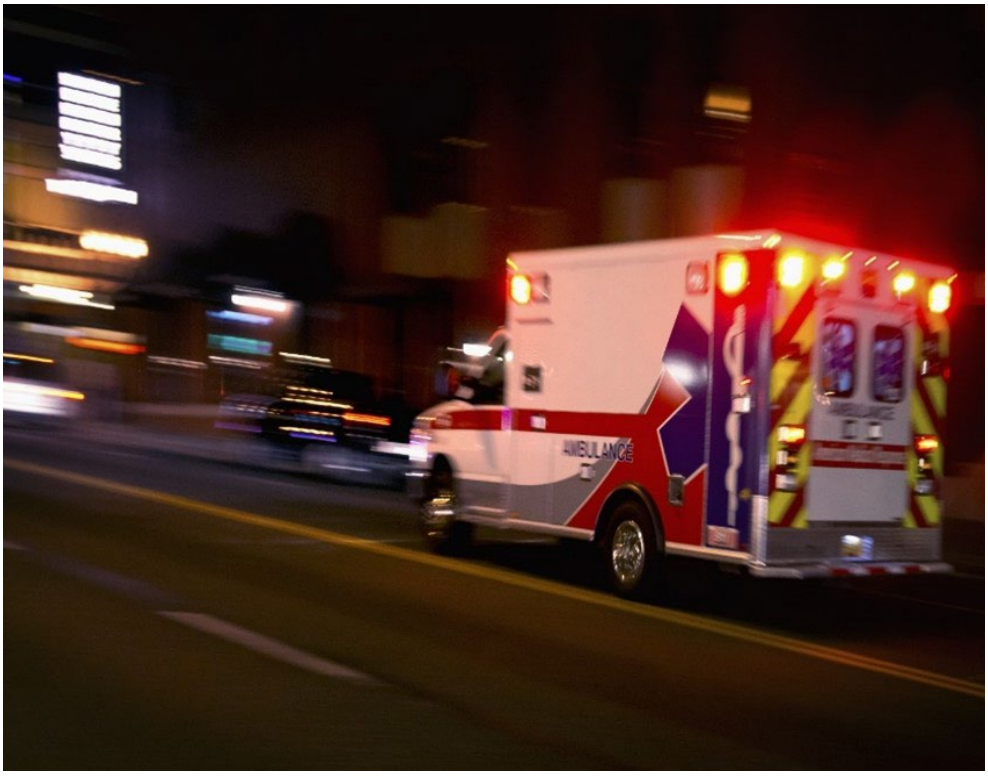
EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention	R: Rural / S: Suburban / U:Urban P:Paid / V:Volunteer
Area:	Recruitment and Retention	R-S-U/V-P
Type:	Reference Articles	

- https://www.researchgate.net/publication/365933459_What_innovations_help_with_the_recruitment_and_retention_of_ambulance_staff_a_rapid_evidence_summary
- https://www.linkedin.com/pulse/ems-recruitment-retention-ferris-wheel-how-break-abbas-ms-nrp/
- https://texasemsschool.com/texas-ems-scholarship-program/
- https://www.pulsara.com/blog/ems-trend-report-2022-proven-recruitment-and-retention-strategies
- https://www.linkedin.com/pulse/5-tips-reduce-turnover-ems-agency-scott-moore/



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TOOL #7

RECRUITMENT AND RETENTION: RETENTION INCENTIVES

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention	R: Rural / S: Suburban / U:Urban P:Paid / V:Volunteer
Area:	Recruitment and Retention	R-S-U / P
Type:	Retention Incentives	

Introduction:

Staffing shortages are one of the main reasons for the crisis that EMS agencies find themselves in today. Training new EMS staff is costly in terms of both time and money. This makes retaining current staffing a high priority.

Discussion:

Turnover continues to be a big problem for EMS agencies. A study in 2021 by the American Ambulance Association noted that the turnover rate for EMTs and paramedics was 20-30% per year. A 25% turnover rate per year equates to 100% staff turnover every four years. There are many reasons that turnover in EMS is high, including long shifts, low pay, less than optimal working conditions, high stress, limited staff engagement, poor management, and limited career advancement potential. When openings exist, other staff must fill the gaps, adding additional strain and stress. Providing incentives is one tool to help agencies retain the staff that they have. Incentives can be as simple as saying "thank-you" or providing clothing or other tangible items, to more larger incentives such as regular pay increases, end of year bonuses, etc.

Recommendations:

EMS agencies should consider incentives such as:

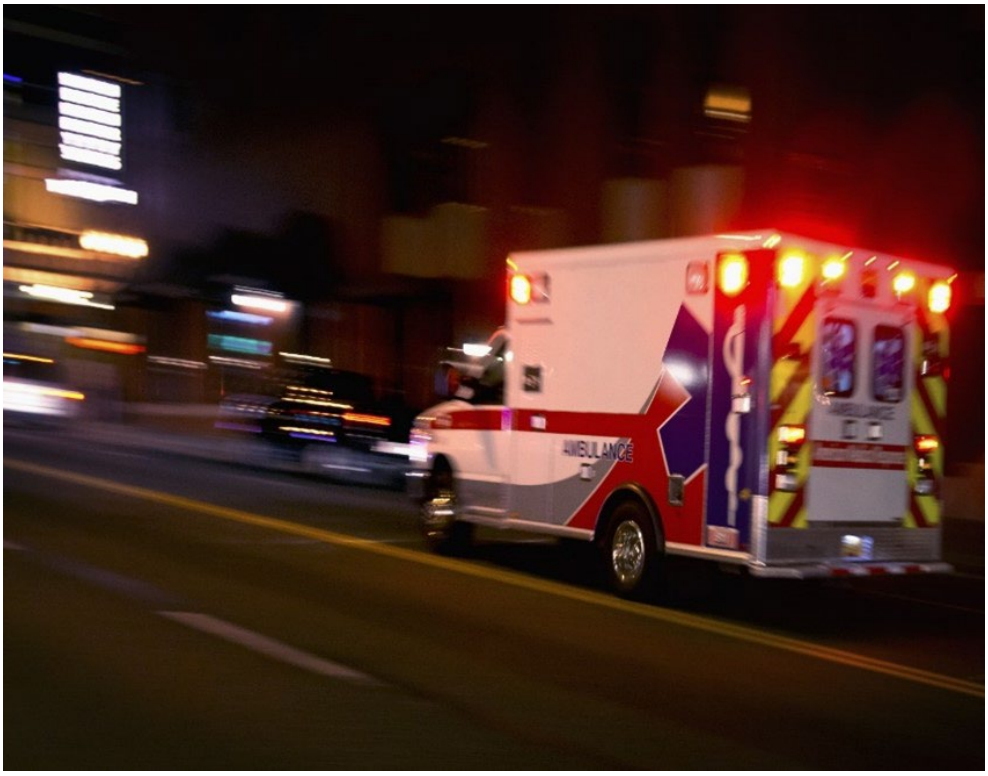
- Foster a supportive work environment, one where job performance and emotional, physical, and mental well-being of staff members are valued. Employees who feel valued and supported perform better at work and go beyond their required duties.
    - Provide positive feedback.
    - Seek staff input on corporate issues.
    - Facilitate opportunities for learning.
    - Develop a strong workplace culture.
    - Utilize a mentoring program for new employees.
    - Ask for feedback.
    - Provide strong leadership.
- Offer step or regular pay increases.
- Provide access to employee assistance programs and stress debriefing services.
- Communicate often with staff to keep them up to date on agency issues.
- Provide uniforms or uniform allowances.
- Allow for pet therapy with service dogs at the stations.
- Offer recognition programs.
- Provide free continuing education.

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention	R: Rural / S: Suburban / U:Urban P:Paid / V:Volunteer
Area:	Recruitment and Retention	R-S-U / P
Type:	Retention Incentives	

- Develop a meaningful career ladder.
- Offer tuition assistance.
- Hire the right people. Hiring staff that do not appear to have the right demeanor and aptitude for the job may solve the short-term staffing need by providing warm bodies, however it ends up being counterproductive and costing the organization more money overall.

County Considerations:

- Offer to assist EMS agencies with consultation from county human resources staff members.
- Support EMS agencies as much as possible with development of retention tools if needed.
- Provide financial support for retention programs to the extent possible.



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TOOL #8

RECRUITMENT AND RETENTION: RECRUITING ON SOCIAL MEDIA

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention	R: Rural / S: Suburban / U: Urban - P: Paid / V: Volunteer
Area:	Recruitment - Recruiting on Social Media	R-S-U/V-P
Type:	Model Program/Best Practices	

Introduction

Social media is ubiquitous in today's society and is a great pathway for getting information out to the general public. As such, it can be a great tool for recruiting new EMS personnel. Utilizing the correct social media platforms is important in reaching the desired audience.

Discussion

It is recommended that social media be utilized as a recruitment tool for recruitment for EMS agencies. However, agencies must be aware that all social media sites are not the same, and they appeal to potential staff differently. During the five-county study, it was noted that, of the EMS agencies that have a presence on social media, the majority utilize agency web pages and Facebook. However, the younger demographic is leaning away from Facebook and spending more time on other platforms. Instagram, TikTok, Twitter, YouTube and other similar platforms are appealing to teenage and early-twenties groups, while Facebook, LinkedIn and other similar apps are utilized more by people in their 30's and older. Recruitment on social media should be tailored toward the demographic that is trying to be reached.

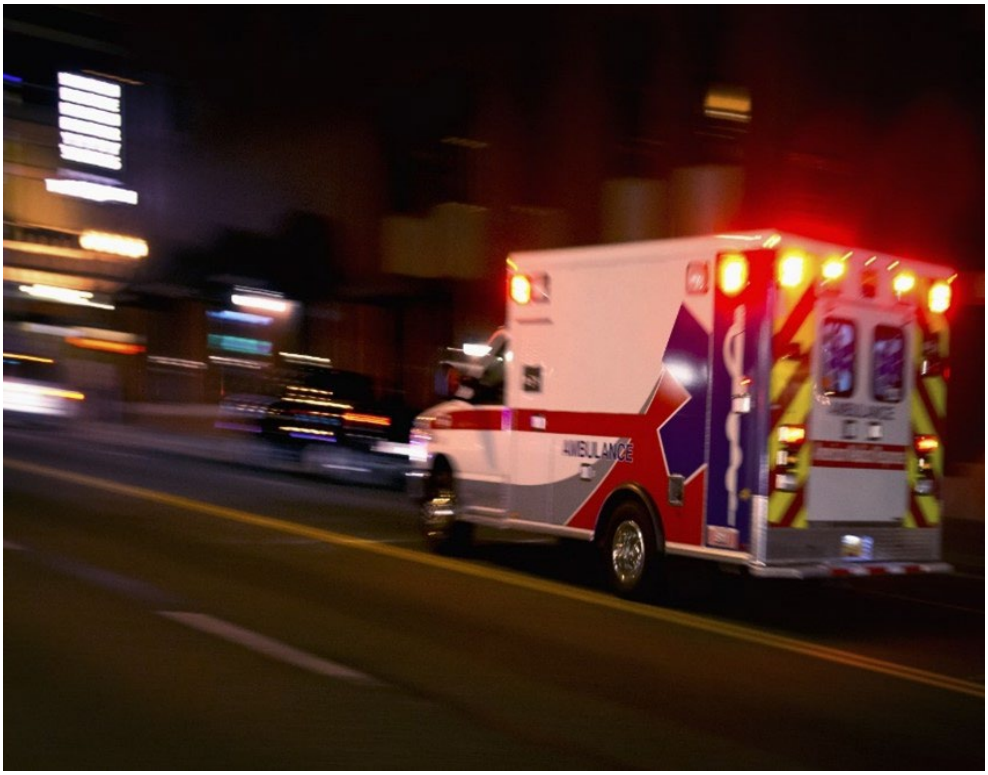
Recommendations

- Agencies should first decide the demographic that they want to appeal to and use the appropriate social media platforms. If unsure, it is recommended to utilize as many social media platforms as possible.
- A recruitment video should be developed, along with short reels that can be shown on social media platforms (Facebook, TikTok,etc.) that employ them. Partner with community television services, high school or college media programs, or other local media services to develop the videos at little or no cost.
    - Sample recruitment videos:
        - https://www.youtube.com/watch?v=bii_UcT8WCk
        - https://www.youtube.com/watch?v=oyTk8LbbWFc
        - https://www.youtube.com/watch?v=5SP77-Kys00
        - https://www.facebook.com/watch/?ref=external&v=850480665415201
        - https://www.facebook.com/watch/?v=124687166169797
        - https://www.youtube.com/watch?v=rfsh-VOb3BI
- An agency website should be developed, if it does not already exist, and recruitment should be highlighted on the home page.
- Benefits of membership/employment should be highlighted, including service to the community.
- Job openings at paid agencies should be listed on social media sites.

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention	R: Rural / S: Suburban / U: Urban - P: Paid / V: Volunteer
Area:	Recruitment - Recruiting on social media	R-S-U/V-P
Type:	Model Program/Best Practices	

County Considerations

- Support EMS agencies as appropriate in the development of recruitment media.
- Provide web-hosting services if capable.
- Allow recruitment videos or other appropriate media to be placed on county web sites.
- Encourage community television stations or other local media outlets to provide services at little or no cost to EMS agencies.



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TOOL #9

RECRUITMENT AND RETENTION/ FINANCIAL STABILITY: TAX CREDITS AND FINANCIAL INCENTIVES

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention/Financial Stability	R: Rural / S: Suburban/ U: Urban P: Paid / V: Volunteer
Area:	Tax Credits and Financial Incentives	R-S-U/V
Type:	Recommendations	

Introduction:

The Borough and Township Codes of Pennsylvania state that municipalities shall provide for emergency medical services for of the citizens within their municipality.

The Borough Code - 8 Pa.C.S. § 1202, Specific Powers.

The powers of the borough shall be vested in the council. In the exercise of any specific powers involving the enactment of an ordinance or the making of any regulation, restriction or prohibition, the borough may provide for enforcement and penalties for violations. The specific powers of the borough shall include the following:

(56) To ensure that fire and emergency medical services are provided within the borough by the means and to the extent determined by the borough, including the appropriate financial and administrative assistance for these services.

Second Class Township Code - 53 P.S. § 66553, Emergency Services.

(a) The township shall be responsible for ensuring that fire and emergency medical services are provided within the township by the means and to the extent determined by the township, including the appropriate financial and administrative assistance for these services.

First Class Township Code - 53 P.S. § 56579.52, Emergency Services.

(a) The township shall be responsible for ensuring that fire and emergency medical services are provided within the township by the means and to the extent determined by the township, including the appropriate financial and administrative assistance for these services.

Third Class Cities - 11 Pa. C.S. § 12446

a) Provision of emergency services -A city shall be responsible for ensuring that fire and emergency medical services are provided within the city by the means and to the extent determined by the city, including the appropriate financial and administrative assistance for these services.

Emergency medical services continue to struggle with operations and finances. Elected officials of municipalities have certain powers to potentially assist emergency medical services. The following are practices and recommendations that could be implemented to help ensure financial stability for emergency medical services that service the municipality.

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention/Financial Stability	R: Rural / S: Suburban/ U: Urban P: Paid / V: Volunteer
Area:	Tax Credits and Financial Incentives	R-S-U/V
Type:	Recommendations	

Discussion:

As Outlined in 35 Pa.C.S. §§ 79A01 – 79A33, municipalities may offer a tax credit to volunteers of fire departments and nonprofit emergency medical services agencies. This tax credit was enacted to acknowledge the value and the absence of any public cost for volunteer fire protection and nonprofit emergency medical services provided by active volunteers and to encourage individuals to volunteer or for former volunteers to consider rejoining as active volunteers in a volunteer fire company or nonprofit emergency medical services agency. The tax credit may be made by a municipality, which includes counties, boroughs, townships and other entities. It does not include school districts. The credit cannot exceed the tax liability.

Requirements:

- Municipalities must levy an earned income tax.
- The municipality chooses the amount of the tax credit.
- The municipality may choose to apply the tax credit against real property tax.
- The tax credit may not exceed the amount of the individual's tax liability.

Cumberland County has instituted a tax credit of up to $250.00 on county real estate taxes for volunteer fire fighters and volunteer EMS providers.

See: www.cumberlandcountypa.gov/DocumentCenter/View/41466/Cumberland-County-Volunteer-EMS-and-Firefighter-Tax-Credit-Ordinance-2022-2

The Borough of Gettysburg has adopted a tax credit program for volunteer members of the local fire department. Each eligible volunteer is eligible to receive a tax credit of 100% of the earned income tax levied by the Borough, up to $1,000.00, and also a tax credit of 100% of the real property tax levied by the Borough on qualified real property.

See:
www.gettysburgpa.gov/sites/g/files/vyhlif3156/f/uploads/fire_protection_volunteer_tax_credit_ordinance_draft.pdf

Act 222 of 2004 amends the Local Tax Enabling Act, Act 511 of 1965, to permit municipalities and school districts (except the Pittsburgh School District)1 to impose a combined Emergency and Municipal Services Tax (EMS tax) of up to $52 a year beginning on and after January 1, 2005. The EMS tax replaces the occupational privilege tax. The total EMS tax paid by any individual in a calendar year is limited to $52, regardless of the number of political subdivisions in which an individual works during the year.

EMS Tool Kit		Applicability:
Focus Group:	Recruitment and Retention/Financial Stability	R: Rural / S: Suburban/ U: Urban P: Paid / V: Volunteer
Area:	Tax Credits and Financial Incentives	R-S-U/V
Type:	Recommendations	

Municipalities must use funds from an EMS tax for police, fire or emergency services; road construction or maintenance; or for the reduction of property taxes.

See: www.legis.state.pa.us/WU01/LI/BI/ALL/2003/0/HB0197.HTM

Title 8, Pa.C.S § 1302 to levy and collect annually a tax not exceeding 30 mills for general borough purposes including support for EMS and fire department operations. The support for fire departments can be up to three mills or higher if approved by referendum. The support for EMS agencies can only go up to two mills if approved by referendum.

See: www.legis.state.pa.us/cfdocs/legis/LI/consCheck.cfm?txtType=HTM&ttl=08&div=0&chpt=13&sctn=2&subsctn=0

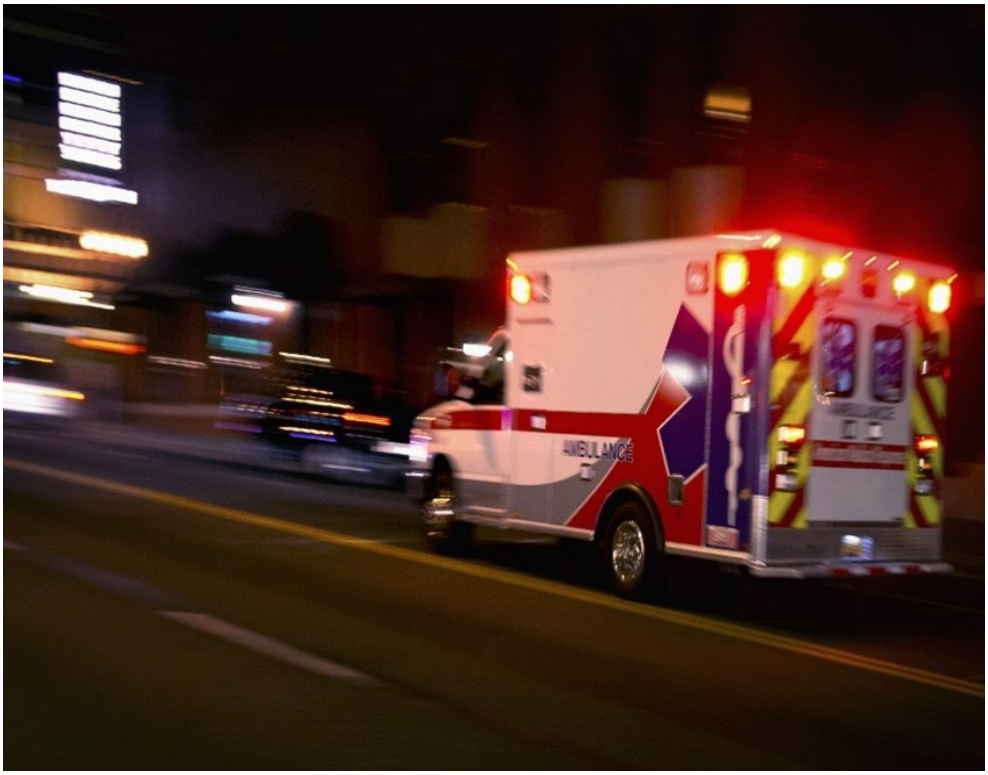
Donations, Subscriptions and Fundraisers

Donations, subscriptions and fundraisers can also be used to assist a municipality with financial stability. These methods should be used to merely augment the financial stability process to increase revenue and not be used as a sole purpose to enhance this situation. These methods are not a sustainable or reliable recurring option but could be used to assist with various action items of an EMS.

Recommendations:

Municipalities and Counties

- Municipalities and Counties could assist EMS agencies with grant funding research and application. See the Financial Stability - Grants tool kit more detailed information.
- Municipalities and Counties can consider adopting the tax programs and credit incentives outlined above.
- Municipalities and Counties could petition the General Assembly for an increase in the millage that is allowed to be allocated for EMS support under Title 8, Pa.C.S § 1302.
- Municipalities and Counties could provide clerical staff for the printing, mailing and processing of subscription services or fund drives.
- Municipalities and Counties could develop and market a donation drive from public and private partnerships to generate donation funding or other resources for EMS agencies.



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TOOL #10

FINANCIAL STABILITY: BUSINESS AND ADMINISTRATION

EMS Tool Kit		Applicability:
Focus Group:	Financial Stability	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Business and Administration	R-S-U/V-P
Type:	Sample Forms - Recommendations	

Business and Administration

Introduction:

Financial stability is vital to the success of any organization, whether it be for-profit, not-for-profit, or non-profit. Service organizations, especially volunteer service organizations, are not often considered in terms of a business model, and as such, the importance of financial stability can be overlooked. Effective business administration is necessary for the successful operation of EMS agencies, both volunteer and paid services.

Discussion:

To operate successfully, EMS agencies need an organized business plan, personnel experienced in business administration and management, appropriate templates for budgeting, an accounts payable/accounts receivable process, and a system for billing. Many agencies, especially small rural agencies do not have members with business administration or finance experience. Additionally, many services are operating without an organized business plan, a short-, medium- and long-term plan for anticipated income and forecasted expenses, or an effective system for billing. A lack of proper documentation on patient care, and a lack of training in medical coding create inefficiencies in billing which negatively impact income. Ineffective accounts payable and expense forecasting can further tax the limited revenue.

Recommendations:

Agencies:

- Recruit/hire an individual with business management, accounts payable/receivable, or financial management experience.
- Request pro-bono assistance from an accountant.
- Use a budgeting form template, software or cloud-based program.
- Forecast and prioritize capital expenditures, i.e., vehicles, and equipment.
- Research funding sources.
    - Insurance reimbursement – Medicare, Medicaid, insurance companies
        - Petition the governing or regulating agencies for increased Medicare/Medicaid reimbursement rates.
        - Petition the governing or regulating agencies for reasonable reimbursement for treatment without transport.

        - Request insurance agencies to directly reimburse EMS services as opposed to the insured.
    - Cost recovery for response to motor vehicle accidents, structure fires, etc. where insurance companies will be involved.

    - Grants
        - Recruit volunteers or hire staff with grant writing experience.
        - Utilize municipal or county financial staff or grant writers for assistance.
        - Refer to the grants toolkit for available grant opportunities.
    - Charitable contributions
        - Recruit volunteers to research and reach out to organizations within your community for financial, or in-kind donations
    - Crowd funding sites
    - Membership programs
        - Agency administrators can organize and lead membership programs.
    - Donations/Fundraising events
        - Recruit volunteers with event planning experience to organize fundraising events within your community.

Municipalities:

- Work with EMS agencies on community outreach for recruitment of volunteers, pro-bono or in-kind services, sharing of budgeting forms or programs.
- Work with county government to request and support changes in legislation to increase reimbursement rates from Medicare and Medicaid programs.
- Consider tax programs that would benefit EMS agencies.
- Support EMS agencies with municipal finance personnel or grant writers.

Tools:

- Budget model template – attachment
- HRSA Rural Ambulance Service Budget – attachment

RURAL AMBULANCE SERVICE BUDGET MODEL

U.S. Department of Health and Human Services
Health Resources and Services Administration (HRSA)
Office of Rural Health Policy (ORHP)

U.S. Department of Health and Human Services
HRSA
Health Resources and Services Administration

DEPARTMENT OF HEALTH & HUMAN SERVICES • USA

Rural Ambulance Service

Budget Model

U.S. Department of Health and Human Services

Health Resources and Services Administration

Office of Rural Health Policy

This document was prepared under HRSA contract # 250-03-0022, U. S. Department of Health and Human Services, Health Resources and Services Administration, Office of Rural Health Policy.

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Foreword

We are very pleased to offer you the **Rural Ambulance Service Budget Model**. This budgeting and financial management tool is an important part of the financial toolkit under development for rural ambulance services and rescue squads that do not have the resources to purchase such tools themselves. We recognize that rural ambulance services are an essential component of rural health care systems. Budgeting and financial management is but one of the many challenges facing rural Emergency Medical Services (EMS) agencies in the United States today. Rural EMS agencies also face such issues as recruitment and retention of qualified, trained human resources; increasing education and training requirements; increasing cost of equipment and increasing funding challenges, to name a few.

With capital and operating costs increasing and reimbursement decreasing, management of limited financial resources is becoming a more important component of rural ambulance service management and governance.

The **Rural Ambulance Service Budget Model** provides a management tool that enables a service to enter known financial information into a simple, yet elegant preprogrammed spreadsheet. Once information is entered into the model, a budget is automatically calculated that can be exported into off the shelf accounting software and monthly budget versus actual results can be used to better manage limited funds and plan for improved financial management of the service.

This publication was developed by the Federal Office of Rural Health Policy, Health Resources and Services Administration in cooperation with the Rural Emergency Medical Services and Trauma Technical Assistance Center. It is hoped that this **Rural Ambulance Service Budget Model** will serve as a valuable tool for rural ambulance services and provide for better informed fiscal management in the challenging realm of out of hospital health care.

Please see the special note on the following page concerning the ongoing availability of this document.

Marcia K. Brand, Ph.D.
Associate Administrator for Rural Health, HRSA

Nels D. Sanddal, Director
Rural Emergency Medical Services and Trauma Technical Assistance Center

A special note to the reader:

In FY 2000, Congress funded the Trauma and EMS Program within the Department of Health and Human Services, Health Resources and Services Administration (HRSA) to foster the development of appropriate, modern systems of such care. Ten percent of the funding provided for that program was earmarked for “rural” trauma and EMS and was administered by HRSA’s Office of Rural Health Policy (ORHP). In FY 03, ORHP established the Rural Emergency Medical Services and Trauma Technical Assistance Center (REMSTTAC). This product represents one of the deliverables identified in the REMSTTAC contract. Congress zeroed out the HRSA Trauma and EMS Program in FY 05 and ORHP, therefore, lost the resources necessary to continue REMSTTAC. However, as part of ORHP’s ongoing commitment to rural EMS, this and other products will continue to be available from two sources. These include the Critical Illness & Trauma Foundation (www.citmt.org) [not a government Web site], the parent organization of the previously funded REMSTTAC, and the Rural Assistance Center (www.RAConline.org) [not a government Web site

OVERVIEW

In the early stages of the development of the Rural EMS and Trauma Technical Assistance Center (REMSTTAC) a diverse group of stakeholders were brought together to provide input and direction regarding how the TA center might best meet the needs of its constituency groups. These three groups are broadly defined as:

- Federal Agencies and national EMS, trauma, and rural health organizations with interest in or responsibility for rural EMS and trauma and their intersection with rural health.
- State EMS lead agencies, State Offices of Rural Health, and similar State level organizations that relate to rural EMS, trauma, and overall rural health.
- Local and regional EMS and trauma providers, including rural ambulance services, hospitals, rural health clinics, and other agencies and organizations involved in regional and local health planning and provision.

In developing and prioritizing the REMSTTAC scope of work, the stakeholder group recommended the development of a financial tool kit that would provide specific financial and budgeting tools to rural EMS agencies and organizations that may be managed by volunteer EMS providers or others with limited experience or training in the financial and budgeting aspects of public, private or not-for-profit organizations. As cited in the Rural and Frontier EMS Agenda for the Future (2005), many rural and frontier EMS services "have no expertise or infrastructure for collecting fees or maintaining the business functions." The need for this toolkit has been further validated through a series of "town hall" meetings conducted in the intermountain west and New England States with representation from local EMS leadership.

In response to this direction, a task group was organized within REMSTTAC to develop tools for this financial tool kit. The task group, coordinated by a REMSTTAC staff person, includes a business/financial consultant and representatives of: the National Association of State EMS Officials, the Rural Health Resource Center and the National Association of Emergency Medical Technicians (EMTs). In addition to the considerable knowledge and expertise of these task group members, tasks and priorities are reviewed by the entire stakeholder group. Their input and direction guides the work of the task group. The task group and stakeholders identified the following priorities for toolkit development:

- A financial Chart of Accounts that identifies common elements of assets, liabilities, revenues, and expenses applicable to a rural EMS agency or organization
- A budget tool that assists rural EMS agencies and organizations in developing and tracking operating budgets and establishing fee schedules
- Instructions for using a budgeting tool and interface with common "off the shelf" accounting software that is readily available at low cost to rural EMS agencies or organizations.

The **Sample Chart of Accounts** represents the first drawer in the Financial Toolkit. It provides a bookkeeping and accounting framework for rural EMS services and is consistent with generally accepted accounting principles. It is organized as follows:

- Assets – These accounts represent both cash and non-cash assets and include bank accounts, accounts receivable, fixed assets such as property, plant and equipment with allowances for applicable depreciation of such assets.
- Liabilities and Equity – These accounts represent accounts payable, loans and lines of credit as well as earnings and owners' equity or fund balances, depending on the type and structure of the organization.
- Revenue – These are income accounts such as revenues from patient billing, other revenue, subsidies, etc. and are applicable to either cash basis or accrual basis accounting rules.
- Expense – These accounts represent the costs of doing business, such as payroll, fringe benefits, costs of occupancy, repairs, maintenance, and similar expense items.

Some EMS services may not need all the items shown in the sample Chart of Accounts. Others may find the need to add accounts. Either way, the sample provides a model with the most commonly used accounts in the accounting structure of a rural EMS organization.

Sample Chart of Accounts			
Assets		**Liabilities/Equities**	
1000	Cash	4001	Patient Revenue - Medicare
1200	Accounts Receivable	4002	Patient Revenue - Medicaid
1300	Prepaids	4003	Patient Revenue - Other
1400	Inventory		
1500	Investments	4100	Grant / Subsidies Revenue
1600	Property, Plant and Equipment	4200	Investment Income
1700	Other Assets	4300	Other Income
2000	Accounts Payable	5000	Contractual Adjustments - Medicare
2100	Short Term Debt	5001	Contractual Adjustments - Medicaid
2200	Accrued Salaries	5002	Contractual Adjustments - Other
2300	Other Accrued Liabilities		
2400	Long-term debt		
3000	Net assets/Equity - Unrestricted		
3100	Net assets/Equity - Restricted		

Expenses			
6101	Salaries-Patient Care	6342	Legal Fees
6102	Benefits-Patient Care	6343	Collection Agency Fees
6103	Medical Supplies - Patient Care	6344	Software Maintenance Contracts
6104	Gases (oxygen) - Patient Care	6345	Consulting Fees
6105	Drugs - Patient Care	6346	Service Contracts
6106	Laundry & Linen - Patient Care	6347	Management Contract
6107	Equipment Depreciation - Patient care	6348	Claim Processing Contract
6108	Equipment Repair - Patient Care	6350	Dues & Memberships
6109	Minor Equipment - Patient Care	6351	Licenses
6110	Training - Patient Care	6352	Donations
6111	Books & Periodicals - Patient Care	6353	Food
6112	Travel & Entertainment - Patient Care	6360	Printing & Publication
6201	Dispatch Salaries	6400	Interest Expense
6202	Dispatch Benefits		
6203	Dispatch Supplies	6503	Facilities Supplies & Services
6207	Dispatch Equipment Depreciation	6507	Building Depreciation
6209	Dispatch Minor Equipment	6508	Building Maintenance
6213	Telephone	6570	Building Rent
6214	Radio Maintenance	6571	Property Taxes
6215	Radio Antenna	6572	Utilities
6216	Cell Phones	6573	Housekeeping
6217	Pagers	6574	Laundry - Non Patient Care
		6575	Uniforms
6301	Administration Salaries	6576	Property Insurance
6302	Administration Benefits		
6303	Office Supplies	6680	Vehicle Registration
6307	Office Equipment Depreciation	6681	Vehicle Gas & Oil
6308	Office Repair & Maintenance	6682	Vehicle Repairs
6309	Office Minor Equipment	6683	Vehicle Depreciation
6311	Books & Periodicals	6684	Vehicle Leases
6312	Travel & Entertainment	6685	Auto Insurance
6313	Administration Telephone	6400	Interest Expense
6320	Worker's Comp		
6321	Unemployment Tax	6503	Facilities Supplies & Services
6322	FICA Tax	6507	Building Depreciation
6323	General Liability Insurance	6508	Building Maintenance
6324	Professional Liability Insurance	6570	Building Rent
6325	Umbrella Coverage	6571	Property Taxes
6326	Health Insurance	6572	Utilities
6327	Pension Plan		
6340	Physician Fees		
6341	Accounting Fees		

The **Rural Ambulance Service Budget Model (RASBM)** fills a very large drawer in the REMSTTAC Financial Toolkit. The Budget Model is a customized Microsoft Excel® spreadsheet. Part of the Microsoft Office® software family, Excel® is commonly available to most computer users and is often bundled on computers marketed in the U.S. Where Excel® is not already installed on a personal computer; the software can be purchased inexpensively from most office supply stores or on-line software vendors. If you have other spreadsheet software REMSTTAC will assist you in the conversion or importation of this template.

This tool was developed to assist rural ambulance services in establishing an annual budget. It also helps calculate the value of services donated to the ambulance service by another entity and the value of donated services provided by the ambulance staff to the community.

Why should you prepare and use a budget? A budget is a record and forecast of all cash sources and cash expenditures. Maintaining a budget allows you to estimate future needs and profits and to plan for managing any discrepancies. At minimum, your budget should track the expenses of running your service compared to the money generated. A detailed budget will allow you to do much more than simply track revenue and expenses; it will provide the framework for quantifying the overall value of your ambulance service. This becomes especially important when seeking community support, reporting to oversight boards or committees, and in applying for grants or loans. The Rural Ambulance Service Budget Model provides step-by-step instructions for organizing important data regarding your service.

By simply opening this Excel® file the user can input known or easily obtainable information into the spreadsheet. The following tutorial provides a detailed, easy to follow procedure for obtaining and entering necessary data into the budget model. When the worksheet variables are filled, the model automatically calculates and displays information that provides the user with an operating budget and information for establishing a fee schedule (for those ambulance services that charge for their services). The Budget Model file consists of a series of spreadsheet “tabs”, all of which are interrelated for calculation purposes. The “tabs” are labeled as follows:

- Introduction
- Demographics
- Vehicles
- Building
- Other Capital
- Staffing
- Training
- Other Expenses
- Budget
- Rate Study

The first step in using this REMSTTAC Budget Model is to copy the .xls file from the enclosed CD ROM onto your computer hard drive. This file should reside in the directory on your hard drive where other Excel® spreadsheet files are maintained. **Do not attempt to fill in your service information on the file on the CD ROM.**

DISCLAIMER:

The rural EMS industry is widely diverse and this budget model will not be appropriate for, nor was it intended to serve, all ambulance services. Ambulance services are encouraged to engage the services of a professional accountant as necessary.

Future Efforts:

The REMSTTAC Budget Model and its associated Chart of Accounts are the first of several drawers in the Financial Toolkit to be developed. Additional tools under consideration are:

- Cash flow management tools
- Accounts receivable management tools
- Billing and third party payer tools
- Others as identified by the Financial Toolkit task group and the REMSTTAC stakeholder group

We welcome your feedback on the REMSTTAC Budget Model and associated Tutorial.

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Rural Ambulance Service Budget Model

INTRODUCTION

Congratulations! You've taken an important first step in deciding to use the budget model tool provided by the Department of Health and Human Services, Health Resources and Service Administration's Office of Rural Health Policy (ORHP). This product was developed by the Rural Emergency Medical Services & Trauma Technical Assistance Center (REMSTTAC) under a previous contract with ORHP.

This tool was developed to assist rural ambulance services in establishing an annual budget. It also provides some utility in demonstrating the value to a community for services donated to the ambulance service by another entity (such as dispatch functions provided free by the sheriff), and the value of donated services provided by the ambulance staff to the community (such as the value of volunteer labor contributions). The tool is one of a series of "EMS Management Tools" being produced.

The model will also give you the ability to upload our national standard EMS Chart of Accounts and the budget you develop directly into the Intuit's QuickBooks® program. QuickBooks® is a proprietary accounting program that can help you manage your finances, print reports, provide payroll functions, and more. We chose QuickBooks® to provide an interface because Intuit supports it fully on-line and provides comprehensive help and training.

Limitations:

The rural EMS industry is widely diverse and this budget model will not be appropriate for, nor was it intended to serve, all ambulance services. Ambulance services are encouraged to engage the services of a professional accountant as necessary.

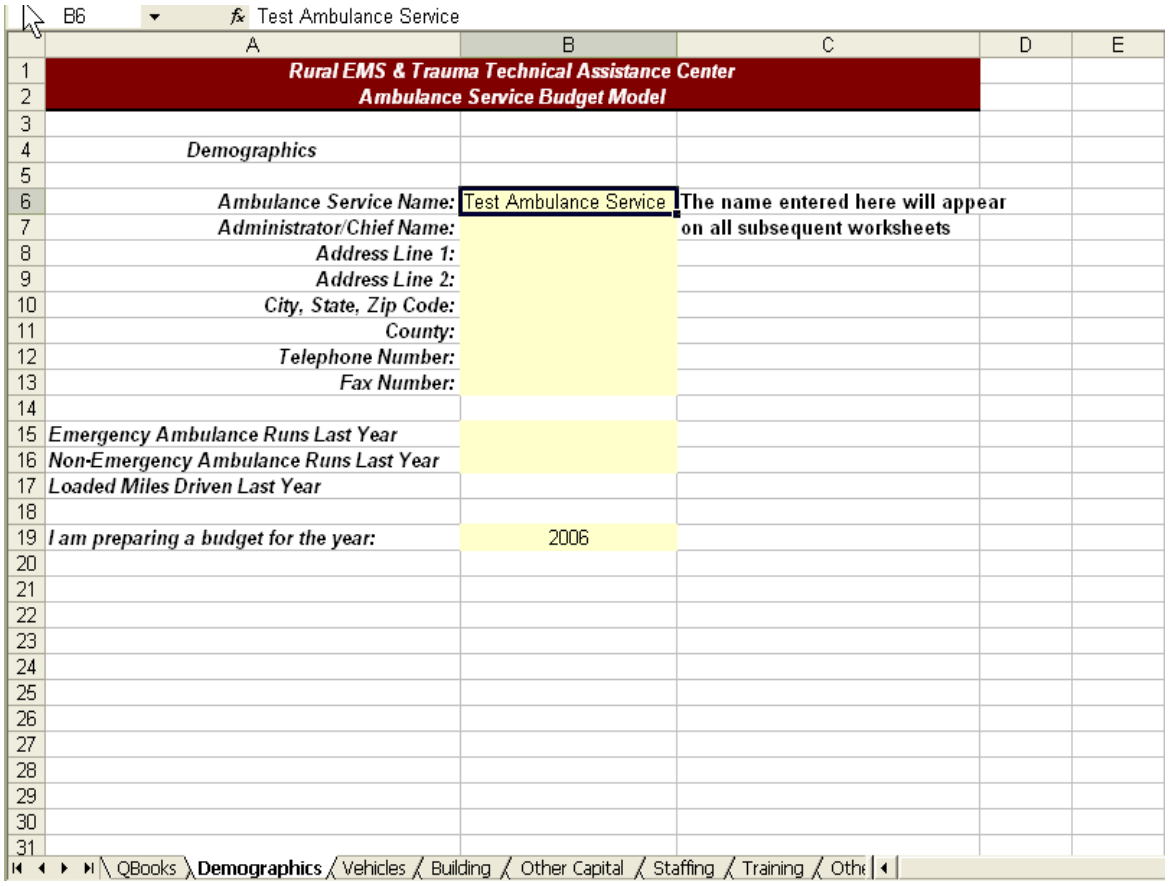
Notes about the Model:

This model consists of a series of visible and hidden rows and columns. It is designed to be completed sequentially; however it is possible to start one section, skip part, and then return. Green areas of the worksheet are always fine to fill in. Yellow areas provide caution or an either/or Statement. Filling in red sections, or any section on the budget page will override formulas. Do so with caution and monitor the effect on the rest of the model. These areas should be changed only by those with strong expertise in spreadsheet design and use.

Let's Get Started:

First, print the document included in this package called "Budget Model Worksheet.doc". Keep it handy: we'll be filling it in as you move along in this tutorial. Next, open the budget model by double clicking on the "Budget Model.xls" file. The first page you see is the Demographics page.

SPREADSHEETS



If you are familiar with spreadsheets, skip to the next page. If you're not, here's a little primer.

Spreadsheets are organized into columns and rows. Columns are identified by letters (A to Z and then AA to ZZ, and so on). Look at the words "Test Ambulance Service" above, (they are at the top of the yellow area). The area those words appear in is called a cell. The reference for that cell is B6. That is because those words appear going across the top in column B and going down to row six. The cell reference for the words "I am preparing a budget for the year:" is A19. The words in cell C7 are "on all subsequent worksheets".

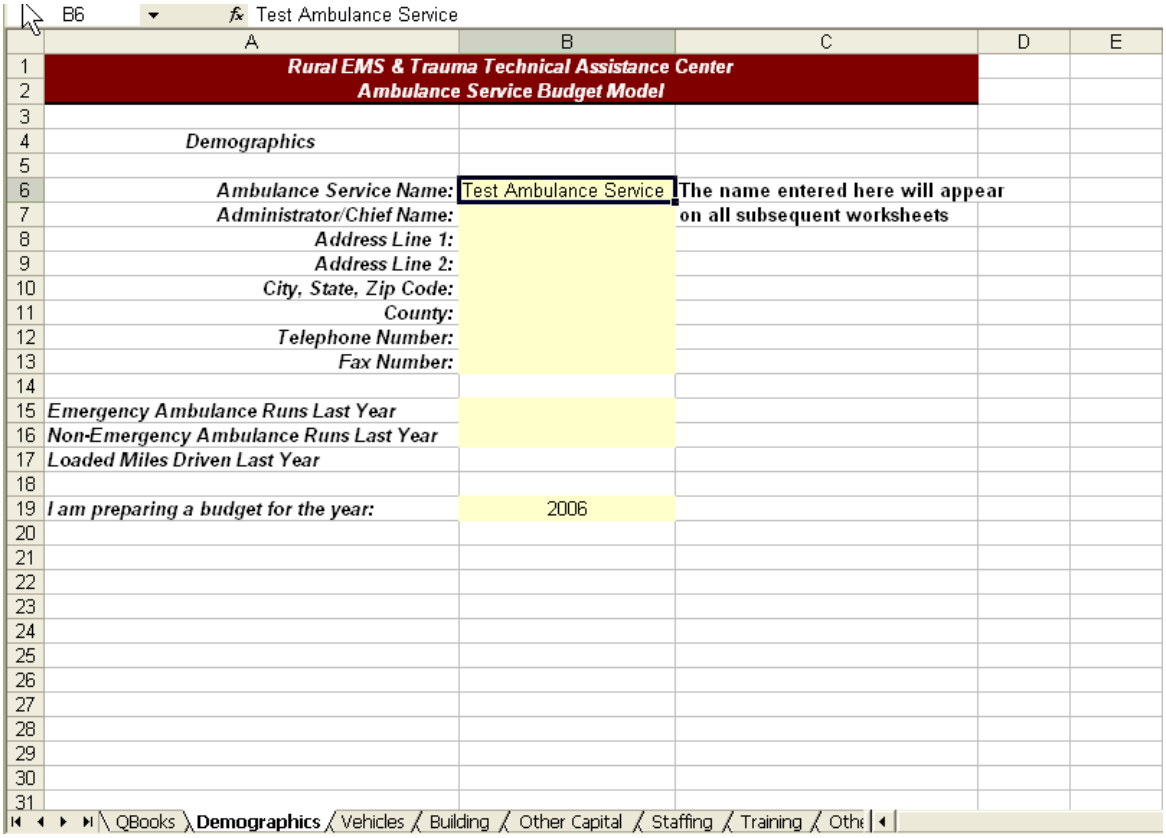
Now look at the bottom of the graphic. Under the number for row 31 you see a group of four arrows pointing left or right and then seven words: *QuickBooks, Demographics, Vehicles, Building, Other Capital, Staffing and Training*. (Your spreadsheet program may display some, all, or all of these plus others.) These are tabs. We're working on the *Demographics* tab right now. To switch to the Vehicles tab, click on the word Vehicles and that tab will be displayed.

If you need more assistance in learning about spreadsheets, please refer to the Help

function on your spreadsheet program.

Demographics:

What this tab does: The transport and miles information you enter on this page will become important as you get to the final steps of the model. You will use them to help determine what you will need to set your rates at in order to cover your costs.



On this tab you will enter the name and other information about your ambulance service. In cell B15, enter the number of emergency ambulance runs your service performed last year that resulted in a bill being sent. Do not include responses that did not result in a bill. In cell B16, follow the same procedure to record the number of non-emergencies. In cell B17, enter the total number of miles billed. Try to be accurate with these numbers, they are important later.

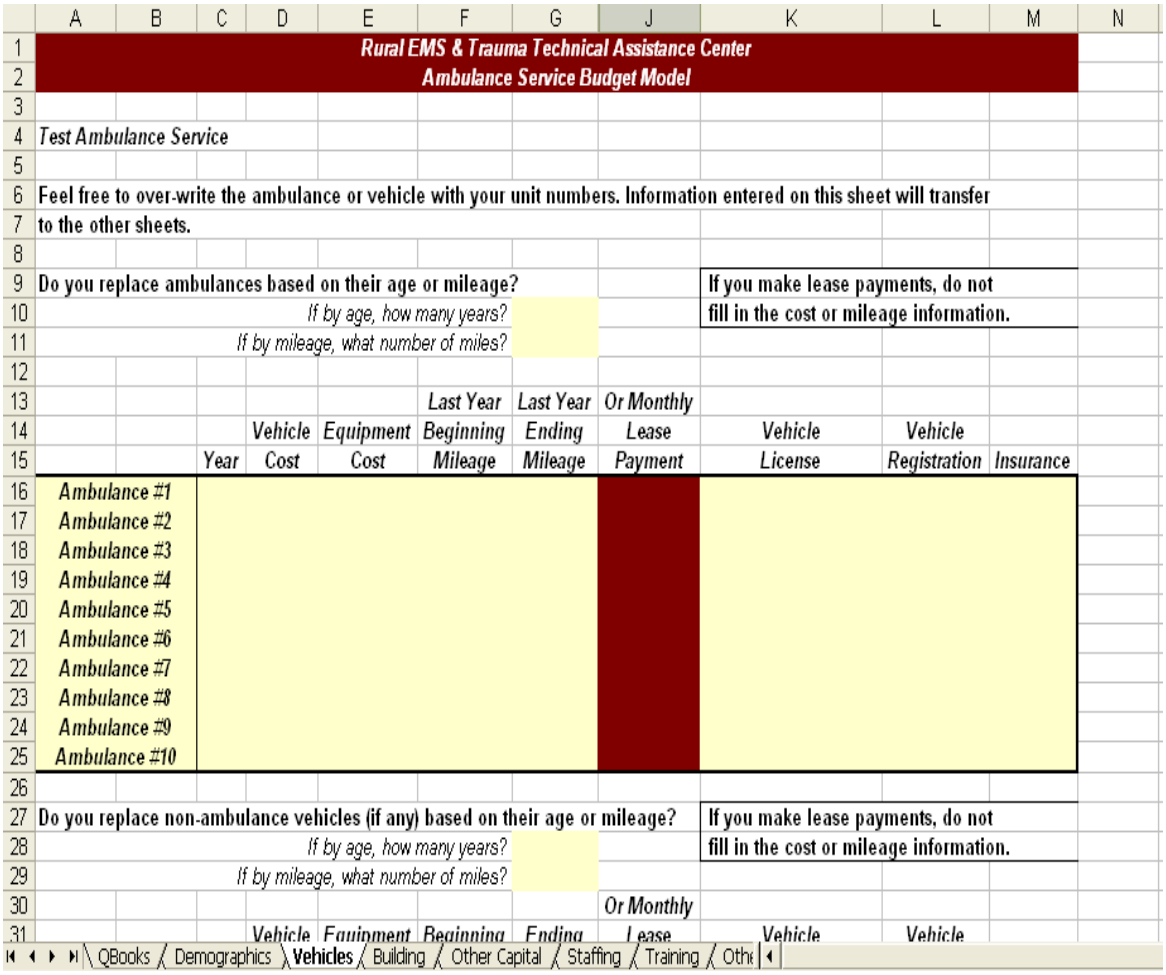
STOP – IT IS TIME TO SAVE YOUR WORK.

This is the first save of your work. To save your file to your hard drive, click on File and then Save-As. Choose a location on your computer to save your work. Rename the file if you would like. We'll have you save your data frequently as you work through this tutorial, always to the same place. Also, if you take a break, when you come back to continue working, be sure to open the saved spreadsheet from your hard drive, not the template version you opened to begin this tutorial.

Now it's time to move to the *Vehicles* tab.

Vehicles:

What this tab does: The information you enter on this page feeds necessary information to your final budget. For vehicles you lease, it will transfer the lease costs into your budget. For vehicles you purchase, it will set up depreciation. Depreciation is an important part of your final budget. By depreciating over time, you will be saving money in the bank to replace your vehicles when their useful life is exhausted. Since the cost of vehicles will increase over time, depreciation alone will not produce enough cash to meet the increased price when replacement is necessary. You will need to supplement depreciation with either cash reserves, or funds produced another way.



Let's make this friendly for you first. Click on cell A16 and replace the words "Ambulance #1" with terminology that is familiar to you. Call it Unit 101, Squad 54, or whatever label will help you recognize this as your primary ambulance. If you have more than one ambulance, replace the text in A17 through A25 similarly.

If you are LEASING any of these ambulances, enter the monthly lease amount in the yellow area on the same row as that vehicle. For leased vehicles, you will not complete columns C to G.

For all vehicles - LEASED AND OWNED - fill in columns K (Vehicle License), L (Vehicle Registration) and M (Insurance). In column K, fill in the amount paid in vehicle licensing fees from your State EMS agency, if any, for all vehicles. The amount should be an annual amount, so if the State charges you once every two years, divide the total by two and enter that amount. Column L is for vehicle registration and license plates from your State vehicle licensing bureau, if any, for all vehicles. Enter an annual amount. Column M is for one year of vehicle insurance. Fill in the annual amount for each of the ambulances.

If you LEASE your vehicles follow the same process as above for any non-ambulances you might have, using rows 32-36. Then, you're done with this tab, unless you also own some of your vehicles.

We'll use columns C to G for vehicles you OWN (or are making loan payments). If you normally replace your vehicles based on a specific number of years, enter the number of years in cell G10. If you normally replace vehicles when their mileage hits a specific level, enter the target number of miles in G11. Do NOT put values in both cells, but also make sure you fill in one of them. If you don't follow either of these replacement milestones, pick one and estimate a number for it.

For each owned ambulance enter the following information: Cell C16 (through C25) – the year the ambulance was acquired. Cell D16 (through D25) – the cost of the vehicle the year it was purchased. Cell E16 (through E25) – the cost of any capital equipment you purchased with the ambulance.

Many ambulance services will purchase new stretchers, mobile radios, defibrillators and other capital equipment each time they purchase an ambulance. If you follow this process, enter the total value of capital items that are purchased with the vehicle. Capital is commonly defined as those items that cost more than $500 and have a useful life exceeding one year. It is important to keep track of what equipment is represented in this figure. It will roll into the total vehicle depreciation calculation; therefore, it should not be listed again later with other capital equipment.

Cells F16 and G16 (through F25 and G25) – if you entered a number of years in cell G10, you do not need to fill in these numbers; your depreciation will be calculated based on the number of years the vehicle is in service. If you entered a number of miles in G11, then you need to complete F16 and G16. In F16, enter the odometer reading of your vehicle at the beginning of the previous 12 month period and the odometer reading at the end of the 12 month period. Since you replace your vehicles based on miles driven, depreciation will be calculated based on the total number of miles driven last year.

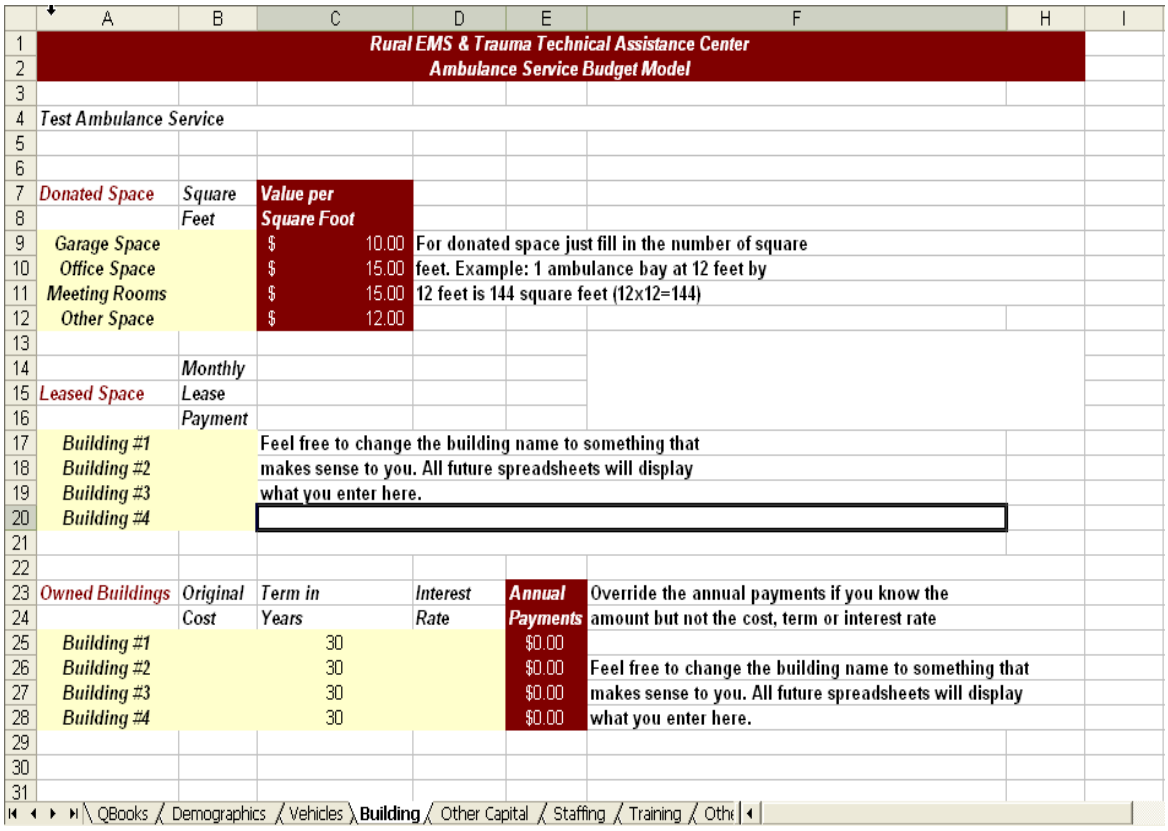
Complete the same information on rows 32-36 for all non-ambulances you own or lease.

STOP – IT IS TIME TO SAVE YOUR WORK. Click on File and then Save.

Now it's time to move to the *Building* tab.

Building:

What this tab does: The *Buildings* tab will record rent and mortgage information. It sets up depreciation for buildings owned by the ambulance service. In addition, it estimates the value of space donated for your use. Pay attention to donated space for two reasons: first, it will help you understand the value of the donation, and secondly, you can publicly report the value of the donation.



Rows 7-12 are for donated space. For each category of space, enter the number of square feet in column B. Column C has some default square footage price estimates. If you know a specific value for your area, you can override these numbers with actual values.

Rows 14-20 are for lease payments made for space you occupy but don't own. Enter your monthly lease payment for each building.

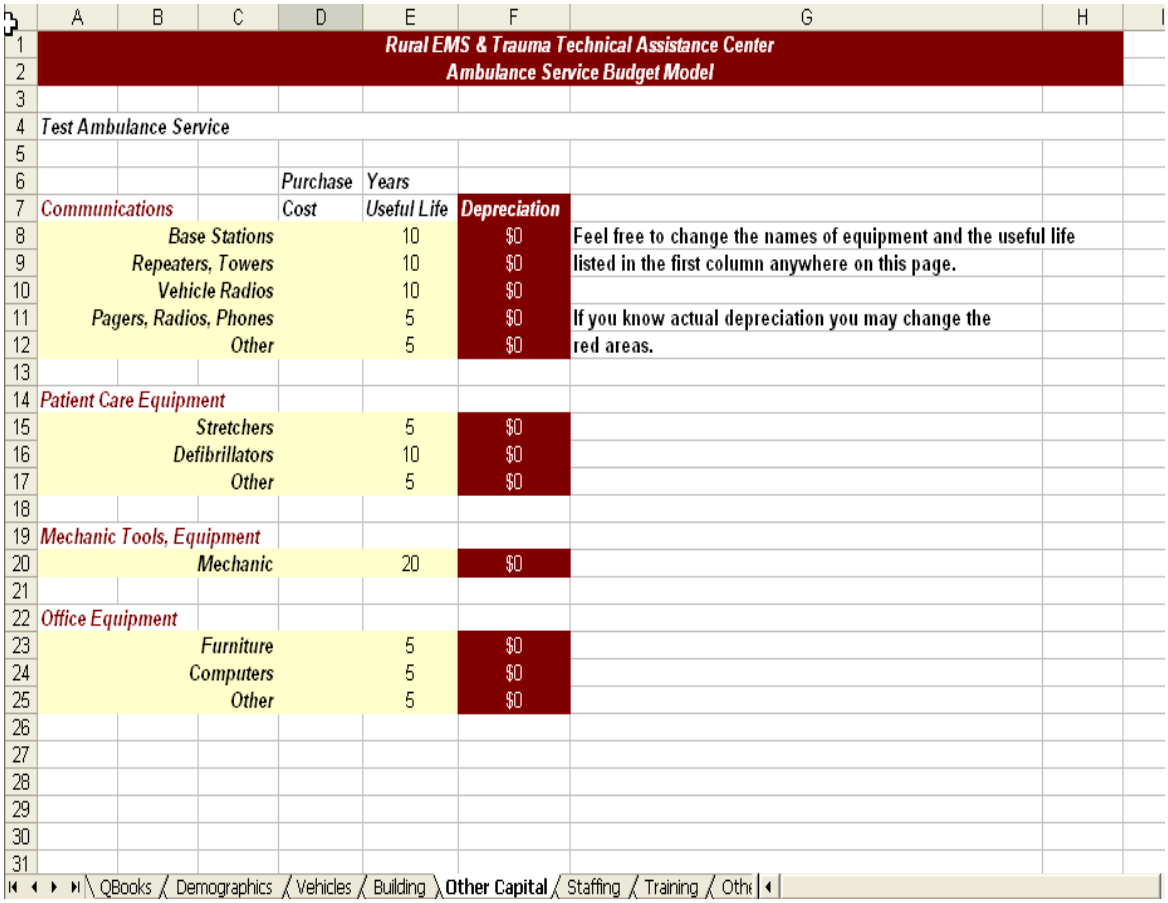
Rows 23-28 are for buildings you own. If you know the original cost, interest rate and mortgage term, enter those values and the annual payment amount will be automatically calculated. As an alternative, if you know the annual mortgage cost, you can just type it into the red area. NOTE: for owned buildings, enter ANNUAL information and for leased buildings, enter MONTHLY lease payments.

STOP – IT IS TIME TO SAVE YOUR WORK. Click on File and then Save.

Now it's time to move to the *Other Capital* tab.

Other Capital:

What this tab does: The *Other Capital* tab collects information to set up depreciation for capital items that are not included on the *Vehicles* tab. Capital items are those that cost over $500 and have a useful life that exceeds one year.



	A	B	C	D	E	F	G	H
1	Rural EMS & Trauma Technical Assistance Center							
2	Ambulance Service Budget Model							
3								
4	Test Ambulance Service							
5								
6				Purchase	Years			
7	Communications			Cost	Useful Life	Depreciation		
8			Base Stations		10	$0	Feel free to change the names of equipment and the useful life	
9			Repeaters, Towers		10	$0	listed in the first column anywhere on this page.	
10			Vehicle Radios		10	$0		
11			Pagers, Radios, Phones		5	$0	If you know actual depreciation you may change the	
12			Other		5	$0	red areas.	
13								
14	Patient Care Equipment							
15			Stretchers		5	$0		
16			Defibrillators		10	$0		
17			Other		5	$0		
18								
19	Mechanic Tools, Equipment							
20			Mechanic		20	$0		
21								
22	Office Equipment							
23			Furniture		5	$0		
24			Computers		5	$0		
25			Other		5	$0		
26								
27								
28								
29								
30								
31								

QBooks | Demographics | Vehicles | Building | Other Capital | Staffing | Training | Othe

The *Other Capital* tab has 4 categories common capital equipment: communications, patient care, mechanic and office equipment. If you have equipment that doesn't fit into one of these categories, you'll have to make it fit somewhere. Use one of the "other" categories on rows 12, 17 or 25. Type over the word "other" to remember what equipment you placed there.

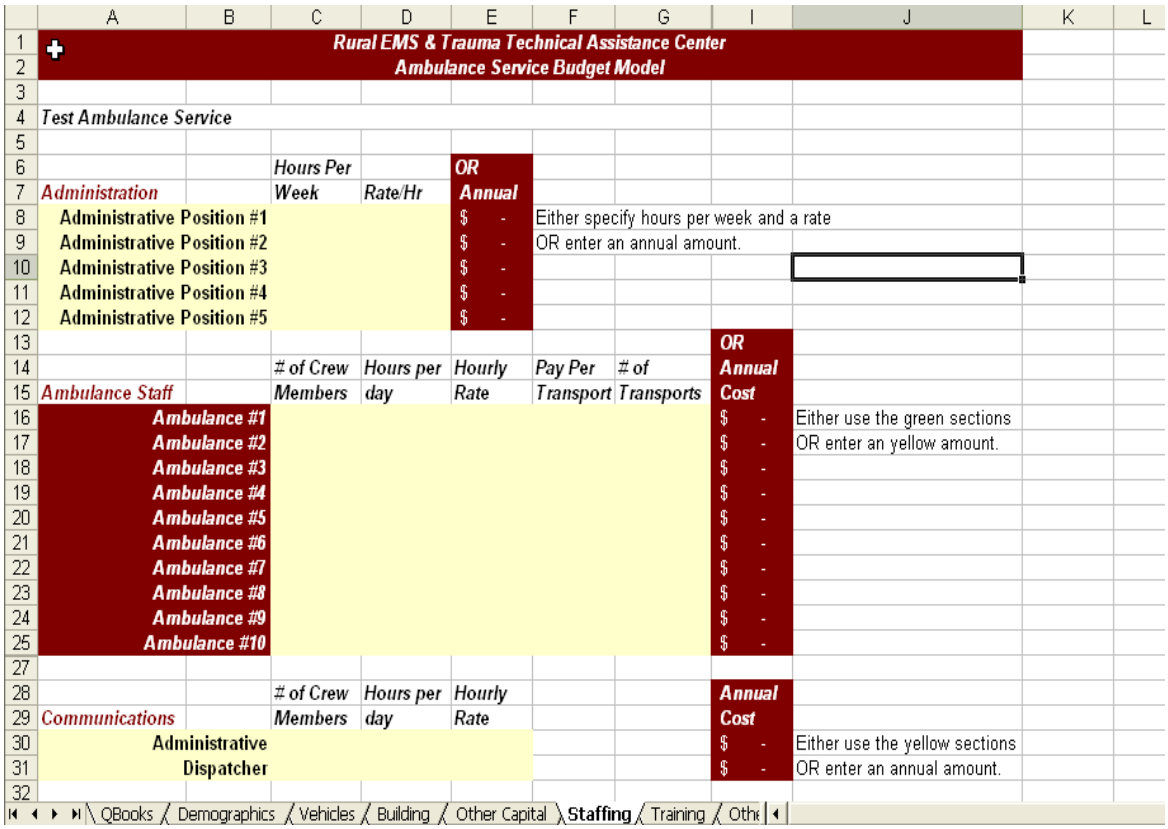
In each category, enter the purchase cost of the item(s) purchased. Feel free to change the number of years in the "Years Useful Life" columns. If you included your stretcher(s) or defibrillator(s) as equipment on the vehicle tab, do not enter them here.

STOP – IT IS TIME TO SAVE YOUR WORK. Click on File and then Save.

Now it's time to move to the *Staffing* tab.

Staffing:

What this tab does: The *Staffing* tab collects information about how you staff your ambulance service and will estimate your salary costs for next year.



	A	B	C	D	E	F	G	I	J	K	L
1	Rural EMS & Trauma Technical Assistance Center										
2	Ambulance Service Budget Model										
3											
4	Test Ambulance Service										
5											
6			Hours Per		OR						
7	Administration		Week	Rate/Hr	Annual						
8	Administrative Position #1				$ -	Either specify hours per week and a rate					
9	Administrative Position #2				$ -	OR enter an annual amount.					
10	Administrative Position #3				$ -						
11	Administrative Position #4				$ -						
12	Administrative Position #5				$ -						
13								OR			
14			# of Crew	Hours per	Hourly	Pay Per	# of	Annual			
15	Ambulance Staff		Members	day	Rate	Transport	Transports	Cost			
16	Ambulance #1							$ -	Either use the green sections		
17	Ambulance #2							$ -	OR enter an yellow amount.		
18	Ambulance #3							$ -			
19	Ambulance #4							$ -			
20	Ambulance #5							$ -			
21	Ambulance #6							$ -			
22	Ambulance #7							$ -			
23	Ambulance #8							$ -			
24	Ambulance #9							$ -			
25	Ambulance #10							$ -			
27											
28			# of Crew	Hours per	Hourly			Annual			
29	Communications		Members	day	Rate			Cost			
30	Administrative							$ -	Either use the yellow sections		
31	Dispatcher							$ -	OR enter an annual amount.		
32											

QBooks | Demographics | Vehicles | Building | Other Capital | Staffing | Training | Oth

Let's make this friendly for you. If you have administrative staff, type over the label Administrative Position #1 in cell A8 with either the name or job classification for the person filling the role. If you have more than one administrative position (billing, secretary, etc.) do the same on A9 to A12.

For administration, you will either enter the hours worked per week in column C and the rate per hour in column D, or you can type in an annual amount in column E.

Whether you staff full-time, volunteer or some combination of each, the ambulance staff section should work for you. This section is organized around your ambulance vehicles. If you have full-time staff or pay an on-call stipend to volunteers, you'll use columns E and F. If you pay your staff a per-run stipend, you'll use columns G and H. If you already know your annual salary costs, you can simply enter those in column J.

Example: ABC ambulance service staffs one ambulance 24 hours a day with two full-time staff. They have a second ambulance which uses on-call staff that are each paid $2 per hour while on call, and $20 per run. On their 500 billable runs, the full-time staffed ambulance completes 450 and volunteers complete the other 50.

In cell D16 enter "2" to represent the two full time staff. In cell D17 enter "2" to represent the volunteers on call. In E16 and E17 enter 24, to represent around the clock staffing.

In cell F16 you will enter the average pay rate of the full-time staff. If your staff are paid different hourly rates depending on their longevity with the service, simply add up all of their pay rates and divide by the number of employees and this will give you the average hourly rate. The typical ambulance service will pay some overtime during the course of the year. Estimate the number of overtime hours and fill in the blocks below. Use that result as the Hourly Rate for cell F16.

	Calculation	***Result***
Number of hours per year	24 hours times 365 days	8,760
Average hourly pay rate	XXXXXXXXXXX	
Estimated annual number of hours of overtime pay	XXXXXXXXXXX	
Average hourly pay rate at time and one-half	Average hourly pay rate times 1.5	
Annual Regular Pay	Number of hours per year (8,760) times average hourly pay rate	
Annual Overtime Pay	Number of overtime hours per year times average hourly pay rate at time and one-half	
Total Pay	Annual Regular Pay Plus Annual Overtime Pay	
Average hourly pay including overtime factor	Total Pay divided by number of hours per year (8,760)	

In cell D16 enter "2" for the volunteers that are on call. In cell E16 enter 24. In cell F16 enter "2" for the $2 per hour call time. In cell G16 enter 20 for the per-run stipend and in cell H16 enter 50 – the number of transports completed by the volunteers.

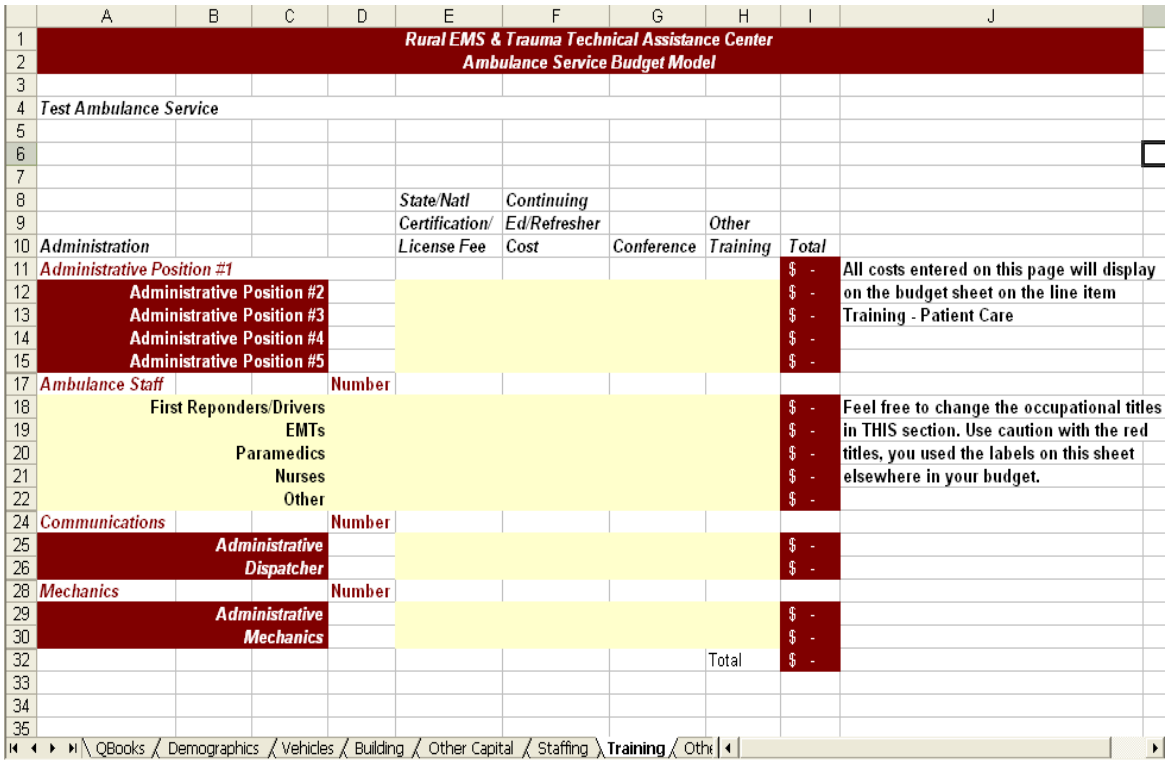
Use a similar process to enter the information for communications and mechanic staff (if any).

STOP – IT IS TIME TO SAVE YOUR WORK. Click on File and then Save.

Now it's time to move to the *Training* tab.

Training:

What this tab does: The *Training* tab collects information about your ongoing education costs.



	A	B	C	D	E	F	G	H	I	J
1	*Rural EMS & Trauma Technical Assistance Center*									
2	*Ambulance Service Budget Model*									
3										
4	*Test Ambulance Service*									
5										
6										
7										
8					*State/Natl*	*Continuing*				
9					*Certification/*	*Ed/Refresher*		*Other*		
10	*Administration*				*License Fee*	*Cost*	*Conference*	*Training*	*Total*	
11	*Administrative Position #1*								$ -	All costs entered on this page will display
12	**Administrative Position #2**								$ -	on the budget sheet on the line item
13	**Administrative Position #3**								$ -	Training - Patient Care
14	**Administrative Position #4**								$ -	
15	**Administrative Position #5**								$ -	
17	*Ambulance Staff*			Number						
18	First Reponders/Drivers								$ -	Feel free to change the occupational titles
19	EMTs								$ -	in THIS section. Use caution with the red
20	Paramedics								$ -	titles, you used the labels on this sheet
21	Nurses								$ -	elsewhere in your budget.
22	Other								$ -	
24	*Communications*			Number						
25	***Administrative***								$ -	
26	***Dispatcher***								$ -	
28	*Mechanics*			Number						
29	***Administrative***								$ -	
30	***Mechanics***								$ -	
32								Total	$ -	
33										
34										
35										

QBooks | Demographics | Vehicles | Building | Other Capital | Staffing | **Training** | Othe

The amounts entered into this tab should be ANNUAL amounts per person. Many States require certification/licensure renewal every two or three years. If your service pays these fees or reimburses staff for them, divide the fee paid by the number of years the certificate/licensure is valid. See an example on the Budget Model Worksheet for how to calculate this result. The example is based on a State certification/licensure fee of $40 for fours years and a National Registry fee of $25 for two years.

Use a similar process to calculate the annual cost of refresher courses if your service pays for them. If your service pays for conference attendance, include the average cost of conference registration plus travel expenses in column G.

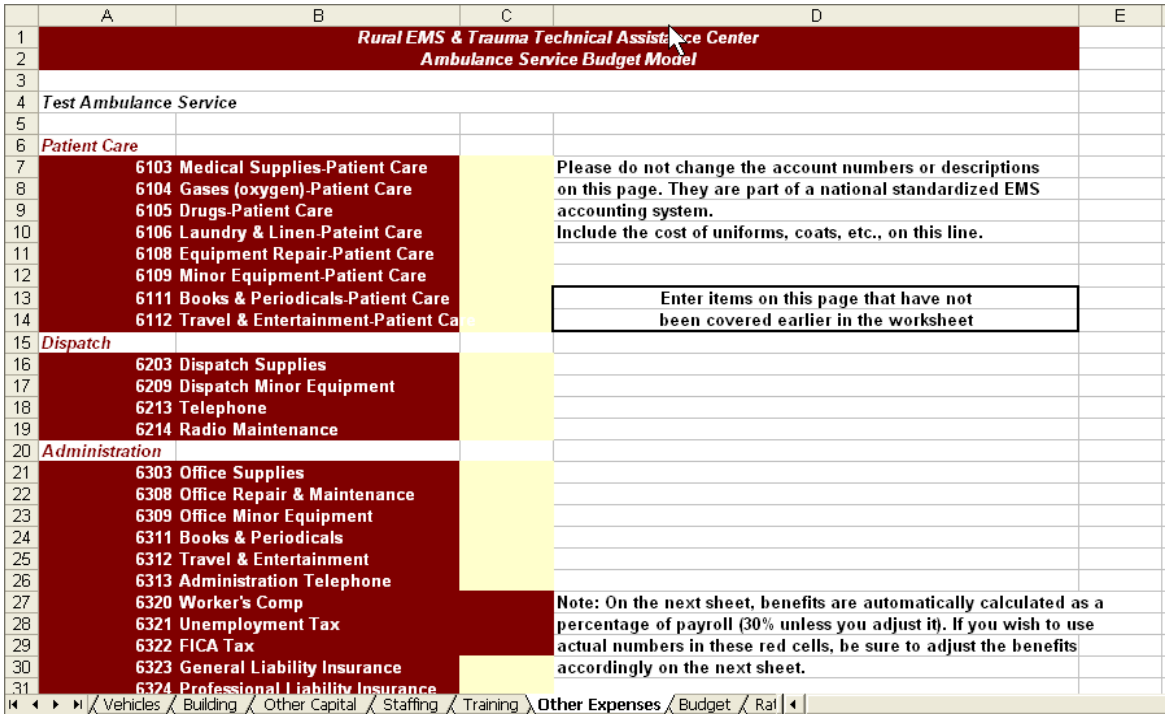
If there is other training that you pay for (for example ACLS or PALS courses), report an average ANNUAL amount that includes reimbursed travel costs. For example, let's say you pay a registration fee of $150 and reimburse on average $50 in travel related costs for ACLS. Since the refresher course is every two years, the cost per two year cycle per person is $200. However, you should report the ANNUAL cost per person ($100).

STOP – IT IS TIME TO SAVE YOUR WORK. Click on File and then Save.

Now it's time to move to the *Other Expenses* tab.

Other Expenses:

What this tab does: This tab collects information about expenses that have not been recorded elsewhere on any tabs.



This tab requires some detective work on your part. You will need to go through your records from last year to determine the total amounts paid for these various categories. The tab is organized into six different sections: patient care expenses, dispatch expenses, administrative expenses, interest expense, building expenses, and vehicle expenses.

DO NOT CHANGE THE ACCOUNT NUMBERS OR DESCRIPTIONS ON THIS TAB. They are part of a national standard EMS Chart of Accounts. If you don't see a category that matches they way you have previously recorded your expenses, you'll need to find the best fit. If you use QuickBooks® or some other proprietary software, you can set-up sub-accounts to these categories later to match the way you keep track of expenses.

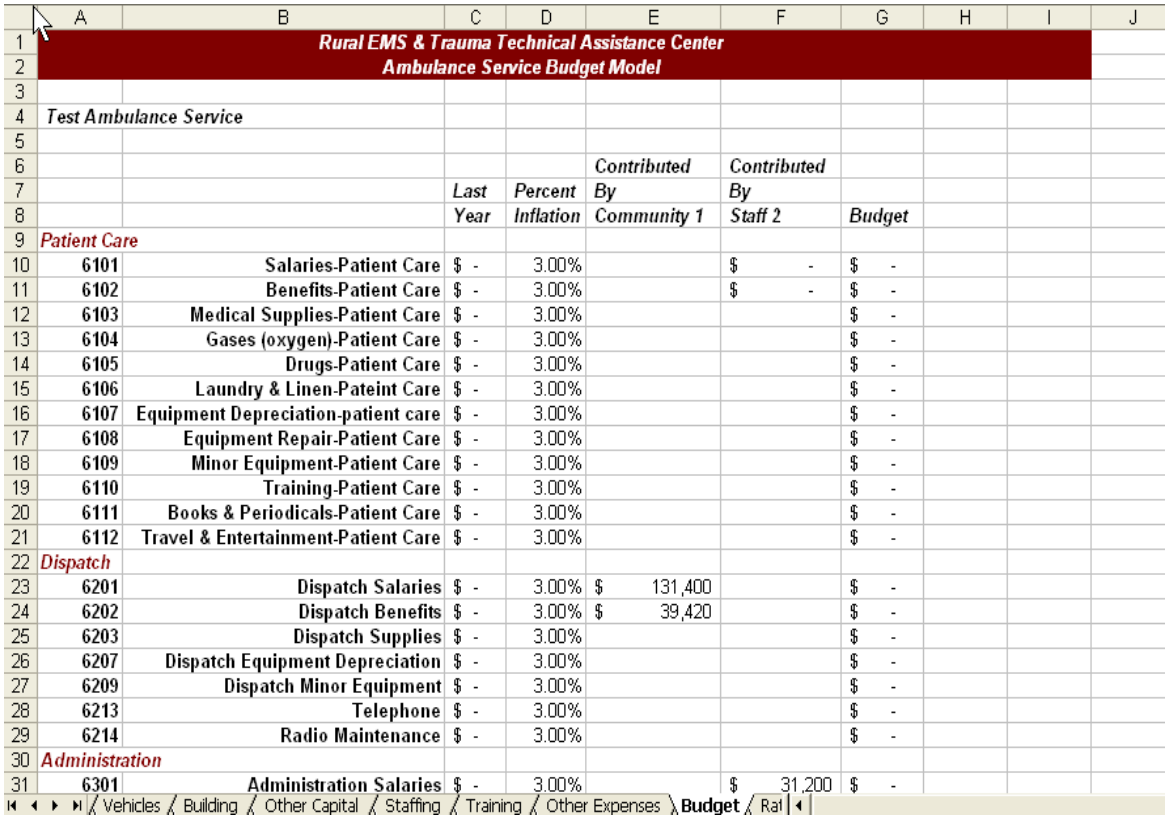
On the *Budget* tab that follows this one, some benefit costs will be automatically calculated for you, using an average benefit rate of 30 percent of salary. If you don't want to use this average rate and you know the actual costs of the red areas in column C, fill in the actual amount in the benefits cells under patient care, dispatch and administration in column C. Change the (0.3) in the formula to reflect your actual benefit percentage.

STOP – IT IS TIME TO SAVE YOUR WORK. Click on File and then Save.

Now it's time to move to the *Budget* tab.

Budget:

What this tab does: This tab displays the calculations and amounts entered on all previous tabs. It also demonstrates the value of contributed items, either by other agencies to yours, or by your volunteer staff. It uses an inflation factor to increase your budget amounts from last year to the current year.



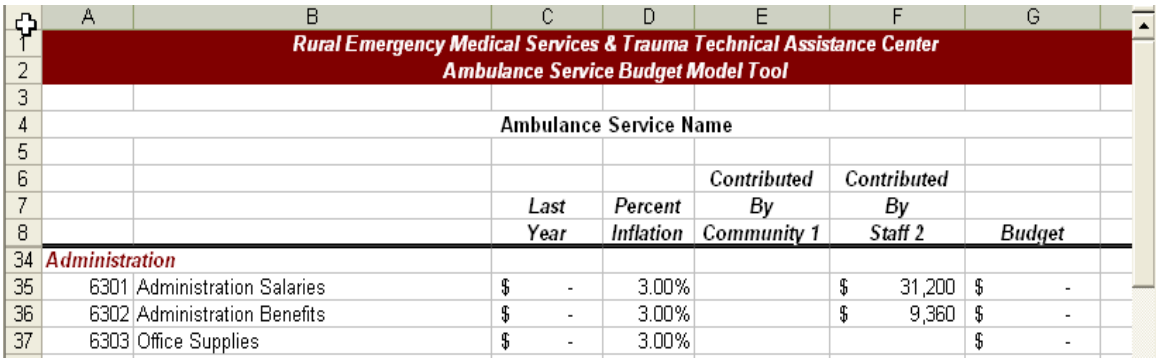
	A	B	C	D	E	F	G
1	Rural EMS & Trauma Technical Assistance Center						
2	Ambulance Service Budget Model						
3							
4	Test Ambulance Service						
5							
6					Contributed	Contributed	
7			Last	Percent	By	By	
8			Year	Inflation	Community 1	Staff 2	Budget
9	Patient Care						
10	6101	Salaries-Patient Care	$ -	3.00%		$ -	$ -
11	6102	Benefits-Patient Care	$ -	3.00%		$ -	$ -
12	6103	Medical Supplies-Patient Care	$ -	3.00%			$ -
13	6104	Gases (oxygen)-Patient Care	$ -	3.00%			$ -
14	6105	Drugs-Patient Care	$ -	3.00%			$ -
15	6106	Laundry & Linen-Pateint Care	$ -	3.00%			$ -
16	6107	Equipment Depreciation-patient care	$ -	3.00%			$ -
17	6108	Equipment Repair-Patient Care	$ -	3.00%			$ -
18	6109	Minor Equipment-Patient Care	$ -	3.00%			$ -
19	6110	Training-Patient Care	$ -	3.00%			$ -
20	6111	Books & Periodicals-Patient Care	$ -	3.00%			$ -
21	6112	Travel & Entertainment-Patient Care	$ -	3.00%			$ -
22	Dispatch						
23	6201	Dispatch Salaries	$ -	3.00%	$ 131,400		$ -
24	6202	Dispatch Benefits	$ -	3.00%	$ 39,420		$ -
25	6203	Dispatch Supplies	$ -	3.00%			$ -
26	6207	Dispatch Equipment Depreciation	$ -	3.00%			$ -
27	6209	Dispatch Minor Equipment	$ -	3.00%			$ -
28	6213	Telephone	$ -	3.00%			$ -
29	6214	Radio Maintenance	$ -	3.00%			$ -
30	Administration						
31	6301	Administration Salaries	$ -	3.00%		$ 31,200	$ -

Vehicles | Building | Other Capital | Staffing | Training | Other Expenses | Budget | Rat

About the patient care section: If you elected to fill in the red cells in the previous tab for benefits you should make the amount in cell C11 “0.” Otherwise, benefits will be reported twice. If your total employee salaries do not equate to at least $10 per hour for two people, cells F10 and F11 will report an amount that volunteers contribute. This number can be a powerful tool for you as you report the estimated dollar value you provided to the community through the volunteers’ service. Feel free to change the Percent Inflation on any or all of the rows in column D to match your particular circumstances. Column G is calculated by taking the actual or estimated information in column C times the inflation factor in column E for that row.

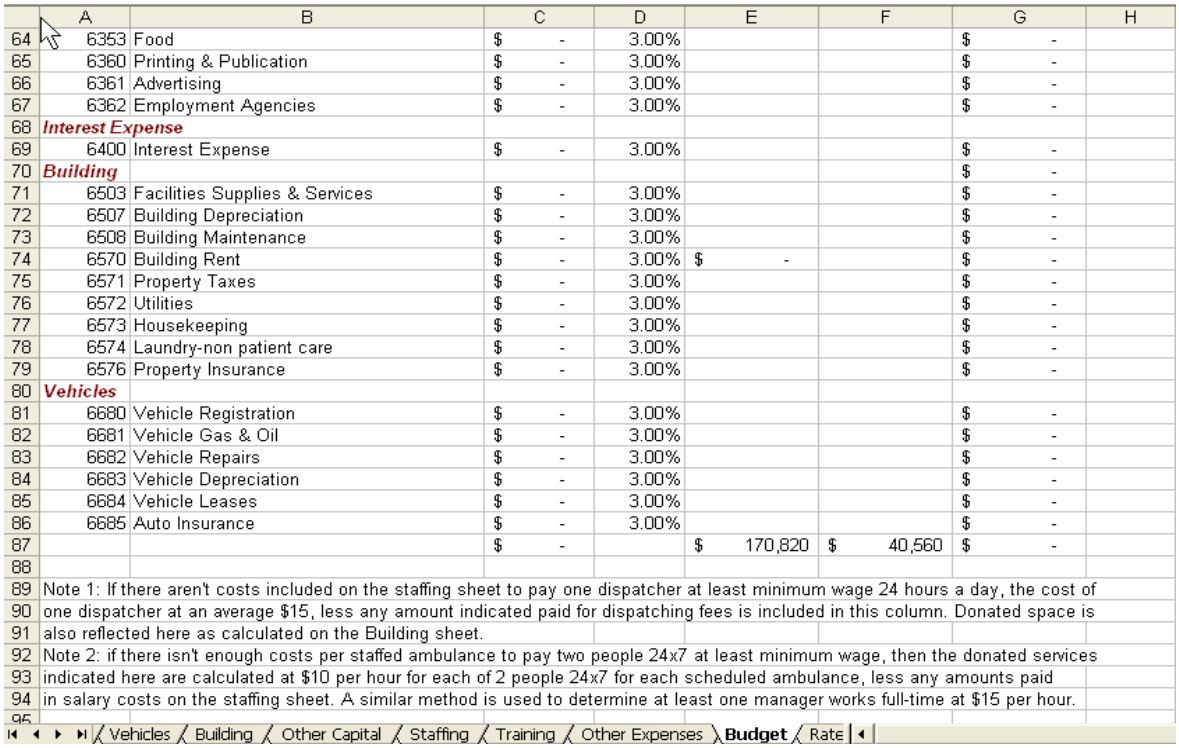
About the dispatch section: Many ambulance services do not operate their own dispatch centers; the service is dispatched by the police or sheriff’s departments. If you haven’t reported an amount equivalent to $15 per hour, 24 hours a day in dispatch salaries, this sheet will estimate the value that your dispatch center provides to you. If you elected to fill in the red cells in the previous tab for benefits you should make the amount in cell C24 “0.”

About the administrative section: Many ambulance services have part-time managers. If you have not reported at least $15 per hour for 40 hours per week in administrative payroll costs, this sheet will report the value of the contribution to the service by your management staff. If you elected to fill in the red cells in the previous tab for benefits you should make the amount in cell C36 zero.



	A	B	C	D	E	F	G
1	Rural Emergency Medical Services & Trauma Technical Assistance Center						
2	Ambulance Service Budget Model Tool						
3							
4	Ambulance Service Name						
5							
6					Contributed	Contributed	
7			Last	Percent	By	By	
8			Year	Inflation	Community 1	Staff 2	Budget
34	Administration						
35	6301	Administration Salaries	$ -	3.00%		$ 31,200	$ -
36	6302	Administration Benefits	$ -	3.00%		$ 9,360	$ -
37	6303	Office Supplies	$ -	3.00%			$ -

About the building section: Cell E24 will report the annual value given to the ambulance service for donated space that was reported on the building tab.



	A	B	C	D	E	F	G	H
64	6353	Food	$ -	3.00%			$ -	
65	6360	Printing & Publication	$ -	3.00%			$ -	
66	6361	Advertising	$ -	3.00%			$ -	
67	6362	Employment Agencies	$ -	3.00%			$ -	
68	Interest Expense							
69	6400	Interest Expense	$ -	3.00%			$ -	
70	Building						$ -	
71	6503	Facilities Supplies & Services	$ -	3.00%			$ -	
72	6507	Building Depreciation	$ -	3.00%			$ -	
73	6508	Building Maintenance	$ -	3.00%			$ -	
74	6570	Building Rent	$ -	3.00%	$ -		$ -	
75	6571	Property Taxes	$ -	3.00%			$ -	
76	6572	Utilities	$ -	3.00%			$ -	
77	6573	Housekeeping	$ -	3.00%			$ -	
78	6574	Laundry-non patient care	$ -	3.00%			$ -	
79	6576	Property Insurance	$ -	3.00%			$ -	
80	Vehicles							
81	6680	Vehicle Registration	$ -	3.00%			$ -	
82	6681	Vehicle Gas & Oil	$ -	3.00%			$ -	
83	6682	Vehicle Repairs	$ -	3.00%			$ -	
84	6683	Vehicle Depreciation	$ -	3.00%			$ -	
85	6684	Vehicle Leases	$ -	3.00%			$ -	
86	6685	Auto Insurance	$ -	3.00%			$ -	
87			$ -		$ 170,820	$ 40,560	$ -	
88								
89	Note 1: If there aren't costs included on the staffing sheet to pay one dispatcher at least minimum wage 24 hours a day, the cost of							
90	one dispatcher at an average $15, less any amount indicated paid for dispatching fees is included in this column. Donated space is							
91	also reflected here as calculated on the Building sheet.							
92	Note 2: if there isn't enough costs per staffed ambulance to pay two people 24x7 at least minimum wage, then the donated services							
93	indicated here are calculated at $10 per hour for each of 2 people 24x7 for each scheduled ambulance, less any amounts paid							
94	in salary costs on the staffing sheet. A similar method is used to determine at least one manager works full-time at $15 per hour.							

Vehicles | Building | Other Capital | Staffing | Training | Other Expenses | Budget | Rate

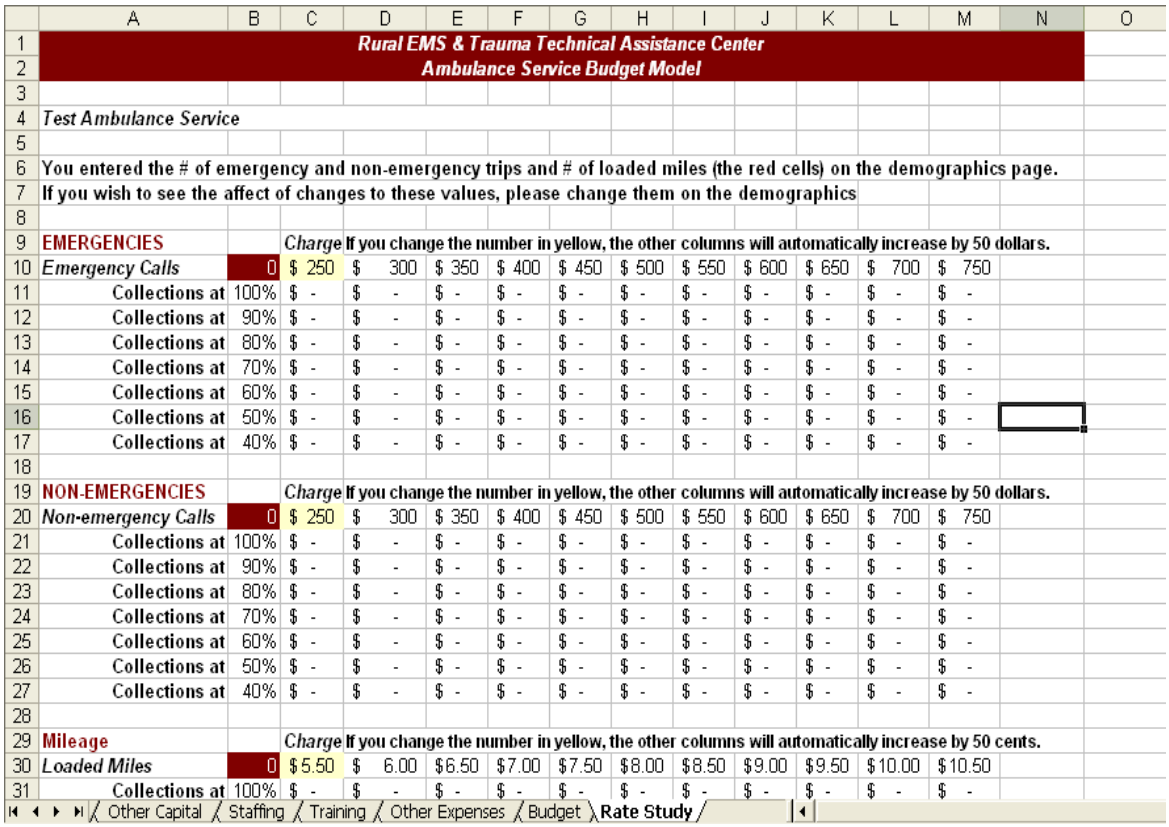
Row 87 provides a total of your expenses from last year, the value added to the service by donated space or dispatch, the value provided to the community by volunteers, and budget amounts for next year that are based on this year's budget plus an inflation factor. When you're satisfied the amounts are correct, you should print this page.

STOP – IT IS TIME TO SAVE YOUR WORK. Click on File and then Save.

Now it's time to move to the *Rate Study* tab.

Rate Study:

What this tab does: This tab allows you to see the effect of varying base and mileage changes, based on the percentage of collections of your service.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Rural EMS & Trauma Technical Assistance Center														
2	Ambulance Service Budget Model														
3															
4	Test Ambulance Service														
5															
6	You entered the # of emergency and non-emergency trips and # of loaded miles (the red cells) on the demographics page.														
7	If you wish to see the affect of changes to these values, please change them on the demographics														
8															
9	EMERGENCIES		Charge	If you change the number in yellow, the other columns will automatically increase by 50 dollars.											
10	Emergency Calls	0	$ 250	$ 300	$ 350	$ 400	$ 450	$ 500	$ 550	$ 600	$ 650	$ 700	$ 750		
11	Collections at	100%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
12	Collections at	90%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
13	Collections at	80%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
14	Collections at	70%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
15	Collections at	60%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
16	Collections at	50%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
17	Collections at	40%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
18															
19	NON-EMERGENCIES		Charge	If you change the number in yellow, the other columns will automatically increase by 50 dollars.											
20	Non-emergency Calls	0	$ 250	$ 300	$ 350	$ 400	$ 450	$ 500	$ 550	$ 600	$ 650	$ 700	$ 750		
21	Collections at	100%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
22	Collections at	90%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
23	Collections at	80%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
24	Collections at	70%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
25	Collections at	60%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
26	Collections at	50%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
27	Collections at	40%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		
28															
29	Mileage		Charge	If you change the number in yellow, the other columns will automatically increase by 50 cents.											
30	Loaded Miles	0	$5.50	$ 6.00	$6.50	$7.00	$7.50	$8.00	$8.50	$9.00	$9.50	$10.00	$10.50		
31	Collections at	100%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		

Other Capital | Staffing | Training | Other Expenses | Budget | Rate Study

This tab is a tool for you to estimate what your charges will need to be in order to recoup your cost of providing service. The number of emergency calls, non-emergency calls, and billed miles reported on the demographics tab are displayed in cells B10, B20 and B30. Note: in order to provide you with an example, we have used 500 emergency trips, 200 non-emergency trips and 9,000 billable miles. When you open this sheet, the numbers you entered on the demographics page will be displayed.

In order to use this sheet, you will need to ask your billing clerk or billing company what your average percentage of collections are. If you bill $100,000 annually and collect $70,000, then your collection percentage is 70 percent. We'll use this as an example. In this example, if you bill a $250 base rate for your 500 emergencies, you would collect roughly the amount in cell C14 ($87,500). For 200 non-emergencies charged at a $250 base rate you would collect the amount in cell C24 ($35,000). For 9,000 billed miles at $9 per mile, you would collect the amount in cell C34 ($56,700). Your total collections for 500 emergencies, 200 non-emergencies and 9,000 billed miles would be $179,200.

STOP – IT IS TIME TO SAVE YOUR WORK. Click on File and then Save.

You can use this sheet to test various rates and collection percentages. We have provided space for you to add these three collections amounts on the Budget Model Worksheet.

If you need to adjust the rates up or down for any or each of the categories, simply change the numbers in cells C10, C20 and C30. Each column D through M on row 10 increases the base rate by $50. If you want to see what a base rate of $100 would collect, change C10 to $100. Then D10 will automatically convert to $150, E10 to $200 and so on.

STOP – IT IS TIME TO SAVE YOUR WORK. Click on File and then Save.

Congratulations! You have finished your own budget based on the Budget Model. We would appreciate hearing from you about your experience using this tool, what you did with it when you were finished, and ways we can enhance it in the future. To provide comments, please e-mail info@remsttac.org or telephone us at (866) 587-6370.

Unless you plan to use QuickBooks® and want to import the Chart of Accounts and your budget, you're finished with this tool. Importing into QuickBooks® will be covered in the next section. Printing costs for the QuickBooks® Pro Edition ranged from $199.95 to $399.95 at the time this document was printed.

Whether or not you export your data to QuickBooks® you have taken a very important step in planning for the financial future of your Agency. By exporting your data to QuickBooks® or another off-the-shelf accounting software system, you will be able to follow the financial performance of your ambulance service on a monthly basis. Tracking expenditures and revenues monthly better enables you to anticipate future needs and plan for addressing them. Maintaining a detailed budget will also provide you with persuasive data to share with others when you need to demonstrate the value and needs of your ambulance service.

Rural Emergency Medical Services & Trauma Technical Assistance Center
Ambulance Service Budget Model Tool

Demographics

Ambulance Service Name:	**Name of Service**	**The name entered here will appear**
Administrator/Chief Name:		**on all subsequent worksheets**
Address Line 1:		
Address Line 2:		
City, State, Zip Code:		
County:		
Telephone Number:		
Email:		

Billed Emergency Ambulance Transports Last Year	
Billed Non-Emergency Ambulance Transports Last Year	
Loaded Miles Driven Last Year	

I am preparing a budget for the 12 month period beginning:	**1/1/2023**	**Format: MM/DD/YYYY**

Rural Emergency Medical Services & Trauma Technical Assistance Center
Ambulance Service Budget Model Tool

Demographics

Ambulance Service Name:	**Name of Service**	**The name entered here will appear on all subsequent worksheets**
Administrator/Chief Name:		
Address Line 1:		
Address Line 2:		
City, State, Zip Code:		
County:		
Telephone Number:		
Fax Number:		

Billed Emergency Ambulance Transports Last Year		
Billed Non-Emergency Ambulance Transports Last Year		
Loaded Miles Driven Last Year		

I am preparing a budget for the 12 month period beginning:	**1/1/2009**	**Format: MM/DD/YYYY**

Rural Emergency Medical Services & Trauma Technical Assistance Center
Ambulance Service Budget Model Tool

Name of Service

Feel free to over-write the ambulance or vehicle with your unit numbers. Information entered on this sheet will transfer to the other sheets.

Do you replace ambulances based on their age or mileage?

If by age, how many years?
If by mileage, what number of miles?

If you make lease payments, do not fill in the cost or mileage information.

	Year	Vehicle Cost	Equipment Cost	Last Year Beginning Mileage	Last Year Ending Mileage	Or Monthly Lease Payment	Vehicle License	Vehicle Registration	Insurance
Ambulance #1									
Ambulance #2									
Ambulance #3									
Ambulance #4									
Ambulance #5									
Ambulance #6									
Ambulance #7									
Ambulance #8									
Ambulance #9									
Ambulance #10									

Do you replace non-ambulance vehicles (if any) based on their age or mileage?

If by age, how many years?
If by mileage, what number of miles?

If you make lease payments, do not fill in the cost or mileage information.

	Year	Vehicle Cost	Equipment Cost	Beginning Mileage	Ending Mileage	Or Monthly Lease Payment	Vehicle License	Vehicle Registration	Insurance
Vehicle #1									
Vehicle #2									
Vehicle #3									
Vehicle #4									
Vehicle #5									

Rural Emergency Medical Services & Trauma Technical Assistance Center
Ambulance Service Budget Model Tool

Name of Service

Donated Space	*Square Feet*	*Value per Square Foot*
Garage Space		$ 10.00
Office Space		$ 15.00
Meeting Rooms		$ 15.00
Other Space		$ 12.00

For donated space just fill in the number of square feet. Example: 1 ambulance bay at 12 feet by 12 feet is 144 square feet (12x12=144)

Leased Space	*Monthly Lease Payment*
Building #1	
Building #2	
Building #3	
Building #4	

Feel free to change the building name to something that makes sense to you. All future spreadsheets will display what you enter here.

Owned Buildings	*Original Cost*	*Term in Years*	*Interest Rate*	*Annual Payments*
Building #1		10		$0.00
Building #2		30		$0.00
Building #3		30		$0.00
Building #4		30		$0.00

Override the annual payments if you know the amount but not the cost, term or interest rate

Feel free to change the building name to something that makes sense to you. All future spreadsheets will display what you enter here.

Rural Emergency Medical Services & Trauma Technical Assistance Center
Ambulance Service Budget Model Tool

Name of Service

Communications	Purchase Cost	Years Useful Life	Depreciation	
Base Stations		10	$0	Feel free to change the names of equipment and the useful life
Repeaters, Towers		10	$0	listed in the first column anywhere on this page.
Vehicle Radios		10	$0	
Pagers, Radios, Phones		5	$0	If you know actual depreciation you may change the
Other		5	$0	red areas.
Patient Care Equipment				
Stretchers		5	$0	
Defibrillators		9	$0	
Other		5	$0	
Mechanic Tools, Equipment				
Mechanic		20	$0	
Office Equipment				
Furniture		5	$0	
Computers		5	$0	
Other		5	$0	

Rural Emergency Medical Services & Trauma Technical Assistance Cente
Ambulance Service Budget Model Tool

Name of Service

Administration	Hours Per Week	Rate/Hr	OR Annual
Director			$ -
Administrative Position #2			$ -
Administrative Position #3			$ -
Administrative Position #4			$ -
Administrative Position #5			$ -

Either specify hours per week and a rate
OR enter an annual amount

Ambulance Staff	# of Crew Members	Hours per day	Hourly Rate	Pay Per Transport	# of Transports	OR Annual Cost
Ambulance #1						$ -
Ambulance #2						$ -
Ambulance #3						$ -
Ambulance #4						$ -
Ambulance #5						$ -
Ambulance #6						$ -
Ambulance #7						$ -
Ambulance #8						$ -
Ambulance #9						$ -
Ambulance #10						$ -

Either use the yellow sections
OR enter an annual amount

Communications	# of Crew Members	Hours per day	Hourly Rate	Annual Cost
Administrative				$ -
Dispatcher				$ -

Either use the yellow sections
OR enter an annual amount

Mechanics	# of Crew Members	Hours per day	Hourly Rate	Annual Cost
Administrative				$ -
Mechanics				$ -

Either use the yellow sections
OR enter an annual amount

Rural Emergency Medical Services & Trauma Technical Assistance Center
Ambulance Service Budget Model Tool

Name of Service

		State/Natl Certification/ License Fee	*Continuing Ed/Refresher Cost*	*Conference*	*Other Training*	*Total*
Administration						
Adminstrative Position #1						$ -
Administrative Position #2						$ -
Administrative Position #3						$ -
Administrative Position #4						$ -
Administrative Position #5						$ -
Ambulance Staff	**Number**					
First Reponders/Drivers						$ -
EMTs						$ -
Paramedics						$ -
Nurses						$ -
Other						$ -
Communications	**Number**					
Administrative						$ -
Dispatcher						$ -
Mechanics	**Number**					
Administrative						$ -
Mechanics						$ -
					Total	$ -

All costs entered on this page will display on the budget sheet on the line item Training - Patient Care

Feel free to change the occupational titles in THIS section. Use caution with the red titles, you used the labels on this sheet elsewhere in your budget.

Rural Emergency Medical Services & Trauma Technical Assistance Center
Ambulance Service Budget Model Tool

Name of Service

USE ANNUAL TOTALS ON THIS PAGE

Patient Care		
6103	Medical Supplies-Patient Care	
6104	Gases (oxygen)-Patient Care	
6105	Drugs-Patient Care	
6106	Laundry & Linen-Pateint Care	
6108	Equipment Repair-Patient Care	
6109	Minor Equipment-Patient Care	
6111	Books & Periodicals-Patient Care	
6112	Travel & Entertainment-Patient Care	
6113	Uniforms	
Dispatch		
6203	Dispatch Supplies	
6209	Dispatch Minor Equipment	
6213	Telephone	
6214	Radio Maintenance	
6215	Radio Antenna (Monthly Fees)	
6216	Cell Phone (Monthly Fees)	
6217	Pager (Monthly Fees)	
Administration		
6303	Office Supplies	
6308	Office Repair & Maintenance	
6309	Office Minor Equipment	
6311	Books & Periodicals	
6312	Travel & Entertainment	
6313	Administration Telephone	
6320	Worker's Comp	
6321	Unemployment Tax	
6322	FICA Tax	
6323	General Liability Insurance	
6324	Professional Liability Insurance	
6325	Umbrella Coverage	
6326	Health Insurance	

Please do not change the account numbers or descriptions on this page. They are part of a national standardized EMS accounting system.

Include the cost of uniforms, coats, etc., on this line.

Enter items on this page that have not been covered earlier in the worksheet

Note: On the next sheet, benefits are automatically calculated as a percentage of payroll (30% unless you adjust it). If you wish to use actual numbers in these red cells, be sure to adjust the benefits accordingly on the next sheet.

6327 Pension Plan	
6340 Physician Fees	
6341 Accounting Fees	
6342 Legal Fees	
6343 Collection Agency Fees	
6344 Software Maintenance Contracts	
6345 Consulting Fees	
6346 Service Contracts	
6347 Management Contract	
6348 Claim Processing Contract	
6350 Dues & Memberships	
6351 Licenses	
6352 Donations	
6353 Food	
6360 Printing & Publication	
6361 Advertising	
6362 Employment Agencies	
Interest Expense	
6400 Interest Expense	
Building	
6503 Facilities Supplies & Services	
6508 Building Maintenance	
6571 Property Taxes	
6572 Utilities	
6573 Housekeeping	
6574 Laundry-non patient care	
6576 Property Insurance	
Vehicles	
6681 Vehicle Gas & Oil	
6682 Vehicle Repairs	

Rural Emergency Medical Services & Trauma Technical Assistance Center
Ambulance Service Budget Model Tool

Name of Service

		Last Year	*Percent Inflation*	*Contributed By Community 1*	*Contributed By Staff 2*	*Budget*
Patient Care						
6101	Salaries-Patient Care	$ -	3.00%		$ -	$ -
6102	Benefits-Patient Care	$ -	3.00%		$ -	$ -
6103	Medical Supplies-Patient Care	$ -	3.00%			$ -
6104	Gases (oxygen)-Patient Care	$ -	3.00%			$ -
6105	Drugs-Patient Care	$ -	3.00%			$ -
6106	Laundry & Linen-Pateint Care	$ -	3.00%			$ -
6107	Equipment Depreciation-patient care	$ -	3.00%			$ -
6108	Equipment Repair-Patient Care	$ -	3.00%			$ -
6109	Minor Equipment-Patient Care	$ -	3.00%			$ -
6110	Training-Patient Care	$ -	3.00%			$ -
6111	Books & Periodicals-Patient Care	$ -	3.00%			$ -
6112	Travel & Entertainment-Patient Care	$ -	3.00%			$ -
6113	Uniforms	$ -	3.00%			$ -
Dispatch						
6201	Dispatch Salaries	$ -	3.00%	$ 131,400		$ -
6202	Dispatch Benefits	$ -	3.00%	$ 39,420		$ -
6203	Dispatch Supplies	$ -	3.00%			$ -
6207	Dispatch Equipment Depreciation	$ -	3.00%			$ -
6209	Dispatch Minor Equipment	$ -	3.00%			$ -
6213	Telephone	$ -	3.00%			$ -
6214	Radio Maintenance	$ -	3.00%			$ -
6215	Radio Antenna (Monthly Fees)	$ -	3.00%			$ -
6216	Cell Phone (Monthly Fees)	$ -	3.00%			$ -
6217	Pager (Monthly Fees)	$ -	3.00%			$ -
Administration						
6301	Administration Salaries	$ -	3.00%		$ 31,200	$ -
6302	Administration Benefits	$ -	3.00%		$ 9,360	$ -
6303	Office Supplies	$ -	3.00%			$ -

6307	Office Equipment Depreciation	$ -	3.00%			$ -
6308	Office Repair & Maintenance	$ -	3.00%			$ -
6309	Office Minor Equipment	$ -	3.00%			$ -
6311	Books & Periodicals	$ -	3.00%			$ -
6312	Travel & Entertainment	$ -	3.00%			$ -
6313	Administration Telephone	$ -	3.00%			$ -
6320	Worker's Comp	$ -	3.00%			$ -
6321	Unemployment Tax	$ -	3.00%			$ -
6322	FICA Tax	$ -	3.00%			$ -
6323	General Liability Insurance	$ -	3.00%			$ -
6324	Professional Liability Insurance	$ -	3.00%			$ -
6325	Umbrella Coverage	$ -	3.00%			$ -
6326	Health Insurance	$ -	3.00%			$ -
6327	Pension Plan	$ -	3.00%			$ -
6340	Physician Fees	$ -	3.00%			$ -
6341	Accounting Fees	$ -	3.00%			$ -
6342	Legal Fees	$ -	3.00%			$ -
6343	Collection Agency Fees	$ -	3.00%			$ -
6344	Software Maintenance Contracts	$ -	3.00%			$ -
6345	Consulting Fees	$ -	3.00%			$ -
6346	Service Contracts	$ -	3.00%			$ -
6347	Management Contract	$ -	3.00%			$ -
6348	Claim Processing Contract	$ -	3.00%			$ -
6350	Dues & Memberships	$ -	3.00%			$ -
6351	Licenses	$ -	3.00%			$ -
6352	Donations	$ -	3.00%			$ -
6353	Food	$ -	3.00%			$ -
6360	Printing & Publication	$ -	3.00%			$ -
6361	Advertising	$ -	3.00%			$ -
6362	Employment Agencies	$ -	3.00%			$ -
Interest Expense						
6400	Interest Expense	$ -	3.00%			$ -
Building						
6503	Facilities Supplies & Services	$ -	3.00%			$ -
6507	Building Depreciation	$ -	3.00%			$ -
6508	Building Maintenance	$ -	3.00%			$ -
6570	Building Rent	$ -	3.00%	$ -		$ -

6571	Property Taxes	$ -	3.00%			$ -
6572	Utilities	$ -	3.00%			$ -
6573	Housekeeping	$ -	3.00%			$ -
6574	Laundry-non patient care	$ -	3.00%			$ -
6576	Property Insurance	$ -	3.00%			$ -
Vehicles						
6680	Vehicle Registration	$ -	3.00%			$ -
6681	Vehicle Gas & Oil	$ -	3.00%			$ -
6682	Vehicle Repairs	$ -	3.00%			$ -
6683	Vehicle Depreciation	$ -	3.00%			$ -
6684	Vehicle Leases	$ -	3.00%			$ -
6685	Auto Insurance	$ -	3.00%			$ -
		$ -		$ 170,820	$ 40,560	$ -

Note 1: If there aren't costs included on the staffing sheet to pay one dispatcher at least minimum wage 24 hours a day, the cost of one dispatcher at an average $15, less any amount indicated paid for dispatching fees is included in this column. Donated space is also reflected here as calculated on the Building sheet.

Note 2: if there isn't enough costs per staffed ambulance to pay two people 24x7 at least minimum wage, then the donated services indicated here are calculated at $10 per hour for each of 2 people 24x7 for each scheduled ambulance, less any amounts paid in salary costs on the staffing sheet. A similar method is used to determine at least one manager works full-time at $15 per hour.

Rural Emergency Medical Services & Trauma Technical Assistance Center
Ambulance Service Budget Model Tool

Name of Service

You entered the number of emergency and non-emergency trips and number of loaded miles (the red cells) on the demographics page.
If you wish to see the affect of changes to these values, please change them on the demographics page.

EMERGENCIES		***Charge***	***If you change the number in yellow, the other columns will automatically increase by 50 dollars***										
Emergency Calls	**0**	$ 250	$ 300	$ 350	$ 400	$ 450	$ 500	$ 550	$ 600	$ 650	$ 700	$ 750	
Collections at	100%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	90%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	80%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	70%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	60%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	50%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	40%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	

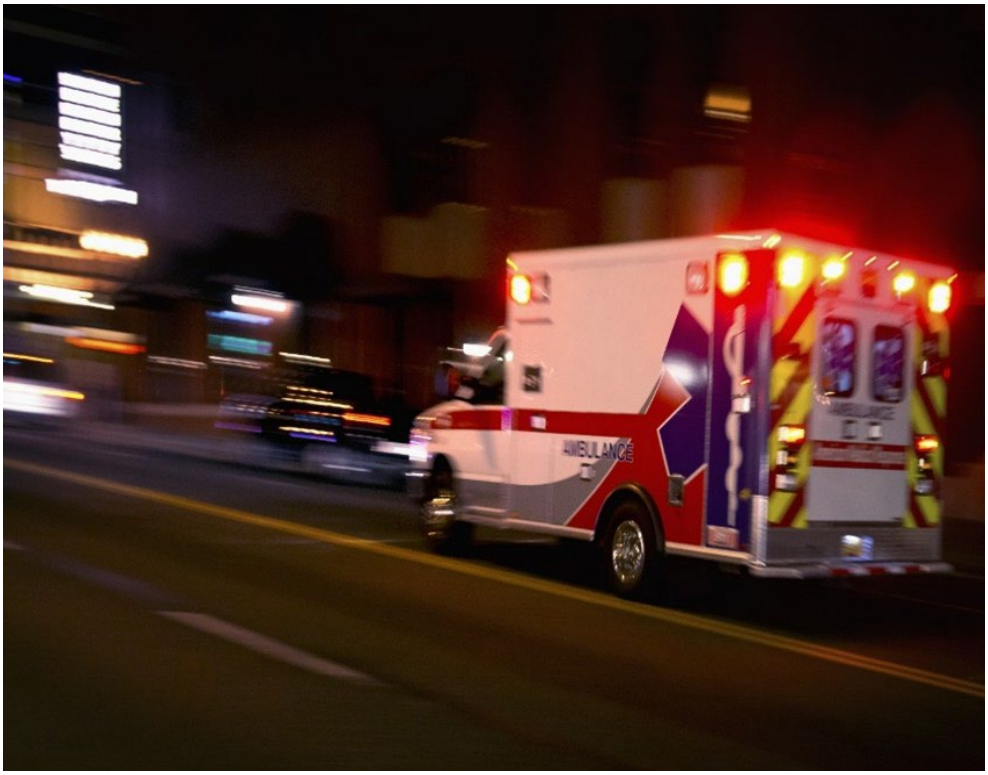
NON-EMERGENCIES		***Charge***	***If you change the number in yellow, the other columns will automatically increase by 50 dollars***										
Non-emergency Calls	**0**	$ 250	$ 300	$ 350	$ 400	$ 450	$ 500	$ 550	$ 600	$ 650	$ 700	$ 750	
Collections at	100%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	90%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	80%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	70%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	60%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	50%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	40%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	

Mileage		***Charge***	***If you change the number in yellow, the other columns will automatically increase by 50 dollars***										
Loaded Miles	**0**	$ 5.50	$ 6.00	$ 6.50	$ 7.00	$ 7.50	$ 8.00	$ 8.50	$ 9.00	$ 9.50	$ 10.00	$ 10.50	
Collections at	100%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	90%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	80%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	70%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	60%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	50%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Collections at	40%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	

EMS Tool Kit		Applicability:
Focus Group:	Financial Stability	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Business and Administration	R-S-U/V-P
Type:	Sample Forms - Recommendations	

County Considerations

- Counties could ensure that municipalities are aware of their responsibility to provide EMS services to their municipality and provide suggestions to address the funding of EMS service.
- Counties could provide guidance to municipalities on supporting EMS agency financial functions with municipal or county financial personnel.
- Counties could provide a database of funding opportunities for municipalities and EMS agencies.
- County fiscal and grant writing staff can assist agencies and municipalities with the sourcing, securing, writing, and applying for grants.
- Counties and/or municipalities can share budgeting programs with EMS agencies.
- Counties could work with EMS agencies on community outreach for recruitment of volunteers, pro-bono, or in-kind services, sharing of budgeting forms or programs.
- Counties could request and support changes in legislation to increase reimbursement rates from Medicare and Medicaid programs.
- Counties could consider tax programs that would benefit EMS agencies.
- Counties could support EMS agencies with municipal finance personnel or grant writers.



January 2023 | Toolkit and Recommendations

TOOL #11

FINANCIAL STABILITY: BILLING

EMS Tool Kit		Applicability:
Focus Group:	Financial Stability	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Billing	R-S-U/V-P
Type:	Recommendations	

Introduction:

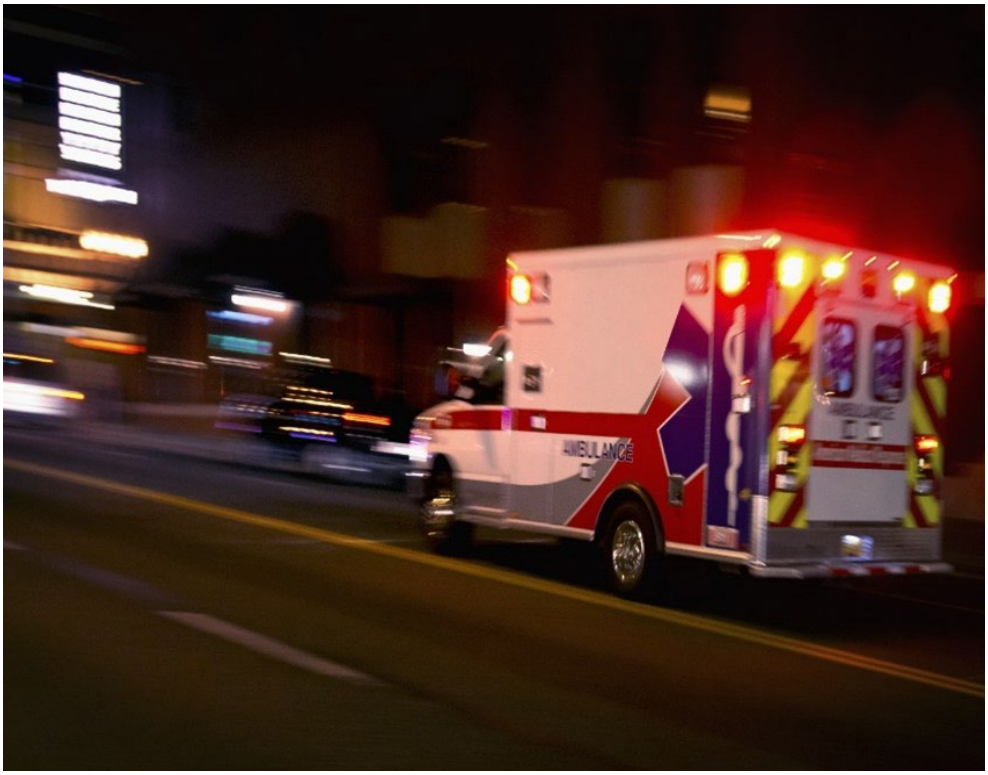
The primary source of income for emergency service agencies is billing for use of services. Third party billing is the most used method of billing; however, third party billing is also an expense for services. There are a variety of vendors who provide billing services to EMS agencies at a variety of price points. It is important to the financial health of any agency that the return on investment exceeds the cost of the service.

Recommendations:

- Research vendors and software packages to determine the highest return on investment.
- Leverage a public purchase option such as COSTARS which could provide a list of vendors at a controlled or more reasonable price point.
- Leverage community outreach to partner with agencies to share third party billing support.
- Recruit volunteers who have insurance and/or medical billing experience.

County Considerations:

- Support municipalities and/or EMS agencies by providing information on access to third party billing vendors.
- Support outreach to community partners who have insurance and/or medical billing experience.
- Provide billing services at reduced or no cost.



January 2023 | Toolkit and Recommendations

TOOL #12

FINANCIAL STABILITY: BUDGET

EMS Tool Kit		Applicability:
Focus Group:	Financial Stability	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Budget	R-S-U/V-P
Type:	Sample Forms	

Introduction:

Financial stability is vital to the success of any organization, whether it be for-profit, not-for-profit, or non-profit. Service organizations, especially volunteer service organizations, are not often considered in terms of a business model, and as such, the importance of financial stability can be overlooked.

Discussion:

To operate successfully, EMS agencies need an organized business plan, to include a business plan, personnel experienced in business administration and management, appropriate templates for budgeting, an accounts payable/accounts receivable process, and a system for billing.

- Issue to consider – Private industry can increase wages because they can increase prices. Without county or municipal support, EMS agencies are limited to Medicare/Medicaid/insurance reimbursement rates which are fixed rates.

The guidance of a business or financial representative who can lead the organization in budget forecasting, positive alignment of income versus expense, and account maintenance is recommended. Many organizations do not have membership with business or financial management backgrounds, effective budget processes, or an efficient and effective accounting system.

Recommendations:

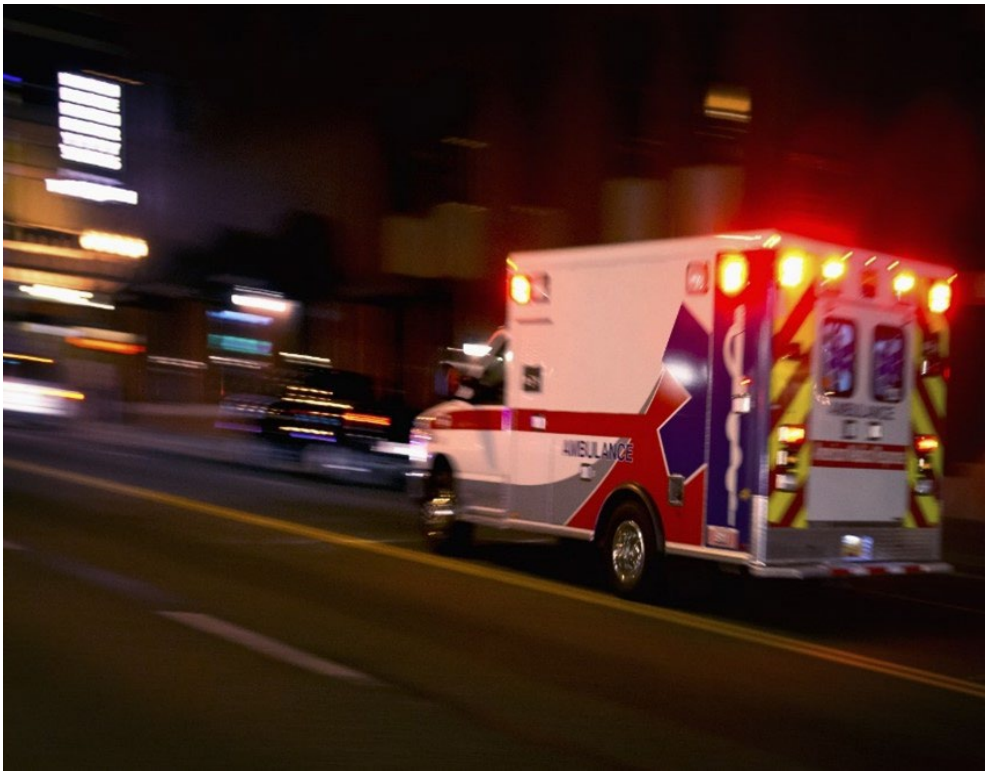
- Recruit/hire an individual with business management, accounts payable/receivable, or financial management experience.
- Request pro-bono assistance from an accountant.
- Use one of the budgeting form templates, software or cloud-based programs
- Forecast and prioritize capital expenditures, i.e., vehicles, and equipment.
- Research funding sources.
    - Insurance reimbursement – Medicare, Medicaid, insurance companies
    - Cost recovery for response to motor vehicle accidents, structure fires, etc. where insurance companies will be involved.
    - Grants
        - Collaboration with other agencies
        - Financial and programmatic capacity
        - Leadership
        - Measurable results
    - Charitable contributions

EMS Tool Kit		Applicability:
Focus Group:	Financial Stability	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Budget	R-S-U/V-P
Type:	Sample Forms	

- Crowd funding
- Membership programs

County Considerations

- Counties could provide guidance to municipalities on supporting EMS agency financial functions with municipal or county financial personnel.
- Counties could provide a database of funding opportunities for municipalities and EMS agencies, and assistance with grant writing.
- Counties could share budgeting programs with municipalities and EMS agencies.



January 2023 | Toolkit and Recommendations

TOOL #13

FINANCIAL STABILITY: BUSINESS AND ADMINISTRATION - BILLING

EMS Tool Kit		Applicability:
Focus Group:	Financial Stability	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Business and Administration - Billing	R-S-U/V-P
Type:	Recommendations	

Financial Stability – Business and Administration

Billing

Introduction:

Billing is the primary source of income for EMS agencies. The absence of effective billing practices, a lack of patient care information for medical coding, and insufficient reimbursement rates are all contributing to the financial issues which many EMS agencies are currently facing.

Discussion:

Both billing practices and billing issues that EMS agencies encounter are multifaceted. Many agencies do not have administrative personnel with medical coding or medical billing experience. This can lead to insurance companies, Medicare, and Medicaid not processing reimbursements, or providing full or accurate reimbursements due to a lack of information. Contributing to this could be a lack of thorough patient care reporting submitted for billing. Additionally, billing software programs are an expense for EMS agencies and there is currently not a bulk purchase option for agencies across the Commonwealth being supported by the Department of Health or PEMA. Finally, reimbursement rates governed by the insurance industry, Medicare and Medicaid are insufficient to cover costs of operation and have not been increased over time in order to keep up with inflation and COL rates. During the course of this study one EMS agency noted that, on average, they lose $120.00 per call due to insufficient reimbursement rates.

Recommendations:

Agencies

- Recruit personnel with medical billing experience.
- Use a third-party service to ensure more accurate billing – conversely, this is an expense to the agency.
- Ensure that patient care reports are completed by response staff to increase accuracy of coding and probability of reimbursement.
- Use billing software – potentially look at a bulk license purchase with other area agencies.
- Partner with local medical practices for billing services offered as an in-kind donation.

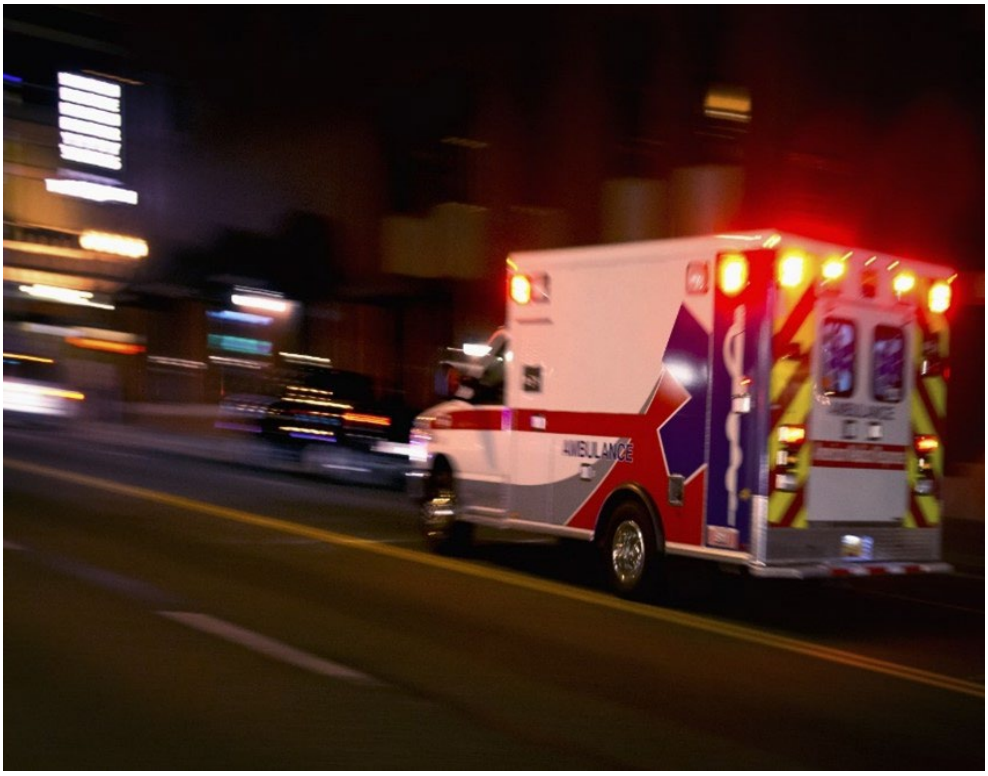
EMS Tool Kit		Applicability:
Focus Group:	Financial Stability	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Business and Administration - Billing	R-S-U/V-P
Type:	Recommendations	

Municipalities

- Support agencies with financial personnel from the municipality to provide billing services.
- Support agencies with assistance with third-party billing expenses.
- Petition the governing or regulating agencies for increased Medicare/Medicaid reimbursement rates.
- Petition the governing or regulating agencies for reasonable reimbursement for treatment without transport.
- Request insurance agencies to directly reimburse EMS services as opposed to the insured.

County Considerations

- Petition the governing or regulating agencies for increased Medicare/Medicaid reimbursement rates.
- Petition the governing or regulating agencies for reasonable reimbursement for treatment without transport.
- Request insurance agencies to directly reimburse EMS services as opposed to the insured.
- Support the municipalities and agencies in your county by assisting with coordination and negotiation of a group purchase of licensing for software, or third-party billing.
- Support agencies with financial personnel from the to provide billing services.
- Support agencies with assistance with third-party billing expenses.



January 2023 | Toolkit and Recommendations

TOOL #14

FINANCIAL STABILITY: BUSINESS AND ADMINISTRATION - PERSONNEL

EMS Tool Kit		Applicability:
Focus Group:	Financial Stability	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Business and Administration - Personnel	R-S-U/V-P
Type:	Recommendations	

Financial Stability – Business and Administration

Personnel

Introduction:

The effective financial management and administration of EMS agencies is vital to the success of the agency, and in part, its ability to serve the citizens of its community.

Discussion:

There is a nationwide crisis in EMS, fueled primarily by a decrease in volunteerism and interest in careers in paramedicine. Due to a lack of providers, the primary focus of EMS agencies is to recruit, train and retain EMTs and paramedics. However, both partially staffed, and fully staffed agencies alike need to operate under a business model including short-, medium-, and long-term financial plans, accounts payable/accounts receivable processes, and an effective system for billing. Strong administration and financial management will positively affect the success of any EMS agency.

The Pennsylvania Bureau of EMS has advised that they will be offering classes on business operations, budgeting, and grant writing.

See: https://www.health.pa.gov/topics/EMS/pages/ems.aspx

Recommendations:

Agencies

- Recruit volunteers or hire staff with business or financial management experience.
- Create partnerships with your municipal or county government for financial management support.
- Share resources with other EMS agencies for financial management.
- Encourage management personnel to attend EMS service management training, or financial management training.
- Provide training in medical coding for more efficient billing practices.
- Ensure that responders are completing accurate patient care reports for medical coding.
- Partner with an educational institution to provide a course specific to emergency service administration and financial management.

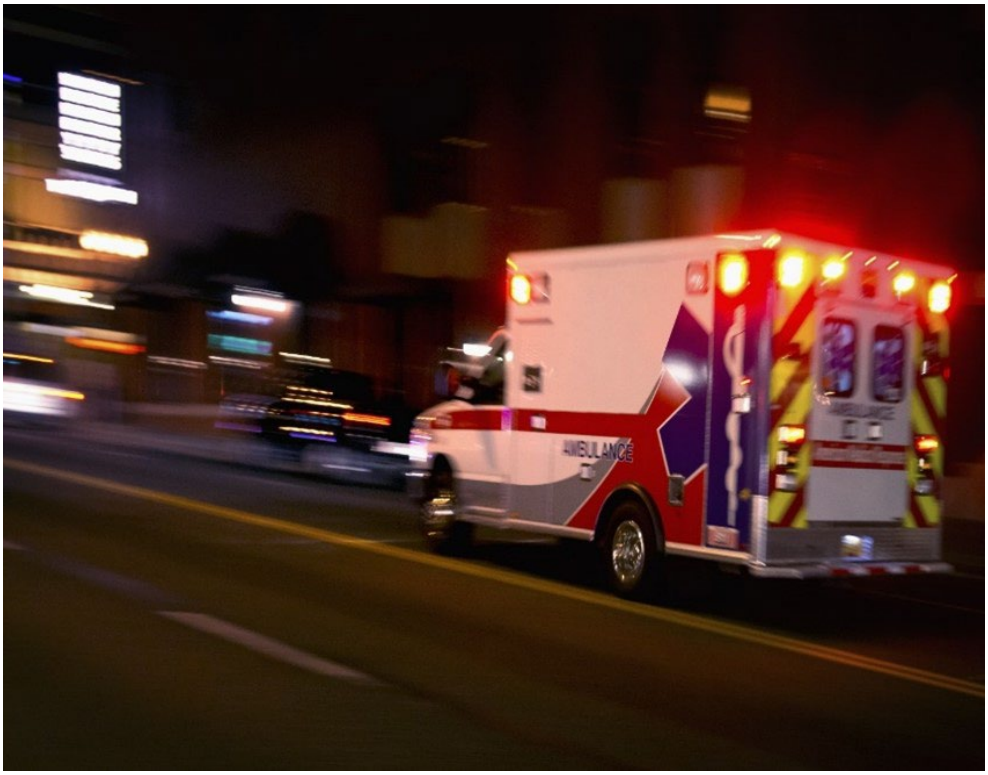
EMS Tool Kit		Applicability:
Focus Group:	Financial Stability	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Business and Administration	R-S-U/V-P
Type:	Business and Administration - Personnel	

Municipalities

- Partner with EMS agencies to support financial management systems.
- Share budgeting tools and platforms with EMS agencies.
- Include EMS agency personnel in financial training programs offered to municipal staff.

County Considerations

- Support EMS agency business and financial management with county financial staff.
- Include EMS agency personnel in financial training programs offered to county staff.
- Support recruitment of business and financial management volunteers or staff using county websites, social media, or other outreach efforts.



January 2023 | Toolkit and Recommendations

TOOL #15

FINANCIAL STABILITY: GRANTS

EMS Tool Kit		Applicability:
Focus Group:	Financial Stability	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Grants	R-S-U/V-P
Type:	Recommendations	

Introduction:

Funding is the lifeline of emergency medical services (EMS) which ensures efficient and effective response to medical emergencies and enhance overall public safety. EMS agencies rely on various funding streams to acquire the necessary annual revenue to conduct EMS activities. Grant funding is one way to augment the revenue of an EMS agency and can sometimes provide funds that would not be available through standard operations and billing.

Recommendations:

Agencies and municipalities should take advantage of any/all available grant programs.
Grant funding is allocated in various, non-recurring and recurring programs. The following outline some of the programs that have been identified to date:

Pennsylvania grant opportunities:

- Pennsylvania Fire and EMS Grant Program
  - https://www.osfc.pa.gov/GrantsandLoans/Volunteer%20Fire%20Company%20And%20Ambulance%20Grants/Pages/default.aspx
- Emergency Medical Services Operation Fund (EMSOF)
  - Apply through the EMS council for your area

Federal grant opportunities:

- FEMA Assistance to Firefighters Grant (AFG)
  - https://www.fema.gov/grants/preparedness/firefighters
- Rural Emergency Medical Services Training Grant
  - https://www.samhsa.gov/grants/grant-announcements/ti-22-001
- Flex Program Fiscal Year 2022 EMS Supplement Funding Guidance and Supporting Materials
  - https://www.ruralcenter.org/resource-library/flex-program-fiscal-year-2022-ems-supplement-funding-guidance-and-supporting
- United States Department of Transportation Highway Safety Grant Programs
  - https://safety.fhwa.dot.gov/shsp/ems/connection/sources_of_ems_funding.html
- Federal Grants Aggregation Page
  - https://Grants.gov

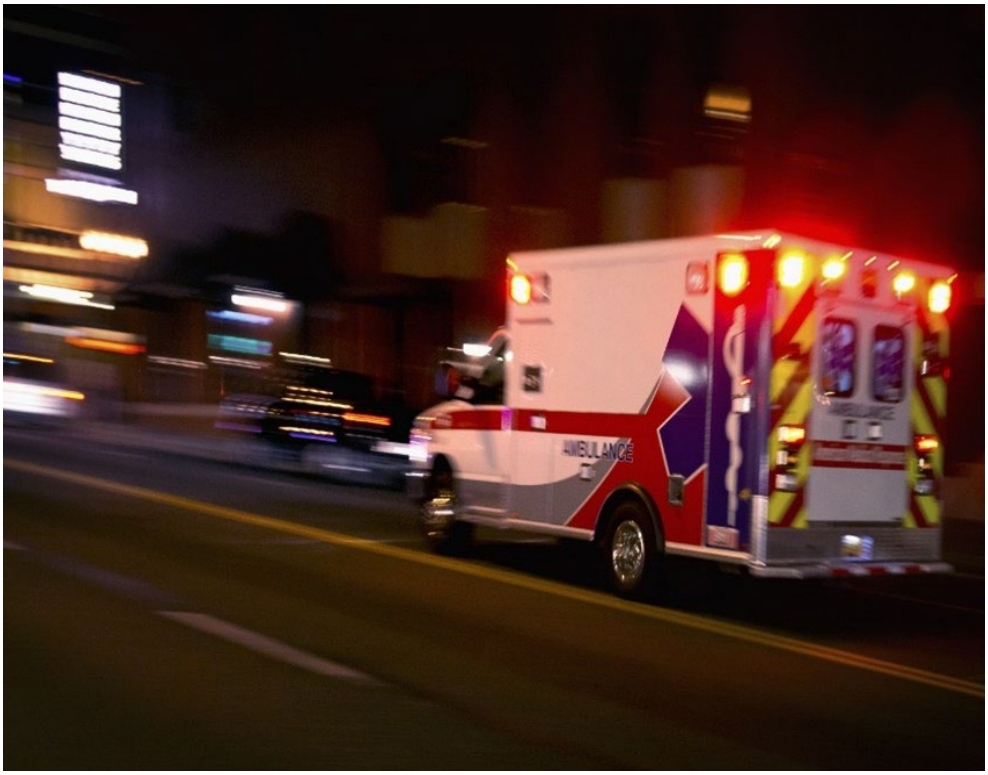
Private Grants/Foundations:

- National Philanthropic Trust
  - https://www.nptrust.org

EMS Tool Kit		Applicability:
Focus Group:	Financial Stability	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Grants	R-S-U/V-P
Type:	Recommendations	

County Considerations:

- Support municipalities and/or EMS agencies by allowing assistance from county grant writers (if available) for grant applications.
- Assist with grant research by municipalities and/or EMS agencies.



January 2023 | Toolkit and Recommendations

TOOL #16

DELIVERY METHODS: COMMUNITY LIFELINE - PARAMEDICINE

EMS Tool Kit		Applicability:
Focus Group:	Delivery Methods	R: Rural / S: Suburban/ U: Urban P:Paid / V:Volunteer
Area:	Community Lifeline - Paramedicine	R-S-U/V-P
Type:	Recommendations	

Introduction:

Community paramedicine allows paramedics to function outside their traditional emergency response and transport roles to help facilitate more appropriate use of emergency care resources while enhancing access to primary care for medically underserved populations. Community Paramedics could provide more effective and efficient services, including preventative services, at a lower cost. Regular preventive services and on-site primary care services can decrease the need for ambulance dispatches.

Issues: Health and Safety codes would need to be addressed at the state level.

Discussion:

California Project concepts:

- Post discharge – avoid unnecessary EMS transports, emergency department (ED) visits, and hospital readmissions.
- Alternate Destination – relieve emergency room overcrowding, reduce costs, transport patients to care sites appropriate to meet their needs, and increase emergency services availability and options for the community.
- Frequent 911 – connect frequent 911 callers with services best able to address their needs, reduce costs, and reduce burdens on EDs from patients whose needs are better served by non-emergency aspects of health care or by the social system.
- Hospice – Provide hospice patients with the medical care and the support necessary to remain in their location of choice, rather than being transported to an emergency medical facility.
- Public Health Collaboration – Provide more efficient and effective healthcare of TB patients by partnering specially training Community Paramedics with public health department case workers.
- Behavioral Health – Provide behavioral health patients with the most effective, efficient, and timely care possible, ease ED overcrowding, reduce the number of patient transfers, and lower hospital and EMS system costs.
- Sobering Center – Provide patients with the most effective, efficient, and timely care possible, ease ED overcrowding, reduce the number of patient transfers, and lower hospital and EMS system costs.

EMS Tool Kit		Applicability:
Focus Group:	Delivery Methods	R: Rural / S: Suburban/ U: Urban P:Paid / V:Volunteer
Area:	Community Lifeline - Paramedics	R-S-U/V-P
Type:	Recommendations	

Rugby Community Paramedic Program (Five counties in North Dakota) offer the following services:

- Assessments
- Wound care
- Vital sign monitoring
- Medication administration
- Blood glucose monitoring
- Laboratory draws
- Medication reconciliation and compliance
- Patients enrolled in one of two programs:
  - Transitional care:
    - Primary care medical services administered in a patient's home.
    - Telephone follow-up calls made after each appointment.
    - The goal was to prevent hospital readmissions.
  - Chronic care:
    - Included evaluations, screenings, and care for patients with chronic diseases. EMS staff also made referrals for adjustments to the patient's home environment to better accommodate their medical situation.
    - Telephone follow-up calls were made after each appointment.

Additional services Community Paramedics could perform:

- Asthma management
- Diabetic testing/monitoring
- Immunizations
- INR testing/monitoring
- Telephone-based support to frequent 911 callers
- Training and education
- Well Baby checks

Some of the states that are supporting Community Paramedics:

- California **See attached document on California's Community Paramedicine Pilot Projects*
- Colorado
- Minnesota
- Maine
- Texas

EMS Tool Kit		Applicability:
Focus Group:	Delivery Methods	R: Rural / S: Suburban/ U: Urban P:Paid / V:Volunteer
Area:	Community Lifeline - Paramedics	R-S-U/V-P
Type:	Recommendations	

Summit County, Ohio, has a program where the sheriff's department visits homes of the elderly population. Not only do they identify issues such as "scam operations", they can also identify any medical issues.

Recommendations:

Counties and Municipalities

- Assess the need for community paramedicine locally.
- Determine the cost-benefit of decreased transports versus implementing and maintaining paramedicine programs.

Overview: Community Paramedicine

CALIFORNIA'S COMMUNITY PARAMEDICINE PILOT PROJECTS April 2018

Illustration by Ruben DeLuna

Community paramedicine seeks to improve the effectiveness and efficiency of health care delivery by partnering specially trained paramedics with other health care providers to meet local health care needs. Community paramedics receive additional training beyond what is required for paramedic licensure and provide care outside of their traditional role, which in California is restricted to responding to 911 calls and transporting patients to an acute care hospital emergency department (ED) or performing interfacility transfers.

A major goal of community paramedicine is to address an overloaded system of emergency care by capitalizing on the unique abilities of paramedics and emergency medical services (EMS) systems to provide alternatives to ambulance transports and ED visits. Community paramedicine, which is being implemented or tested in most states in the US, also aligns with the health care sector's Triple Aim: to improve patient experience, improve the health of populations, and decrease the cost of care.

In 1972, California established the Health Workforce Pilot Project (HWPP) program (California Health and Safety Code §§ 128125–128195), a visionary program administered by the California Office of Statewide Health Planning and Development (OSHPD) that waives scope of practice laws to test and evaluate new and innovative models of care. In November 2014, OSHPD approved HWPP #173, a project sponsored by the California Emergency Medical Services Authority (EMSA). The pilot initially involved 13 projects testing six community paramedicine concepts. One additional project and concept ("alternate destination – sobering center") began operation in early 2017. In November 2017, six new projects were approved. Four projects testing two concepts were discontinued earlier in 2017, including all three "alternate destination – urgent care" projects. The six remaining concepts being tested are:

1. **Post-discharge.** Provide short-term, home-based follow-up to care for people recently discharged from a hospital due to a serious health condition with the goal of decreasing hospital readmissions within 30 days.
2. **Frequent EMS users.** Provide case management services to people who are frequent 911 callers or frequent visitors to EDs to reduce their use of the EMS system by connecting them with primary care, behavioral health, housing, and social services.
3. **Directly observed TB therapy.** Collaborate with local public health officials to provide directly observed therapy to people with tuberculosis (i.e., dispense medications and observe patients taking them) to assure effective treatment and prevent spread of the disease.
4. **Hospice.** In response to 911 calls, collaborate with hospice agency nurses, patients, and family members to treat patients in their homes and according to their wishes instead of transporting them to the ED.
5. **Alternate destination – mental health.** In response to 911 calls, offer patients who have mental health needs but no emergent medical needs transport to a mental health crisis center instead of an ED.
6. **Alternate destination – sobering center.** In response to 911 calls, offer patients with acute alcohol intoxication and no other acute medical or mental health needs transport to a sobering center instead of an ED.

HWPP regulations require organizations that sponsor pilot projects to retain an independent evaluator. A team of evaluators at the University of California, San Francisco (UCSF), serves in this role for HWPP #173. The initial 13 projects began enrolling patients in June to October of 2015, and the 14th project began enrolling patients in February 2017. The most recent UCSF evaluation covers pilot site operations through September 2017 (healthforce.ucsf.edu).

Summary of the Evaluation Results

The community paramedicine pilot projects have demonstrated that specially trained paramedics can provide services beyond their traditional and current statutory scope of practice in California. Enrolling a total of 2,515 people through September 2017, these projects are enhancing patients' well-being by improving the coordination of medical care, behavioral health, and social services. They are also reducing ambulance transports, ED visits, and hospital readmissions, yielding potential savings for payers and other parts of the health care system.

The majority of potential savings associated with these pilot projects accrued to Medicare and hospitals serving Medicare patients as they accounted for the largest share of people enrolled in the pilot projects. Potential savings also accrued to the Medi-Cal program and providers that serve Medi-Cal beneficiaries.

Californians benefit from these innovative models of health care that leverage an existing workforce operating at all times under medical control, either directly or by protocols developed by physicians experienced in emergency care.

No adverse outcomes were attributable to any of these pilot projects. No health professionals were displaced; in fact, the pilot projects demonstrated that community paramedics can collaborate with physicians, nurses, behavioral health professionals, and social workers to fill gaps in the health and social services safety net. These projects integrate with existing health care resources and leverage the unique skills of paramedics and their round-the-clock availability.

At least 33 states are operating community paramedicine programs, and research conducted to date indicates that these programs are improving the efficiency and effectiveness of the health care system. Research findings suggest that the benefits of community paramedicine programs grow as they mature, solidify partnerships, and find their optimal structure and niche within a community.

If community paramedicine is implemented on a broader scale, California's current EMS system design is well-suited to incorporate the results of these pilot programs to (1) optimize the design and implementation of proposed programs and (2) assure effectiveness and patient safety. The two-tiered system of local control with state oversight and regulation enables cities and counties to tailor community paramedicine programs to meet local needs while ensuring patient safety.

Community Paramedicine Pilot Projects, 2018

16 PROJECTS • 12 SITES • 6 CONCEPTS

PD **Post-Discharge.** Provide short-term, home-based follow-up care for persons recently discharged from a hospital due to a serious health condition to decrease hospital readmissions within 30 days.

TB **Directly Observed TB Therapy.** Collaborate with local public health services to provide directly observed therapy to persons with tuberculosis (i.e., dispense medications and observe patients taking them to assure effective treatment) to prevent its spread.

HO **Hospice.** In response to 911 calls, collaborate with hospice agency nurses, patients, and family members to treat patients in their homes, according to their wishes, instead of transporting them to the ED.

EM **Frequent EMS Users.** Provide case management services to persons who are frequent 911 callers or frequent visitors to EDs to reduce their use of the EMS system by connecting them with primary care, behavioral health, housing, and social services.

Projects approved November 2017.
Expected to be operational spring 2018.

Alternate Destinations

MH **Mental Health.** In response to 911 calls, offer patients who have mental health needs but no emergent medical needs transport to a mental health crisis center instead of an ED.

SC **Sobering Center.** In response to 911 calls, offer patients who are acutely intoxicated but have no emergent medical needs transport to a sobering center instead of an ED.

The California Health Care Foundation provided support for state-level project management and independent evaluation.

For more information on community paramedicine programs operating today in California, visit www.emsa.ca.gov/community_paramedicine.

Post-Discharge Follow-Up to Avoid Excessive Readmissions

CALIFORNIA'S COMMUNITY PARAMEDICINE PILOT PROJECTS April 2018

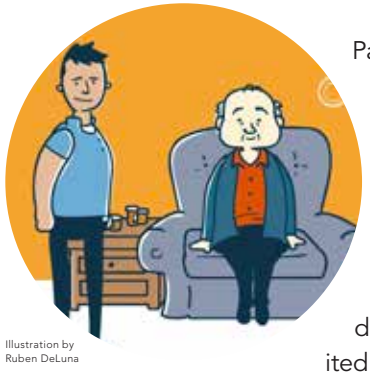


Illustration by Ruben DeLuna

Patients recently discharged from a hospital after treatment of a chronic condition such as congestive heart failure, acute myocardial infarction, or chronic obstructive pulmonary disease (COPD), are visited at home by a community paramedic. The goal of these short-term follow-up visits is to decrease the number of patients who are readmitted to the hospital within 30 days of discharge. These projects seek to give patients tools to manage their conditions more effectively so that they can avoid readmission.

Results (as of September 30, 2017)

- 1,401 patients were enrolled in post-discharge projects at five sites across California. At four sites, patients received at least one in-person visit from a community paramedic. At the other site, community paramedic contact was primarily by phone or, if needed, in-person.
- All five post-discharge projects have reduced the 30-day readmission rate for people with one or more of the chronic conditions they target to a level that is below the partner hospital's historical readmission rate. Butte County's heart failure patients were the only group whose 30-day readmission rate was higher than the historical rate. In response to these findings, the county changed its protocol in November 2017 to provide at least one home visit to every patient.
- These projects reduced the risk of harm to patients, particularly related to prescription medications. Community paramedics examined all prescription drugs in a patient's possession and reconciled them with the patient's discharge instructions. They then worked with patients to understand the medications and assisted them in obtaining any needed refills. Community paramedics identified 229 instances in which a patient needed additional instructions about how to take their medications as directed by their doctors.
- Community paramedics also made at least 188 referrals to other service providers including primary care physicians, specialist physicians, pharmacists, mental health services, home health providers, drug and alcohol treatment programs, food assistance agencies, and domestic violence agencies. These service providers can help patients manage their conditions and improve their overall well-being.
- All five pilot sites saw potential cost savings for payers, primarily Medicare and Medi-Cal, due to reductions in inpatient readmissions. The average potential savings per enrollee ranged from about $246 to $2,619, for an estimated total of $1.4 million across the five sites. In addition, partner hospitals may have benefitted if reductions in readmissions were sufficient to lower the risk that they would be penalized by Medicare for excessive readmissions.

How It Works

Local paramedic service providers and hospitals are collaborating to reduce the number of avoidable readmissions. Community paramedics provide patients who have been recently discharged from hospitals with timely follow-up visits, calls, or both. Patients with the designated diagnoses are contacted by a community paramedic within 48–72 hours of their discharge from the hospital. Having contact with a health professional during the first week after discharge is important because many readmissions occur during this time period. The community paramedics work with patients to ensure that they are taking medications as prescribed, have sufficient refills to manage their conditions, have scheduled follow-up visits with their physicians, and are adhering to any dietary restrictions related to management of their condition. In some sites, the community paramedics provide a home safety inspection when visiting patients in their homes.

The services provided by community paramedics do not replace home health care or other services available to patients. When community paramedics learn that a patient is receiving home health services, for example, they coordinate with home health agency staff.

See reverse side for a list of partners.

Partners

LOCAL EMERGENCY MEDICAL SERVICES (EMS) AGENCY	LEAD AGENCY	HEALTH CARE SYSTEM PARTNERS	EMS PROVIDER PARTNERS	LOCATIONS
Alameda County	Alameda County EMS Agency	Alameda Hospital	Alameda City Fire Department	City of Alameda
Inland Counties	San Bernardino County Fire Department	Arrowhead Regional Medical Center	San Bernardino County and Rialto Fire Departments	San Bernardino County (5 cities)
Los Angeles*	UCLA Center for Prehospital Care	Glendale Adventist Hospital	Glendale Fire Department	City of Glendale
Sierra Sacramento Valley	Butte County EMS Dignity Health EMS†	Enloe Medical Center Vituity (formerly California Emergency Physicians) Shasta County Public Health Shasta Regional Medical Center Dignity Health hospitals: ➤ Mercy Medical Center Redding ➤ Mercy Medical Center Mt. Shasta ➤ St. Elizabeth Community Hospital Dignity Health Home Health	Butte County EMS Dignity Health EMS American Medical Response (AMR)	Butte County Redding
Solano County	Medic Ambulance Service	NorthBay Healthcare	Medic Ambulance Service	Solano County

*Pilot project ended August 2016.
†Pilot project approved November 2017; expected to be operational spring 2018.

For more information on community paramedicine programs operating today in California, visit www.emsa.ca.gov/community_paramedicine.

Frequent Emergency Medical Services Users

CALIFORNIA'S COMMUNITY PARAMEDICINE PILOT PROJECTS April 2018

Illustration by Ruben DeLuna

Frequent 911 callers or frequent visitors to emergency departments (EDs) are provided with case management services to connect them with primary care, behavioral health, housing, and social services. The goal of these projects is to reduce frequent emergency medical services (EMS) users' dependence on EMS agencies and EDs for care.

Results (as of September 30, 2017)

- 103 patients were enrolled in frequent 911 projects at two sites — one in San Diego and one in the Bay Area.
- Among enrolled patients at the pilot sites, there were large reductions in the number of 911 calls, ambulance transports, and ED visits. In San Diego's pilot project, the total number of 911 calls decreased by 35%, from an average of 26 per person per year to 17. In Alameda, the total number of 911 calls decreased by 16%, from an average of four per person per year to three.
- Community paramedics linked patients to housing and other nonemergency services to meet the physical, psychological, and social needs that led to their frequent EMS use. Community paramedics in Alameda and San Diego made 58 referrals to medical care providers, mental health providers, drug and alcohol treatment programs, food assistance programs, housing assistance programs, transportation assistance programs, domestic violence resources, and other social services. In addition, they transported patients to these types of providers on 48 occasions to help them obtain services.
- Payers, ambulance providers, and hospitals saw potential cost savings estimated to total about $580,200. The average potential savings per patient was about $14,912 in San Diego and about $860 in Alameda. Since 43% of patients enrolled in San Diego were uninsured, reducing the frequency of their ED visits also potentially decreased the amount of uncompensated care provided by ambulance providers and hospitals. Most of the potential savings from Alameda's project accrued to Medicare because the majority of its patients are Medicare beneficiaries.

How It Works

Frequent EMS user pilot sites enroll people who are frequent 911 callers, ED visitors, or both. Community paramedics identify the reasons for the frequent use of EMS resources and link patients to appropriate nonemergency service providers that can reduce the patients' dependence on EMS agencies and EDs for care.

Community paramedics assess the patient's physical, psychological, and social needs. When possible, a home safety assessment is also conducted. Medication reconciliation is provided for patients who take any prescription medications. These assessments are performed at an initial in-person meeting and then as needed for the duration of the patient's tenure with the project. Patients remain enrolled in the projects until a community paramedic determines that the patient no longer needs the project's services. Criteria for discontinuing services include reaching important individual milestones such as obtaining housing or maintaining sobriety.

The two pilot sites enroll different populations of frequent EMS users. The City of San Diego's project primarily enrolls people with 20 or more ED visits per year. The City of Alameda's project, which serves a population much smaller than San Diego's (79,227 vs. 1,391,676), is open to anyone identified by the EMS agency or the partner hospital as a frequent 911 or ED user.

See reverse side for a list of partners.

Partners

LOCAL EMERGENCY MEDICAL SERVICES (EMS) AGENCY	LEAD AGENCY	HEALTH CARE SYSTEM PARTNERS	EMS PROVIDER PARTNERS	LOCATION
Alameda County	Alameda County EMS Agency	Alameda Hospital	Alameda City Fire Department	City of Alameda
City and County of San Francisco*	San Francisco Fire Department	San Francisco Department of Public Health San Francisco Department of Homelessness and Supportive Housing	San Francisco Fire Department American Medical Response (AMR) King-American Ambulance	City and County of San Francisco
Marin County*	Marin County EMS Agency	Marin Community Clinics Marin County Department of Health and Human Services Marin General Hospital	San Rafael Fire Department	Marin County
San Diego County	City of San Diego	UC San Diego	San Diego City Fire Department	City of San Diego

*Pilot project approved November 2017; expected to be operational spring 2018.

For more information on community paramedicine programs operating today in California, visit www.emsa.ca.gov/community_paramedicine.

Directly Observed Tuberculosis Therapy

Illustration by Ruben DeLuna

Community paramedics collaborate with local public health officials to provide directly observed therapy (DOT) to patients with tuberculosis (TB), a highly contagious disease. The community paramedics dispense medications and observe patients taking them to ensure that treatment protocols are followed, thus preventing spread of the disease.

Results (as of September 30, 2017)

- 42 people were enrolled in a pilot project involving DOT at one site in southern California. Because treatment often lasts six to nine months, community paramedics had an average caseload of seven patients per month.
- Patients with TB who received DOT from community paramedics were more likely to receive all doses of TB medication prescribed by the TB clinic physician than patients who received DOT from the TB clinic's community health workers (CHWs). Properly taking all prescribed doses of TB medications increases the likelihood that a patient will be cured and not spread the disease to others or develop a drug-resistant strain of TB that would be more difficult to treat and to control in the community.
- Community paramedics dispensed appropriate doses of TB medications. Their patients did not have any greater frequency of side effects than patients who received their medications from CHWs.
- Community paramedics also helped patients address other medical conditions, such as diabetes, that may create barriers to effective TB treatment.

How It Works

Tuberculosis is a highly contagious disease that is treated with special antibiotic medications. The number of medications and frequency of dosing are determined by a physician with expertise in TB treatment. Patients with TB must take their medications as directed since stopping treatment too soon or missing doses of medication could lead to the development of a drug-resistant strain of TB, posing a major public health risk to a community. To ensure that patients take their TB medications as directed, TB clinics often provide DOT, in which a health care worker gives a patient the medication, observes them taking it, and monitors them for side effects.

In Ventura County, public health officials asked EMS provider partners to offer DOT because the TB clinic does not have sufficient staff to serve all TB patients in the county. The clinic's CHWs administer DOT, but they only work on weekdays. In addition, the CHWs are based in Oxnard, where the TB clinic is located, and must drive for up to 60 minutes to reach some of its patients. In contrast, the community paramedics are stationed throughout the county and can usually reach patients within 15 minutes.

Partners

LOCAL EMERGENCY MEDICAL SERVICES (EMS) AGENCY	LEAD AGENCY	HEALTH CARE SYSTEM PARTNER	EMS PROVIDER PARTNERS	LOCATION
Ventura County	Ventura County EMS Agency	Ventura County Public Health Department	American Medical Response (AMR) Gold Coast Ambulance LifeLine Ambulance	Ventura County

For more information on community paramedicine programs operating today in California, visit www.emsa.ca.gov/community_paramedicine.

911 Hospice Calls

Illustration by Ruben DeLuna

In response to 911 calls, community paramedics collaborate with hospice agency nurses, patients, and family members to treat patients in their homes and according to their wishes instead of transporting them to the emergency department (ED).

Results (as of September 30, 2017)

- 270 people were enrolled in a pilot project involving 911 hospice calls at one site in southern California. Community paramedics visited patients in their homes, which were either private residences, or skilled nursing or residential care facilities.
- Prior to this pilot project, 80% of 911 hospice calls resulted in ambulance transport of a patient to the ED. This dropped to 30% for patients participating in the pilot project. Not being transported to the ED preserves hospice benefits and better meets the wishes of patients who prefer to receive home care.
- After conducting an assessment to determine that the patient could remain at home under hospice care, the community paramedics provided hospice patients and their families with emotional support and, when necessary, administered medications from the patients' "comfort care" packs (these contain medications to help manage the patient's symptoms) as directed by a hospice nurse. ED transports occurred when a patient requested it or when they had a medical need that could not be met in their home, such as a bone fracture. Community paramedics also alerted hospice agencies and family members to patients' needs for additional assistance (e.g., a caregiver to stay overnight with the patient to assist with safe transfers and help avoid falls).
- The project potentially saved about $203,700 (an average of $755 per patient) for Medicare and other payers by reducing ambulance transports and ED visits.

How It Works

The goal of hospice care is to provide medical, psychological, and spiritual support to those dying from a terminal illness. Care is provided by a multidisciplinary team of health professionals and volunteers in a patient's place of residence. Hospice staff members tell hospice patients, their family members, and other caregivers to contact the hospice instead of calling 911 if they believe there is a medical need or if they become concerned about the patient's comfort. Despite this instruction, some hospice patients or their family members/caregivers call 911, which typically leads to the hospice patient being transported to an ED. This may be upsetting and uncomfortable for hospice patients, and ED clinicians may perform unwanted medical interventions, including admission for inpatient care. In addition, insurers may revoke hospice benefits if a patient receives treatment or hospitalization that is incompatible with the hospice approach of comfort care.

Ventura County's hospice project seeks to prevent transports to an ED that are not consistent with a patient's wishes. If a 911 dispatcher or a first responder on scene determines that a person is under the care of a hospice agency, a community paramedic is dispatched to the patient's place of residence. The community paramedics are supervisors who can respond to hospice calls while other paramedics respond to 911 calls. The community paramedic assesses the patient, talks with family members and caregivers, and contacts a registered nurse employed by the hospice agency. The hospice nurse directs the community paramedic regarding what care to provide. The hospice nurse may ask the community paramedic to wait with the patient until the nurse arrives or direct the community paramedic to administer pain or other medications to the patient that the hospice has provided in a "comfort care" pack.

See reverse side for a list of partners.

Partners

LOCAL EMERGENCY MEDICAL SERVICES (EMS) AGENCY	LEAD AGENCY	HEALTH CARE SYSTEM PARTNERS	EMS PROVIDER PARTNERS	LOCATION
Ventura County	Ventura County EMS Agency	Assisted Home Care Services Hospice Buena Vista Hospice Care Livingston Memorial Visiting Nurse Association Roze Room Hospice TLC Home Hospice	American Medical Response (AMR) Gold Coast Ambulance LifeLine Ambulance	Ventura County

For more information on community paramedicine programs operating today in California, visit www.emsa.ca.gov/community_paramedicine.

Alternate Destination – Mental Health

Illustration by Ruben DeLuna

In response to 911 calls, community paramedics evaluate patients with mental health needs, but no emergent medical needs, for transport directly to a mental health crisis center instead of to an emergency department (ED).

Results (as of September 30, 2017)

- 251 people were enrolled in an "alternate destination – mental health" pilot project at one site in central California.
- The pilot project substantially reduced the rate at which 911 calls involving patients with mental health needs resulted in transport to an ED for medical screening. It also reduced patients' time to treatment by a mental health professional, which improved their well-being.
- Twenty-six percent of eligible patients were evaluated by community paramedics and transported to the mental health crisis center without the long delay of a preliminary ED visit. Based on their mental health needs, another 26% of evaluated patients could have been transported directly to the mental health center if an inpatient psychiatric bed was available or if they were uninsured or enrolled in Medi-Cal.
- The community paramedics accurately screened patients to determine which ones could be safely transported directly to the mental health crisis center. About 4% of patients required subsequent transfer to the ED, and there were no adverse outcomes. The medical evaluation protocols used in the field were refined six months into the project, after which there was only one transfer to an ED.
- Prior to the pilot project, law enforcement transported many mental health patients to an ED and waited with them to transfer responsibility for the patient to a clinician. This pilot project improved public safety since community paramedics can assess patients' mental health needs and arrange ambulance transports directly to the mental health center, allowing officers to focus on law enforcement duties.
- The project yielded potential savings of about $266,200 (an average of $1,061) for payers, primarily Medi-Cal, because screening mental health patients in the field for medical needs and transporting them directly to the mental health crisis center avoided the need for an ED visit with subsequent transfer to a mental health facility.
- For uninsured patients, the amount of uncompensated care provided by ambulance providers and hospitals also potentially decreased.

How It Works

Many California EDs are overcrowded. Some of the patients served in an ED could be treated safely and effectively in other settings, including some who arrive via ambulance.

Patients with mental health needs are often transported to an ED for medical clearance or when there is no capacity to evaluate them at a mental health crisis center. These patients can spend hours in an ED waiting for medical clearance, and in some cases, they can spend days in the ED waiting for a bed to be available at an inpatient mental health facility and not receive definitive mental health care during their ED stay.

In Stanislaus County, community paramedics respond to 911 calls that a dispatcher determines to be a mental health emergency or when another paramedic or a law enforcement officer identifies a patient with mental health needs. Community paramedics are also dispatched to the mental health crisis center to assess patients who arrive on their own and need to be medically cleared before being admitted to the county's inpatient psychiatric facility. The community paramedics provide these services as needed in addition to responding to traditional 911 calls.

Once on scene, a community paramedic assesses the patient for medical needs or intoxication due to alcohol or drug consumption. If the patient has no emergent medical needs, is not intoxicated, and is not violent,

the community paramedic contacts the mental health crisis center to determine bed availability at the county inpatient psychiatric facility. If a bed is available and the patient agrees, the community paramedic arranges for the patient to be transported to the mental health crisis center. Upon a patient's arrival, professionals on the mental health crisis center staff evaluate the patient to determine what services they need. Eligibility in the pilot project is limited to nonelderly adults who are uninsured or enrolled in Medi-Cal because the county inpatient psychiatric facility does not accept patients with other health insurance.

Partners

LOCAL EMERGENCY MEDICAL SERVICES (EMS) AGENCY	LEAD AGENCY	HEALTH CARE SYSTEM PARTNER	EMS PROVIDER PARTNER	LOCATION
Central California*	Central California EMS Agency and American Ambulance	Fresno County Behavioral Health and Public Health Departments Fresno County hospitals	American Ambulance	Fresno County
Mountain Valley	Mountain Valley EMS Agency	Stanislaus County Behavioral Health and Recovery Services	American Medical Response (AMR)	Stanislaus County
Santa Clara County*	Santa Clara County EMS Agency	Santa Clara County Behavioral Health Services Department	City of Gilroy Fire Department	City of Gilroy

*Pilot project approved November 2017; expected to be operational spring 2018.

For more information on community paramedicine programs operating today in California, visit www.emsa.ca.gov/community_paramedicine.

Alternate Destination – Sobering Center

Illustration by Ruben DeLuna

In response to 911 calls, paramedics offer patients with acute alcohol intoxication and no other acute medical or mental health needs transport to a sobering center instead of to an emergency department (ED).

Results (as of September 30, 2017)

- 400 people were enrolled in an "alternate destination — sobering center" pilot project at one site in the Bay Area during its first eight months of operation; of these, 50 (13%) were admitted to the sobering center more than once.
- The number of intoxicated people transported to an ED was reduced through this pilot project. In addition, for patients seeking treatment and medical detoxification, staff at the sobering center can provide withdrawal management prior to patient transfer to a medical detoxification center, which helps patients cope with withdrawal and increases their willingness to complete detoxification.
- 98% of enrolled patients were treated safely and effectively at the sobering center. Only ten patients who were transported to the sobering center were subsequently transferred to an ED.
- Community paramedics provide feedback to paramedics on 911 crews on how to screen acutely intoxicated people to determine if they are candidates for transfer to the sobering center. They also collaborate with sobering center staff and homeless outreach workers to encourage people who use the sobering center frequently to seek treatment for their alcohol use disorder.
- During its first eight months of operation, the pilot project generated about $132,700 in potential savings (an average of $332 per patient), the majority of which accrued to Medi-Cal because about 61% of patients enrolled in the pilot are Medi-Cal beneficiaries.

How It Works

Nationwide, an estimated 9.7% of ED visits are due to inebriation. In busy EDs, clinicians have little time to assist intoxicated patients unless they also have an acute medical need. As a result, they may not counsel patients about their drinking or provide information about detoxification programs, case management, or other resources. Sobering centers have been established in several cities to care for intoxicated patients — these centers are much less expensive to operate than EDs, and their staff can focus on the needs of people who are intoxicated.

As of February 2017, one pilot site (San Francisco) offered patients with acute alcohol intoxication and no other acute medical or mental health needs transport to a sobering center instead of an ED. The sobering center has cared for over 50,000 people since it opened in 2003. It serves people who are acutely intoxicated but do not have other urgent health care needs. The sobering center is open 24 hours per day, seven days per week and is staffed by registered nurses who monitor patients throughout their stay. Staff social workers help patients obtain treatment for alcoholism and also assist them in obtaining housing, Medi-Cal, Supplemental Security Income, and General Assistance. Most patients stay for 4 to 12 hours. About one-third of the sobering center's patients are treated there multiple times per year, and about 90% of patients are homeless when services are provided.

San Francisco has trained all paramedics on 911 response crews to screen intoxicated patients to determine if they are eligible to enroll in the pilot project. Patients are eligible for transport to the sobering center if they have acute alcohol intoxication but no other medical or mental health needs. If a patient meets all the eligibility criteria, the paramedics offer the patient a choice of transport to the sobering center or an ED. Patients who do not meet all eligibility criteria are transported directly to an ED.

Ten experienced community paramedics work with the sobering center's staff to perform quality assurance reviews for patients transported to the sobering center. The community paramedics are also available to consult with paramedics on 911 response crews in the field (e.g., on the street, in a homeless shelter, in a hospital ED) or by telephone if they are unsure whether a patient is eligible for transport to the sobering center.

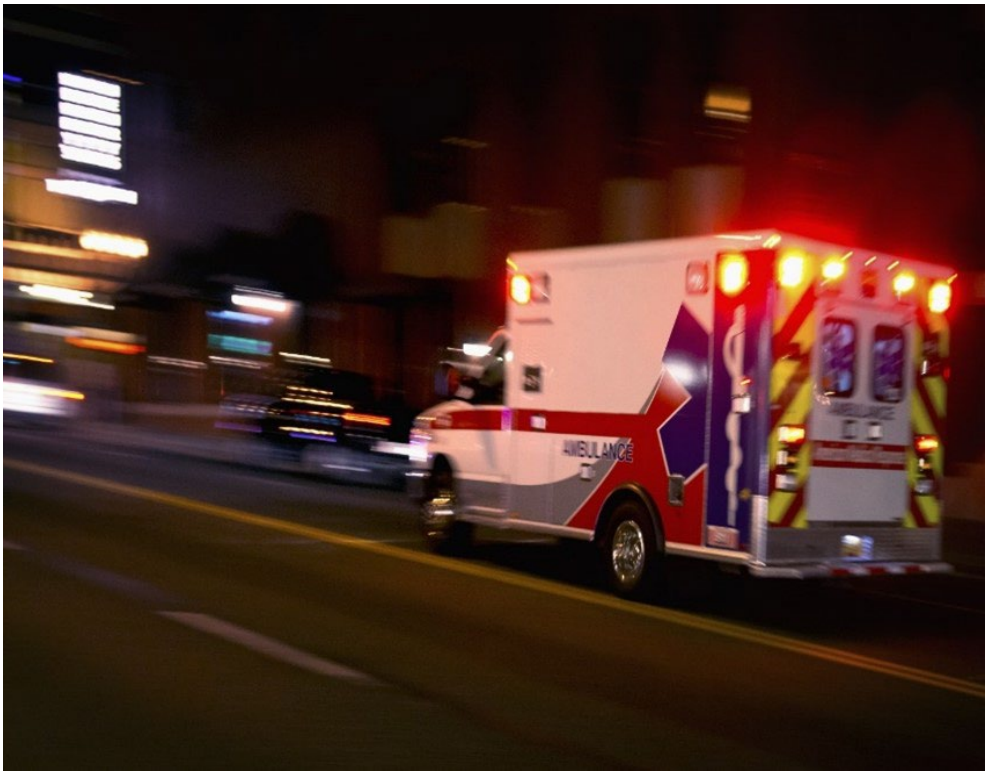
See reverse side for a list of partners.

Partners

LOCAL EMERGENCY MEDICAL SERVICES (EMS) AGENCY	LEAD AGENCY	HEALTH CARE SYSTEM PARTNERS	EMS PROVIDER PARTNERS	LOCATIONS
City and County of San Francisco	San Francisco Fire Department	San Francisco Sobering Center San Francisco Department of Public Health	San Francisco Fire Department American Medical Response (AMR) King American Ambulance	City and County of San Francisco
Santa Clara County*	Santa Clara County EMS Agency	Mission Street Sobering Center Gilroy Police Department Saint Louise Hospital	Gilroy Fire Department	City of Gilroy

*Pilot project approved November 2017; expected to be operational spring 2018.

For more information on community paramedicine programs operating today in California, visit www.emsa.ca.gov/community_paramedicine.



January 2023 | Toolkit and Recommendations

TOOL #17

DELIVERY METHODS: COMMUNITY LIFELINE - PRIMARY CARE PROVIDERS AND SERVICES

EMS Tool Kit		Applicability:
Focus Group:	Delivery Methods	R: Rural / S: Suburban/ U: Urban P:Paid / V:Volunteer
Area:	Community Lifeline – Primary Care Providers and Services	R-S-U/V-P
Type:	Recommendations	

Introduction:

Many in the community may not have access to a primary care provider.

Discussion:

Patients that don't have access to a primary care provider (PCP) are more likely to have health issues and utilize or misuse/abuse emergency departments and EMS services. By initiating campaigns that encourage the use of, or providing access to, primary care providers can help prevent unnecessary calls for EMS services and improve the overall health of the community. This can not only lead to cost-savings for EMS agencies but also keep units available for true medical emergencies.

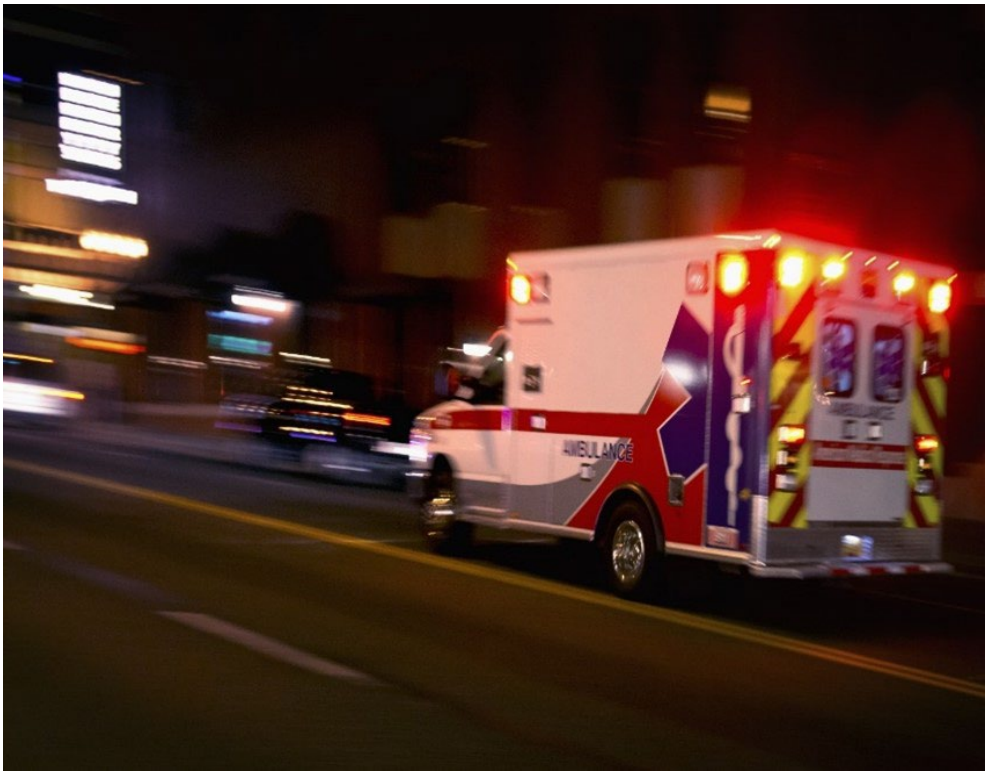
Recommendations:

Agencies:

- EMS Agencies should consider partnering with local hospitals or health organizations to provide community PCP awareness campaigns.
- Community campaigns to secure a PCP can be held at (but not limited to):
    - Health fairs
    - National Night Out events
    - Fire Prevention week events
    - Open houses
    - Emergency room can provide information/education upon patient discharge

Counties and Municipalities:

- Counties and municipalities could assist EMS agencies and local health organizations in coordination of community campaigns.



January 2023 | Toolkit and Recommendations

TOOL #18

DELIVERY METHODS: CROSS-TRAINED RESPONDERS

EMS Tool Kit		Applicability:
Focus Group:	Delivery Methods	R: Rural / S: Suburban/ U: Urban P:Paid / V:Volunteer
Area:	Cross-Trained Responders	R-S-U/V-P
Type:	Recommendations	

Introduction:

Cross-trained responders can fill in the provider shortage gaps where they exist.

Discussion:

Cross-trained responders, whether they be law enforcement personnel, municipal workers, or fire department staff that are out in the community during their regular work shifts, can usually provide emergency medical services prior to the arrival of transport units. This can lead to improved patient outcomes but can also decrease the need for transport (and tying up EMS units) if it is determined that the patient can be treated on-scene and released, or if there is no need for transport.

Benefits can include:

- Patient care is started sooner, which can lead to shorter hospital stays and more positive patient outcomes.
- EMS on-scene time is decreased or eliminated, allowing for units to be placed in service more quickly.
- Increased community support for services.
- Removing the need for repeat calls from patients to the 911 center.
- Assisting municipalities in meeting their requirement to provide EMS service under the borough and township codes of Pennsylvania.

Best practice: Gennessee County, Michigan, Sheriff program

The Office of Genesee County (Michigan) Sheriff Paramedic Division is funded through the Genesee County Paramedic Millage and the only agency in the state where officers are also paramedics. All staff are certified police officers and licensed paramedics in the State of Michigan. The Paramedic Division utilizes the life-saving device known as the LUCAS chest compression device. In 2016, the Paramedic Division responded to over 23,000 911 calls involving medical emergencies.

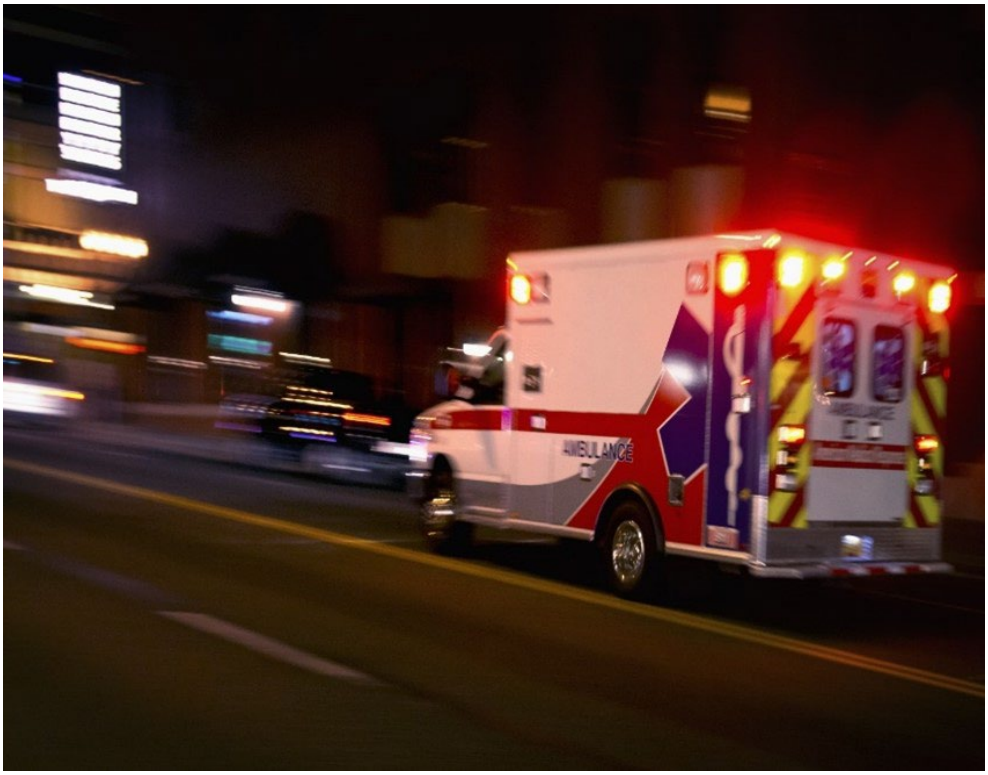
Contact: Office of Genesee County Sheriff Paramedic Division
1002 South Saginaw Street
Flint, MI 48502
Non-Emergency: 810-257-3422
Administration: 810-257-3406

EMS Tool Kit		Applicability:
Focus Group:	Delivery Methods	R: Rural / S: Suburban/ U: Urban P:Paid / V:Volunteer
Area:	Cross-Trained Responders	R-S-U/V-P
Type:	Recommendations	

Recommendations:

Counties and Municipalities:

- Counties and municipalities could consider programs that provide cross-trained responders within fire, law enforcement, and municipal employees.
- Counties and municipalities could research funding methods for support of cross-trained responder programs.



January 2023 | Toolkit and Recommendations

TOOL #19

DELIVERY METHODS: EMERGENCY TRIAGE, TREAT, AND TRANSPORT MODEL (ET3)

EMS Tool Kit		Applicability:
Focus Group:	Delivery Methods	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Emergency Triage, Treat, and Transport (ET3)	R-S-U/V-P
Type:	Model Programs/Best Practices	

Introduction:

EMS units are occasionally dispatched to treat and transport a patient who might not need emergency department care, thereby tying up resources that might be needed for more urgent patients.

The Emergency Triage, Treat, and Transport (ET3) Model is a voluntary, five-year payment model that will provide greater flexibility to ambulance care teams to address emergency health care needs of Medicare Fee-for-Service beneficiaries following a 9-1-1 call. The goals of the Model are to provide person-centered care, increase efficiency in the EMS system, and encourage appropriate utilization of emergency medical services.

Discussion:

ET is a payment model providing greater flexibility for EMS when patients call 911 but don't necessarily need to be transported to a hospital emergency department. Triage of patients' needs is completed for determination of further treatment and/or transportation. Treatment could occur for issues that are within the scope of practice of EMT/Paramedics following a consultation with a doctor.

Transportation would be made to the appropriate facility for further patient care. Under the ET3 Model, the Centers for Medicare & Medicaid Services (CMS) will test two new ambulance payments, while continuing to pay for emergency transport of a Medicare beneficiary to a hospital Emergency Department (ED) or other destination covered under current Medicare requirements. Under the ET3 Model, Medicare will pay model participants, who are Medicare-enrolled ambulance suppliers and hospital-owned ambulance providers to:

- Transport a beneficiary to an Alternative Destination Partner such as a primary care doctor's office or an urgent care clinic (Transport to an Alternative Destination Partner), or
- Initiate and facilitate beneficiary receipt of a medically necessary covered service by a Qualified Health Care Partner or Downstream Practitioner at the scene of a 9-1-1 response, either in-person on the scene or via telehealth (Treatment in Place).

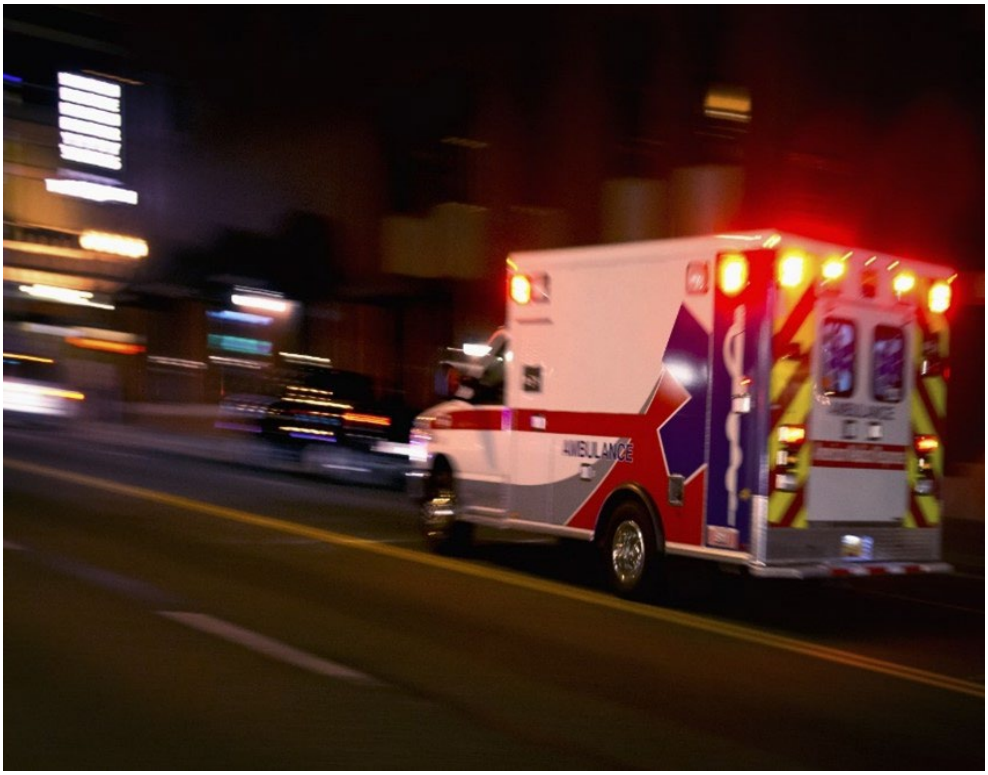
See: https://innovation.cms.gov/innovation-models/et3

Recommendations:

Agencies, Counties and Municipalities

EMS Tool Kit		Applicability:
Focus Group:	Delivery Methods	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Emergency Triage, Treat, and Transport (ET3)	R-S-U/V-P
Type:	Model Programs/Best Practices	

- Research the ET3 model.
- Facilitate discussion with local EMS agencies, hospitals and regional medical command about the ET3 model and whether it may be an effective model for local services.



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TOOL #20

DELIVERY METHODS: INTERMEDIATE ADVANCED LIFE SUPPORT

EMS Tool Kit		Applicability:
Focus Group:	Delivery Methods	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Intermediate Advanced Life Support	R-S-U/P-V
Type:	Model Program/Best Practices	

Introduction:

Intermediate Life Support (IALS) is a level of training for prehospital care providers. IALS is classed as mid-level emergency medical care provided by trained first responders who receive more training than basic life support providers (EMT-Basics, Basic First Responders and First-aid providers), but less as advanced life support providers (such as Paramedics).

Discussion:

IALS allows EMS providers to give a higher level of patient care than basic life support EMTs. The training for IALS certification costs less than paramedic training and is shorter in length, allowing providers to be certified faster thus putting them out in the field faster.

Lancaster Public Safety Answering Point (PSAP) worked with the Emergency Health Services Federation (EHSF) on the intermediate life support (ILS) project.

Benefits include:

- More expedient and cost-effective training.
- Advanced life support (ALS) units would have increased availability for higher acuity calls.
- Increased pool of trained personnel.

Lancaster County provided the following information:

The direction from the EHSF to the PSAPs has been as follows:

- The nomenclature to be used for IALS dispatching is a class 1i or class 1 intermediate.
- When a dispatcher, based on medical protocol, determines a caller's needs meet one of the approved determinants for an IALS dispatch and an IALS resource is available in the response area, then IALS can be dispatched for the patient in lieu of an ALS unit.
- When a dispatcher, based on medical protocol, determines a caller's needs meet one of the approved determinants for an IALS dispatch and an IALS resource is not available in the response area, then an ALS unit will be dispatched for the patient.
- Determinants for an IALS dispatch have been selected because the training, scope, and protocols of the AEMT can effectively manage the patient's needs based on the EMD screening process.
- The EHSF (EMS Council) is aware there are some additional determinants where the AEMT is capable of effectively managing the patient's needs. However, Lancaster PSAP is easing into this change. Additional determinants may be assigned for an IALS response overtime.

EMS Tool Kit		Applicability:
Focus Group:	**Delivery Methods**	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Intermediate Advanced Life Support	R-S-U/P-V
Type:	Model Program/Best Practices	

Explanation of EMD Dispatching System

Within the dispatching system, a dispatching protocol identifies a type of patient's need/condition. For example, protocol one is abdominal pain/problems. Within this one dispatching protocol, there are ten different determinants for dispatching. The determinants provide clarification to what is occurring with the patient's need/condition. For example, abdominal pain/problems – not alert or abdominal pain/problems – fainting or near fainting greater than or equal to 50-years old. Each determinant is assigned a specific type of response (i.e., class 1, class 1i, class 2, or class 3)

Concern Regarding IALS Dispatch for Cardiac Arrest Patients

Among the thirty-three different dispatching protocols, there are forty-five approved determinants for dispatching at the IALS level. There are no protocols where all determinants generate a class 1i dispatch. One area of concern for Lancaster County is IALS dispatched for cardiac arrest patients. In protocol nine for cardiac arrest, there are nine determinants for dispatch. Only one of those determinants is assigned at the IALS level. A cardiac arrest where there is obvious or expected death, such as cold and stiff in a warm environment, decapitation, decomposition, incineration, or non-recent death, can be dispatched at an IALS level instead of the ALS level. The other determinants identify a suspected cardiac arrest – not breathing, uncertain breathing, hanging, strangulation, suffocation, or ineffective breathing will remain an ALS response. Additionally, there will remain two determinants at a class 3 (BLS response) obvious death unquestionable and expected death unquestionable.

IALS Resource Document

Attached is a spreadsheet with resources regarding IALS system planning for the EHSF region.

- The first sheet is the EMD Determinants. This sheet lists every protocol with every determinant and will provide which dispatch class level is approved in the region. Any determinant highlighted in yellow (and will also have IALS in red to the right) means this determinant can be dispatched as a class 1i if there is an IALS level resource available.
- The second sheet is the AEMT Scope. This sheet provides a column for EMT, AEMT, and paramedic to identify the scope differences among the three provider levels.
- The third sheet is the Approved Medications. This sheet provides a column for EMT, AEMT, and paramedic to identify the differences among medications that are required and those permitted to be delivered by each level of certification.
- The fourth sheet is the AEMT Protocols. This sheet lists each of the AEMT protocols and provides skill differences between the EMT and AEMT, as well as the AEMT and paramedic.

EMS Tool Kit		Applicability:
Focus Group:	**Delivery Methods**	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Intermediate Advanced Life Support	R-S-U/P-V
Type:	Model Program/Best Practices	

QA Process

Monitoring how the system works with this change is a priority. Each PSAP has their own internal quality assurance (QA) process. Additionally, as a part of licensure, EMS agencies are to perform quality improvement. The EHSF encourages EMS agencies with IALS level licensure to complete a QA/QI (quality improvement) review of dispatches where IALS is being utilized. It is also encouraged that the agency's medical director is involved with the QA/QI process. The EHSF will also be reviewing IALS usage at a regional level. The EHSF will continue to discuss IALS system planning among the EHSF Medical Advisory Committee, Prehospital Operations Committee, and Regional Communications Committee. These three meeting forums will provide an opportunity to discuss how the system is working and offer suggestions for improvement.

Recommendations:

Agencies and Counties:

Step one – meetings:

EMS Council, PSAP, select group of EMS providers, and the regional medical director should have meetings to discuss the process and protocols.

Step two – create a new unit:

Creation of the unit type Intermediate (IALS) needs to be used in computer aided dispatch (CAD) and on the radio. (Lancaster County made the decision to dispatch IALS as a basic life support (BLS) following the BLS protocols, as this unit type did not fit into their three-tier dispatching model.)

Step three – final decision on protocols and new incident types:

The regional medical director should work with the EMS Council on the translation of changes into the protocols for dispatch to an IALS level of care. From this guideline the PSAP should create new incident types. (Lancaster County had a three-tiered response levels: Class 1 [ALS], Class 2 [BLS light/siren], and Class 3 [BLS no lights/siren]. Lancaster PSAP created a Class 1i for IALS.)

Examples:

Allergic reaction Class 1
Allergic reaction Class 1i (the new incident type)
Allergic Reaction Class 2
Allergic Reaction Class 3

Step four – work behind the scenes:

(Lancaster County PSAP had to update the response zones with the new level of response. A decision was made to keep the IALS response to their home agency calls only. For ALS calls in the county; Class 1 ALS calls go to the closest ALS unit and if a BLS unit is

physically closer, they are dispatched as well to render aid until the ALS unit arrives.)

Step five – time to test:

(Lancaster County began with one agency to make sure the software was mapping to the correct incident types. The CAD recommended the correct resource based on the incident type. CAD also reacted properly if the home IALS was not available. This testing was run for up to two months before expanding to other agencies.)

Example:

Attached spreadsheet with identified protocols for IALS response.

APPENDIX A-

IALS SYSTEM

DISPATCHING APPROVED DETERMINANTS

LANCASTER COUNTY

Protocol 1: Abdominal Pain / Problems			Approved IALS Dispatch	Additional Notes
1 - D - 1	not alert	class 1		
1 - D - 2	ashen or gray color reported ≥ 50	class 1		
1 - C - 1	suspected aortic aneurysm (tearing/ripping pain) ≥ 50	class 1		
1 - C - 2	diagnosed aortic aneurysm	class 1		
1 - C - 3	fainting or near fainting ≥ 50	class 1		
1 - C - 4	females with fainting or near fainting 12-50	class 1		
1 - C - 5	males with pain above navel ≥ 35	class 1	IALS	
1 - C - 6	females with pain above navel ≥ 45	class 1	IALS	
1 - A - 1	abdominal pain	class 3		
1 - A - 2	testicle or groin pain (male)	class 3		

Protocol 2: Allergies / Envenomations			Approved IALS Dispatch	Additional Notes
2 - E - 1	ineffective breathing	class 1		
2 - D - 1	not alert	class 1		
2 - D - 2	difficulty speaking between breaths	class 1		
2 - D - 3	swarming attack (bees, wasps, hornets, etc.)	class 1	IALS	
2 - D - 4	snakebite	class 1	IALS	
2 - C - 1	difficulty breathing or swallowing	class 1	IALS	
2 - C - 2	history of severe allergic reaction	class 1	IALS	
2 - B - 1	unknown status/other codes not applicable	class 2		
2 - A - 1	no difficulty breathing or swallowing (rash, hives, or itching may present)	class 3		
2 - A - 2	spider bite	class 3		

Protocol 3: Animal Bites / Attacks			Approved IALS Dispatch	Additional Notes
3 - D - 1	arrest	class 1		
3 - D - 2	unconscious	class 1		
3 - D - 3	not alert	class 1		
3 - D - 4	chest or neck injury (with difficulty breathing)	class 1		
3 - D - 5	dangerous body area	class 1		
3 - D - 6	large animal	class 1	IALS	
3 - D - 7	exotic animal	class 1	IALS	
3 - D - 8	mauling or multiple animals	class 1	IALS	
3 - D - 9	attack in progress	class 1	IALS	
3 - B - 1	possibly dangerous body area	class 2		
3 - B - 2	serious hemorrhage	class 2		
3 - B - 3	unknown status/other codes not applicable	class 2		
3 - A - 1	not dangerous body area	class 3		
3 - A - 2	non-recent (≥6hrs) injuries (without priority symptoms)	class 3		
3 - A - 3	superficial injuries	class 3		

Protocol 4: Assault / Sexual Assault / Stun Gun			Approved IALS Dispatch	Additional Notes
4 - D - 1	arrest	class 1		
4 - D - 2	unconscious	class 1		
4 - D - 3	not alert	class 1		
4 - D - 4	chest or neck injury (with difficulty breathing)	class 1		
4 - D - 5	multiple victims	class 1	IALS	
4 - B - 1	possibly dangerous body area	class 2		
4 - B - 2	serious hemorrhage	class 2		
4 - B - 3	unknown status/other codes not applicable	class 2		

4	- A -	1	marked (*) not dangerous body area with deformity	class 3	
4	- A -	2	not dangerous body area	class 3	
4	- A -	3	non-recent (≥6hrs) injuries (without priority symptoms)	class 3	

Protocol 5: **Back Pain (Non-Traumatic/Recent Trauma)**					**Approved IALS Dispatch**	**Additional Notes**
5	- D -	1	not alert	class 1		
5	- D -	2	ashen or gray color reported ≥ 50	class 1		
5	- C -	1	suspected aortic aneurysm (tearing/ripping pain) ≥ 50	class 1		
5	- C -	2	diagnosed aortic aneurysm	class 1		
5	- C -	3	fainting or near fainting ≥ 50	class 1		
5	- C -	4	difficulty breathing	class 1		
5	- A -	1	non-traumatic back pain	class 3		
5	- A -	2	non-recent (≥6hrs) traumatic back pain (without priority symptoms)	class 3		

Protocol 6: **Breathing Problems**					**Approved IALS Dispatch**	**Additional Notes**
6	- E -	1	ineffective breathing	class 1		
6	- D -	1	not alert	class 1		
6	- D -	2	difficulty speaking between breaths	class 1		
6	- D -	3	changing color	class 1		
6	- D -	4	clammy or cold sweats	class 1		
6	- D -	5	tracheostomy (obvious distress)	class 1		
6	- C -	1	abnormal breathing	class 1		
6	- C -	2	tracheostomy (no obvious distress)	class 1		

Protocol 7: **Burns / Explosion**					**Approved IALS Dispatch**	**Additional Notes**
7	- E -	1	person on fire	class 1		
7	- D -	1	multiple victims	class 1		
7	- D -	2	arrest	class 1		
7	- D -	3	unconscious	class 1		
7	- D -	4	not alert	class 1		
7	- D -	5	difficulty speaking between breaths	class 1		
7	- C -	1	fire with persons reported inside	class 1		
7	- C -	2	difficulty breathing	class 1		
7	- C -	3	burns ≥ 18% body area	class 1		
7	- C -	4	significant facial burns	class 1		
7	- B -	1	blast injuries (without priority symptoms)	class 2		
7	- B -	2	unknown status/other codes not applicable	class 2		
7	- A -	1	Burns < 18% body area	class 2		
7	- A -	2	fire alarm (unknown situation)	class 3		
7	- A -	3	minor burns	class 3		
7	- A -	4	sunburn	class 3		
7	- A -	5	non-recent (≥6hrs) burns/injuries (without priority symptoms)	class 3		

Protocol 8: **Carbon Monoxide/Inhalation/Hazmat/CBRN**					**Approved IALS Dispatch**	**Additional Notes**
8	- D -	1	arrest	class 1		
8	- D -	2	unconscious	class 1		
8	- D -	3	not alert	class 1		
8	- D -	4	difficulty speaking between breaths	class 1		
8	- D -	5	multiple victims	class 1	IAL S	
8	- D -	6	unknown status/other codes not applicable	class 1	IAL S	

8	- C -	1	alert with difficulty breathing	class 1
8	- B -	1	alert without difficulty breathing	class 2
8	- Ω -	1	carbon monoxide detector alarm (scene contact without priority symptoms)	omega FD
8	- Ω -	2	carbon monoxide detector alarm (alarm only, no scene contact)	omega FD

Protocol 9: **Cardiac Arrest or Respiratory Arrest / Death**				**Approved IALS Dispatch**	**Additional Notes**
9	- E -	1	suspected workable arrest (not breathing/ineffective breathing): not breathing at all	class 1	
9	- E -	2	suspected workable arrest (not breathing/ineffective breathing): uncertain breathing	class 1	
9	- E -	3	suspected workable arrest (not breathing/ineffective breathing): hanging	class 1	
9	- E -	4	suspected workable arrest (not breathing/ineffective breathing): strangulation	class 1	
9	- E -	5	suspected workable arrest (not breathing/ineffective breathing): suffocation	class 1	
9	- D -	1	ineffective breathing	class 1	
9	- D -	2	obvious or expected death questionable (see list defined by reg med dir)	class 1	IALS
9	- B -	1	obvious death unquestionable (see list defined by reg med dir)	class 3	
9	- Ω -	1	expected death unquestionable	class 3	

Protocol 10: **Chest Pain / Chest Discomfort**				**Approved IALS Dispatch**	**Additional Notes**
10	- D -	1	not alert	class 1	
10	- D -	2	difficulty speaking between breaths	class 1	
10	- D -	3	changing color	class 1	
10	- D -	4	clammy or cold sweats	class 1	
10	- D -	5	heart attack or angina history	class 1	
10	- C -	1	abnormal breathing	class 1	
10	- C -	2	cocaine	class 1	
10	- C -	3	breathing normally ≥ 35	class 1	
10	- A -	1	breathing normally < 35	class 2	

Protocol 11: **Choking**				**Approved IALS Dispatch**	**Additional Notes**
11	- E -	1	complete obstruction / ineffective breathing	class 1	
11	- D -	1	abnormal breathing (partial obstruction)	class 1	
11	- D -	2	not alert	class 1	
11	- A -	1	not choking now (can talk or cry, is alert and breathing normally)	class 3	

Protocol 12: **Convulsions / Seizures**				**Approved IALS Dispatch**	**Additional Notes**
12	- D -	1	not breathing (after key questioning)	class 1	
12	- D -	2	continuous or multiple seizures	class 1	
12	- D -	3	agonal/ineffective breathing	class 1	
12	- D -	4	effective breathing not verified ≥ 35	class 1	
12	- C -	1	focal/absence seizure (not alert)	class 1	
12	- C -	2	pregnancy	class 1	
12	- C -	3	diabetic	class 1	
12	- C -	4	not seizing now and effective breathing verified (>6, confirmed no seizure disorder)	class 1	
12	- C -	5	history of stroke or brain tumor	class 1	
12	- C -	6	overdose/poisoning (ingestion)	class 1	
12	- C -	7	atypical seizure	class 1	
12	- B -	1	effective breathing not verified < 35	class 2	
12	- A -	1	not seizing now and effective breathing verified (known seizure disorder)	class 3	
12	- A -	2	not seizing now and effective breathing verified (seizure disorder unknown)	class 3	
12	- A -	3	not seizing now and effective breathing verified (≤6, confirmed no seizure disorder)	class 3	
12	- A -	4	focal/absence seizure (alert)	class 3	

Card 9: Obvious death (B-1, D-2)

L*ocal medical control must define and authorize any of the patient conditions below before this determinant can be used. Situations should be unquestionable and may include:* cold and stiff in a warm environment, decapitation, decomposition, incineration, non-recent death

12	-	A	-	5	impending seizure (aura)	class 3

Protocol 13: Diabetic Problems						**Approved IALS Dispatch**	**Additional Notes**
13	-	D	-	1	unconscious	class 1	
13	-	C	-	1	not alert	class 1	IAL
13	-	C	-	2	abnormal behavior	class 1	S
13	-	C	-	3	abnormal breathing	class 1	IAL
13	-	A	-	1	alert and behaving normally	class 3	S
							IAL
							S

Protocol 14: Drowning/Near Drowning /Diving/Scuba						**Approved IALS Dispatch**	**Additional Notes**
14	-	E	-	1	arrest (out of water)	class 1	
14	-	E	-	2	underwater (domestic rescue)	class 1	
14	-	D	-	1	unconscious	class 1	
14	-	D	-	2	underwater (specialized rescue)	class 1	
14	-	D	-	3	stranded (specialized rescue)	class 3	
14	-	D	-	4	just resuscitated and/or defibrillated (external)	class 1	
14	-	D	-	5	not alert	class 1	
14	-	D	-	6	suspected neck injury	class 1	
14	-	C	-	1	alert with abnormal breathing	class 1	
14	-	B	-	1	alert and breathing normally (injuries or in water)	class 2	
14	-	B	-	2	obvious death (submersion ≥ 6 hrs)	class 3	
14	-	B	-	3	unknown status/other codes not applicable	class 2	
14	-	A	-	1	alert and breathing normally (no injuries or out of water)	class 3	

Protocol 15: Electrocution / Lightning						**Approved IALS Dispatch**	**Additional Notes**
15	-	E	-	1	not breathing/ineffective breathing	class 1	
15	-	D	-	1	multiple victims	class 1	
15	-	D	-	2	unconscious	class 1	
15	-	D	-	3	not disconnected from power	class 1	
15	-	D	-	4	power not off or hazard present	class 1	
15	-	D	-	5	extreme fall (≥ 30ft/10m)	class 1	
15	-	D	-	6	long fall	class 1	
15	-	D	-	7	not alert	class 1	
15	-	D	-	8	abnormal breathing	class 1	
15	-	D	-	9	unknown status/other codes not applicable	class 1	
15	-	C	-	1	alert and breathing normally	class 1	

Protocol 16: Eye Problems / Injuries						**Approved IALS Dispatch**	**Additional Notes**
16	-	D	-	1	not alert	class 1	
16	-	B	-	1	severe eye injuries	class 2	
16	-	A	-	1	moderate eye injuries	class 3	
16	-	A	-	2	minor eye injuries	class 3	
16	-	A	-	3	medical eye problems	class 3	

Protocol 17: Falls						**Approved IALS Dispatch**	**Additional Notes**
17	-	D	-	1	extreme fall (≥ 30ft/10m)	class 1	
17	-	D	-	2	arrest	class 1	
17	-	D	-	3	unconscious	class 1	
17	-	D	-	4	not alert	class 1	

17	- D -	5	chest or neck injury (with difficulty breathing)	class 1
17	- D -	6	long fall	class 1
17	- B -	1	possibly dangerous body area	class 2
17	- B -	2	serious hemorrhage	class 2
17	- B -	3	unknown status/other codes not applicable	class 2
17	- A -	1	marked (*) not dangerous body area with deformity	class 3
17	- A -	2	not dangerous body area	class 3
17	- A -	3	non-recent (≥ 6hrs) injuries (without priority symptoms)	class 3
17	- A -	4	public assist (no injuries and no priority symptoms)	class 3

Protocol 18:					**Approved IALS Dispatch**	**Additional Notes**
Headache						
18	- C -	1	not alert	class 1		
18	- C -	2	abnormal breathing	class 1		
18	- C -	3	speech problems*	class 1	IALS	
18	- C -	4	sudden onset of severe pain*	class 1	IALS	
18	- C -	5	numbness*	class 1	IALS	
18	- C -	6	paralysis*	class 1	IALS	
18	- C -	7	change in behavior (≤ 3hrs)*	class 1	IALS	
18	- B -	1	unknown status/other codes not applicable	class 2		
18	- A -	1	breathing normally	class 3		

Protocol 19:					**Approved IALS Dispatch**	**Additional Notes**
Heart Problems / AICD						
19	- D -	1	not alert	class 1		
19	- D -	2	difficulty speaking between breaths	class 1		
19	- D -	3	changing color	class 1		
19	- D -	4	clammy or cold sweats	class 1		
19	- D -	5	just resuscitated and/or defibrillated (external)	class 1		
19	- C -	1	firing of A.I.C.D.	class 1		
19	- C -	2	abnormal breathing	class 1		
19	- C -	3	chest pain/discomfort ≥ 35	class 1		
19	- C -	4	cardiac history	class 1		
19	- C -	5	cocaine	class 1		
19	- C -	6	heart rate < 50 bpm or ≥ 130 bpm (without priority symptoms)	class 1		
19	- C -	7	unknown status/other codes not applicable	class 1		
19	- A -	1	heart rate > 50 bpm or < 130 bpm (without priority symptoms)	class 3		
19	- A -	2	chest pain/discomfort < 35 (without priority symptoms	class 3		

Protocol 20:					**Approved IALS Dispatch**	**Additional Notes**
Heat / Cold Exposure						
20	- D -	1	not alert	class 1		
20	- D -	2	multiple victims (with priority symptoms)	class 1		
20	- C -	1	heart attack or angina history	class 1		
20	- B -	1	change in skin color	class 2		
20	- B -	2	unknown status/other codes not applicable	class 2		
20	- A -	1	alert	class 3	IALS	

Protocol 21:					**Approved IALS Dispatch**	**Additional Notes**
Hemorrhage / Lacerations						
21	- D -	1	arrest	class 1		
21	- D -	2	unconscious	class 1		
21	- D -	3	not alert	class 1		
21	- D -	4	dangerous hemorrhage	class 1		

21 - D - 5	abnormal breathing	class 1
21 - C - 1	hemorrhage through tubes	class 1
21 - C - 2	hemorrhage of dialysis fistula	class 1
21 - C - 3	hemorrhage from varicose veins	class 1
21 - B - 1	possible dangerous hemorrhage	class 2
21 - B - 2	serious hemorrhage	class 2
21 - B - 3	bleeding disorder	class 2
21 - B - 4	blood thinners	class 2
21 - A - 1	not dangerous hemorrhage	class 3
21 - A - 2	minor hemorrhage	class 3

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Protocol 22: **Inaccessible Incident / Other Entrapments**			**Approved IALS Dispatch**	**Additional Notes**
22 - D - 1	mechanical/machinery/object entrapment	class 1		
22 - D - 2	trench collapse	class 1		
22 - D - 3	structure collapse	class 1		
22 - D - 4	confined space entrapment	class 1		
22 - D - 5	inaccessible terrain situation	class 1		
22 - D - 6	mudslide/avalanche	class 1		
22 - B - 1	no longer trapped (unknown injuries)	class 2		
22 - B - 2	peripheral entrapment only	class 2		
22 - B - 3	unknown status (investigation)/other codes not applicable	class 2		
22 - A - 1	no longer trapped (no injuries)	class 3		

Protocol 23: **Overdose / Poisoning**			**Approved IALS Dispatch**	**Additional Notes**
23 - D - 1	unconscious	class 1		
23 - D - 2	changing color	class 1		
23 - C - 1	not alert	class 1		
23 - C - 2	abnormal breathing	class 1		
23 - C - 3	antidepressants (tricyclic)	class 1		
23 - C - 4	cocaine, methamphetamine (or derivatives)	class 1		
23 - C - 5	narcotics (heroin, morphine, methadone, oxycontin, etc.)	class 1		
23 - C - 6	acid or alkali (lye)	class 1		
23 - C - 7	unknown status/other codes not applicable	class 1		
23 - C - 8	poison control request for response	class 1		
23 - B - 1	overdose (without priority symptoms)	class 2		
23 - Ω - 1	poisoning (without priority symptoms)	poison control		

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Protocol 24: **Pregnancy / Childbirth / Miscarriage**			**Approved IALS Dispatch**	**Additional Notes**
24 - D - 1	breech or cord	class 1		
24 - D - 2	head visible/out	class 1		
24 - D - 3	imminent delivery (≥ 6 months/24 weeks)	class 1		
24 - D - 4	3rd trimester hemorrhage	class 1		
24 - D - 5	high risk complications	class 1		
24 - D - 6	baby born (complications with baby)	class 1		
24 - D - 7	baby born (complications with mother)	class 1		
24 - C - 1	2nd trimester hemorrhage or miscarriage	class 1	IALS	
24 - C - 2	1st trimester serious hemorrhage	class 1	IALS	
24 - C - 3	abdominal pain/cramping (< 6 months/24 weeks and no fetus or tissue)	class 2		
24 - C - 4	baby born (no complications)	class 2		
24 - B - 1	labor (delivery not imminent, ≥ 6 months/24 weeks)	class 2		
24 - B - 2	unknown status/other codes not applicable	class 2		

Card 24: Pregnancy/Childbirth/Miscarriage (D-5)

High Risk Complications include:
Premature birth (24-36 weeks), multiple birth (≥ 24 weeks), bleeding disorder, blood thinners, cervical cerclage (stitch), placenta abruption, placenta previa, abnormal vital signs, severe hemorrhage, prolapsed cord, hypotension, preeclampsia, breech, ectopic pregnancy

24 - A - 1	1st trimester hemorrhage or miscarriage	class 2
24 - Ω - 1	water broken (no contractions or presenting parts)	class 2

Protocol 25: Psychiatric/Abnormal Behavior/Suicide Attempt			**Approved IALS Dispatch**	**Additional Notes**
25 - D - 1	not alert	class 1		
25 - D - 2	dangerous hemorrhage	class 1		
25 - D - 3	near hanging, strangulation, or suffocation (alert with difficulty breathing)	class 1		
25 - B - 1	serious hemorrhage	class 2		
25 - B - 2	non-serious or minor hemorrhage	class 2		
25 - B - 3	threatening suicide	class 2		
25 - B - 4	jumper (threatening)	class 2		
25 - B - 5	near hanging, strangulation, or suffocation (alert without difficulty breathing)	class 2		
25 - B - 6	unknown status/other codes not applicable	class 2		
25 - A - 1	non-suicidal and alert	class 3		
25 - A - 2	suicidal (not threatening) and alert	class 3		

Protocol 26: Sick Person (Specific Diagnosis)			**Approved IALS Dispatch**	**Additional Notes**
26 - D - 1	not alert	class 1		
26 - C - 1	altered level of consciousness	class 1		
26 - C - 2	abnormal breathing	class 1		
26 - C - 3	sickle cell crisis/Thalassemia	class 1	IALS	
26 - C - 4	automatic dysreflexia/hyperreflexia	class 1		
26 - B - 1	unknown status/other codes not applicable	class 2		
26 - A - 1	no priority symptoms (compliant conditions 2-12 not identified)	class 3		
26 - A - 2-12	non-priority complaints	class 3		
26 - Ω - 2-28	non-priority complaints	class 3		

Protocol 27: Stab / Gunshot / Penetrating Trauma			**Approved IALS Dispatch**	**Additional Notes**
27 - D - 1	arrest	class 1		
27 - D - 2	unconscious	class 1		
27 - D - 3	not alert	class 1		
27 - D - 4	central wounds	class 1		
27 - D - 5	multiple wounds	class 1		
27 - D - 6	multiple victims	class 1		
27 - B - 1	non-recent (≥ 6 hrs) single central wound	class 2		
27 - B - 2	known single peripheral wound	class 2		
27 - B - 3	serious hemorrhage	class 1		
27 - B - 4	unknown status/other codes not applicable	class 2		
27 - B - 5	obvious death	class 3		
27 - A - 1	non-recent (≥ 6 hrs) peripheral wounds (without priority symptoms)	class 3		

Protocol 28: Stroke / Transient Ischemic Attack			**Approved IALS Dispatch**	**Additional Notes**
28 - C - 1	not alert	class 1		
28 - C - 2	abnormal breathing	class 1		
28 - C - 3	sudden speech problem	class 1	IALS	
28 - C - 4	sudden weakness or numbness (one side)	class 1	IALS	
28 - C - 5	sudden paralysis or facial droop (one side)	class 1	IALS	
28 - C - 6	sudden loss of balance or coordination	class 1	IALS	
28 - C - 7	sudden vision problems	class 1	IALS	
28 - C - 8	sudden onset of severe headache	class 1	IALS	

Card 26: Sick Person (Specific Diagnosis) Non-priority complaints (alpha-level): 26-A-2-12 2. blood pressure abnormality (asymptomatic), 3. dizziness/vertigo, 4. fever/chills, 5. general weakness, 6. nausea, 7. new onset of immobility, 8. other pain (non-omega-level), 9. transportation only, 10. unwell/ill, 11. vomiting, 12. possible meningitis

Non-Priority Complaints (omega-level): 26-Ω 2-28 2. boils, 3. bumps (non-traumatic), 4. can't sleep, 5. can't urinate (without abdominal pain) 6. catheter (urinary - in/out without hemorrhaging), 7. constipation, 8. cramps/spasms/joint pain (in extremities and non-traumatic), 9. cut-off ring request, 10. deafness, 11. defecation/diarrhea, 12. earache, 13. enema, 14. gout, 15. hemorrhoids/piles, 16. hepatitis, 17. hiccups, 18. itching, 19. nervous, 20. object stuck (nose, ear, vagina, rectum, penis), 21. object swallowed (without choking or difficulty breathing, can talk) 22. painful urination, 23. penis problems/pain, 24. rash/skin disorder (without difficultly breathing or swallowing, 25. sexually transmitted disease (STD), 26. sore throat (without difficulty breathing or swallowing), 27. toothache (without jaw pain), 28. wound infected (focal or surface)

28 - C - 9	stroke history	class 1	IAL	
28 - C - 10	TIA (mini-stroke history)	class 1	S	
28 - C - 11	breathing normally ≥ 35	class 1	IAL	
28 - C - 12	unknown status/other codes not applicable	class 1	S	
28 - A - 1	breathing normally < 35	class 1	IAL	
			S	
			IAL	
			S	
			IAL	
			S	

Protocol 29: **Traffic / Transportation Incidents**			**Approved IALS Dispatch**	**Additional Notes**
29 - D - 1	major incident (a through h)	class 1		
29 - D - 2	high mechanism (k through t)	class 1		
29 - D - 3	high velocity impact	class 1		
29 - D - 4	hazmat	class 1		
29 - D - 5	pinned (trapped) victim	class 1		
29 - D - 6	arrest	class 1		
29 - D - 7	unconscious	class 1		
29 - D - 8	not alert with noisy breathing (abnormal)	class 1		
29 - D - 9	not alert with normal breathing	class 1		
29 - B - 1	injuries	class 2		
29 - B - 2	serious hemorrhage	class 2		
29 - B - 3	other hazards	class 2		
29 - B - 4	low mechanism (1st or 2nd party caller)	class 3		
29 - B - 5	unknown status/other codes not applicable	class 2		
29 - A - 1	1st part caller with injury to not dangerous body area	class 3		
29 - A - 2	no injuries reported (unconfirmed or ≥ 5 persons involved)	class 3		
29 - Ω - 1	no injuries (confirmed for all persons up to 4)	no EMS response		

Card 29: Traffic/Transportation

(D-1) - major incident

a. aircraft, b. bus, c. subway/metro, d. train, e. watercraft, f. multi-vehicle (≥ 10) pile-up, g. street car/tram/light rail, h. vehicle vs. building

(D-2) - high mechanism

k. all-terrain/snowmobile, l. auto vs. bicycle/auto vs. motorcycle, m. auto vs. pedestrian, n. ejection, o. personal watercraft, p. rollovers, q. vehicle off bridge/height, r. possible death at scene, s. sinking vehicle/vehicle in floodwater, t. train/light rail vs. pedestrian

Protocol 30: **Traumatic Injuries (Specific)**			**Approved IALS Dispatch**	**Additional Notes**
30 - D - 1	arrest	class 1		
30 - D - 2	unconscious	class 1		
30 - D - 3	not alert	class 1		
30 - D - 4	chest or neck injury (with difficulty breathing)	class 1		
30 - D - 5	high velocity impact/mass injury	class 1		
30 - B - 1	possibly dangerous body area	class 2		
30 - B - 2	serious hemorrhage	class 2		
30 - B - 3	unknown body area (remote patient location)	class 2		
30 - A - 1	marker (*) not dangerous body area with deformity	class 3		
30 - A - 2	not dangerous body area	class 3		
30 - A - 3	non-recent (≥ 6 hrs) injuries (without priority symptoms)	class 3		

Protocol 31: **Unconscious / Fainting**			**Approved IALS Dispatch**	**Additional Notes**
31 - E - 1	ineffective breathing	class 1		
31 - D - 1	unconscious - agonal/ineffective breathing	class 1		
31 - D - 2	unconscious - effective breathing	class 1		
31 - D - 3	not alert	class 1		
31 - D - 4	changing color	class 1		
31 - C - 1	alert with abnormal breathing	class 1		
31 - C - 2	fainting episode(s) and alert ≥ 35 (with cardiac history)	class 1		
31 - C - 3	females 12-50 with abdominal pain	class 1		
31 - A - 1	fainting episode(s) and alert ≥ 35 (without cardiac history)	class 3		
31 - A - 2	fainting episode(s) and alert < 35 (with cardiac history)	class 2		
31 - A - 3	fainting episode(s) and alert < 35 (without cardiac history)	class 3		

Protocol 32: Unknown Problem					**Approved IALS Dispatch**	**Additional Notes**
32	- D -	1	life status questionable	class 1		
32	- B -	1	standing, sitting, moving, or talking	class 2		
32	- B -	2	medical alarm (alert) notifications (no patient information)	class 3		
32	- B -	3	unknown status/other codes not applicable	class 2		
32	- B -	4	caller's language not understood (no interpreter in center)	class 2		

Protocol 33: Transfer / Interfacility / Palliative Care					**Approved IALS Dispatch**	**Additional Notes**
33	- D -	1	suspected cardiac or respirator arrest	class 1		
33	- D -	2	just resuscitated and/or defibrillated (external)	class 1		
33	- C -	1	not alert (acute change)	class 1		
33	- C -	2	abnormal breathing (acute onset)	class 1		
33	- C -	3	significant hemorrhage	class 1		
33	- C -	4	shock	class 1		
33	- C -	5	possible acute heart problems or MI (heart attack)	class 1		
33	- C -	6	severe pain	class 1		
33	- C -	7	emergency response requested	class 1		
33	- A -	1	acuity I (no priority symptoms)	class 3		
33	- A -	2	acuity II (no priority symptoms)	class 3		
33	- A -	3	acuity III (no priority symptoms)	class 3		

*updated 12/21/2021

AEMT Scope of Practice Breakdown		
EMT	**AEMT**	**Paramedic**
Airway/Ventilation/Oxygenation		
	Airway - nonsurgical alternative/Rescue Airway (CombiTube, iGel, Supraglottic, King)	
Airway - oropharyngeal and nasopharyngeal		
*EMT may assist paramedic	Bag-valve - ETT/nonsurgical alternate airway ventilation	
*EMT may assist paramedic	Bag-valve ventilation - with in-line small-volume nebulizer	
Bag-valve-mask ventilation		
		Chest decompression - needle
		Chest tube thoracostomy, monitoring of existing tube in open system (i.e. vented, Hemlich valve)
*EMT if EMS agency is approved by medical director to use program	Continuous positive airway pressure (CPAP)	
		Biphasic positive airway pressure (BiPAP) for patients chronically on BiPAP for >48 hours
		Cricothyrotomy - needle
		Cricothyrotomy - open/surgical
		Cricothyrotomy - overwire (Seldinger) technique
	End tidal CO_2 monitoring/capnography	
		Extubation - removal of ETT
		Gastric decompressions - orogastric or nasogastric tube insertion

EMT	AEMT	Paramedic
Airway/Ventilation/Oxygenation (continued)		
	Gastric decompression by alternatives/rescue airway (CombiTube or King)	
Head-tilt/chin lift		
	*AEMT if EMS agency is approved by medical director to use program	Inspiratory Impedance Threshold Device (ITD)
		Endotracheal Intubation - by direct laryngoscopy (including video intubation devices), nasotracheal, digital and transillumination/ lighted stylet techniques
Mouth-to-mouth, nose, stoma, barrier and pocket mask		
		Obstruction - direct laryngoscopy (remove with forceps)
Obstruction - manual (abdominal thrusts, finger sweep, chest thrusts) upper airway		
Oxygen therapy - blow-by delivery		
Oxygen therapy - humidifiers		
Oxygen therapy - nasal cannula		
Oxygen therapy - nonrebreather		
Oxygen therapy - partial rebreather		
Oxygen therapy - regulators		
Oxygen therapy - simple face mask		
Oxygen therapy - venturi mask		
	Peal expiratory flow assessment	
		Suctioning - meconium aspiration

EMT	AEMT	Paramedic
Airway/Ventilation/Oxygenation (continued)		
Suctioning - stoma/tracheostomy		
*EMT may assist paramedic	Suctioning - tracheobronchial by advanced airway	
Suctioning - upper airway (nasal)		
Suctioning - upper airway (oral)		
		Transtracheal jet ventilation
	Single mode, volume controlled automated ventilator (without blender) *AEMT and paramedic if EMS agency is approved by medical director to use program	
		Ventilators, transport - single or multi-modal, with or without blender, using volume control mode only, on patients >1 year of age with no anticipated need to actively titrate ventilator settings during transport
Cardiovascular/Circulation		
Blood pressure - auscultation		
Blood pressure - electronic noninvasive		
Blood pressure - palpation		
*EMT may assist paramedic	*AEMT may assist paramedic	Electrocardiogram (ECG) monitoring - apply electrodes for single leads
Electrocardiogram (ECG) monitoring - obtain and transmit 12-lead ECG		
		Electrocardiogram (ECG) monitoring - 12-lead (interpret)

EMT	AEMT	Paramedic
Cardiovascular/Circulation (continued)		
		Cardiac monitoring - single lead (interpret)
Manual chest compressions - adult, child, infant		
		Cardioversion - synchronized
		Defibrillation - counter shock - manual
		Transcutaneous cardiac pacing
Defibrillation - automated external defibrillator (AED)		
Mechanical chest compression device *EMT, AEMT, and paramedic if EMS agency is approved by medical director to use program		
IV Initiation / Maintenance / Fluids		
		Central venous line - access of existing catheters with external ports
		External jugular vein cannulation
	Saline lock insertions as no-flow IV	
	Intraosseous - needle placement and infusion - tibia, femur and humerus	
	IV insertion, peripheral venous - initiation (cannulation)	
	Venous blood sampling, peripheral - for clinical diagnostic purposes only	
		Venous blood sampling, peripheral - for legal purposes only
Arterial line - capped - transport		

EMT	AEMT	Paramedic
Lifting and Moving		
Patient lifting, moving and transfers		
Patient restraints on transport devices		
Medication Administration Routes		
Inhalation (aerosolized/nebulized)		
	Intramuscular (IM)	
	Intranasal (IN)	
	Intraosseous (IO) - tibia, humerus or femur	
	Intravenous (IV) - fluid bolus	
	Intravenous (IV) - monitoring or maintaining existing intravenous infusion (crystalloid fluid) during interfacility transport	
		Intravenous (IV) infusion, with added medication, including by intravenous pump
		Nasogastric
Oral - over-the-counter medications for pain, fever, and hypoglycemia (as listed in the approved medications)		
		Rectal
	Subcutaneous	
*EMT may only assist patient with his/her prescribed nitroglycerin	Sublingual (EMT - only patient assisted Nitro)	
		Topical
		Auto-injector benzodiazepine for seizure

EMT	AEMT	Paramedic
Medication Administration Routes (continued)		
Auto-injector epinephrine (assist patient with prescribed medication)		
*EMT if EMS agency is approved by medical director to use program	Auto-injector epinephrine - primary use - not patient's own prescription	
Medications as published in PA Bulletin by Department		
		Immunizations as published in PA Bulletin by Department
Oxygen		
Auto-injector nerve agent antidote - self or peer rescue		
*EMT may only perform skill when under direct supervision of paramedic or higher	*AEMT may only perform skill when under direct supervision of paramedic or higher	Auto-injector nerve agent antidote - patient treatment
*EMT may only assist patient with his/her prescribed medication	Metered-dose inhaler (MDI) bronchodilator	
*EMT if EMS agency is approved by medical director to use program	Naloxone - intranasal or auto-injector	
*EMT if EMS agency is approved by medical director to use program	Glucagon - intranasal (powder spray) or intramuscular auto-injector	
Patient Assessment / Management		
Behavioral - restrain violent patient		
*EMT if EMS agency is approved by medical director to use program	Blood glucose assessment	
Childbirth - umbilical cord cutting		
Childbirth (abnormal/complications)		

EMT	AEMT	Paramedic
Patient Assessment / Management		
Childbirth (normal) - cephalic delivery		
Carbon Monoxide CO - oximetry monitoring *EMT, AEMT, and paramedic if EMS agency is approved by medical director to use program		
Carbon Monoxide CO - exhaled analysis device *EMT, AEMT, and paramedic if EMS agency is approved by medical director to use program		
Carbon Monoxide monitoring, with environmental surveillance devices		
Eye irrigation		
Patient management per Statewide EMS Protocols and Department approved protocols		
Pulse oximetry monitoring		
Splinting, extremity - manual, rigid, soft, vacuum		
Splinting, femur - traction		
Wound care, dressing, bandaging		
Wound drainage vacuum devices, monitoring		
Wound care, hemorrhage control - direct pressure, tourniquet, bandaging, hemostatic agents		
Spine Care		
Restrict spinal motion - cervical collar application		
Restrict spinal motion - helmet removal or stabilization		
Restrict spinal motion - manual cervical spine stabilization		
Restrict spinal motion - rapid extrication with precautions to restrict spinal movement		
Devices to restrict spinal motion - vacuum mattress, extrication devices, scoop stretcher and spine board		

**inhaler - need to include agency approved by medical director*

*updated 10/24/2021

Approved Medications			
Required Medications	**EMT**	**AEMT**	**Paramedic**
Adenosine			yes
Aspirin	yes	yes	yes
Atropine			yes
Benzodiazepine (diazepam, lorazepam, midazolam - min 1)			yes
Bronchodilators (albuterol or albuterol with ipratropium bromide - min 1)		yes	yes
Dextrose (between 10%-50%)		yes	yes
Diphenhydramine HCl			yes
Epinephrine 1 mg/mL (IALS may carry auto-injector)		yes *IM only	yes
Epinephrine 0.1 mg/mL concentration			yes
Epinephrine autoinjector adult and pediatric doses	if approved		
Etomidate			if approved
Glucose, oral	yes	yes	yes
Lidocaine			yes
Naloxone	yes	yes	yes
Narcotic analgesic (fentanyl, morphine - min 1)			yes
Nitroglycerine, sublingual		yes	yes
Normal saline solution (0.9% NaCl)		yes	yes
Oxygen	yes	yes	yes
Sodium bicarbonate			yes

*updated 10/24/2021

Permitted Medications	**EMT**	**AEMT**	**Paramedic**
Abciximab (interfacility)			yes
Acetaminophen	yes	yes	yes
Acetylcysteine (interfacility)			yes
Activated Charcoal	yes	yes	yes
Adenosine			yes
Albuterol (nebulizer solution)	yes	yes	yes
Albuterol with ipratropium bromide (nebulizer solution)	yes	yes	yes
Amiodarone			yes
Antimicrobials: all types			yes
Aspirin, oral	yes	yes	yes
Atropine sulfate			yes
Benzocaine, topical			yes
Bivalirudin (interfacility)			yes
Bronchodilators (MDIs)	yes	yes	yes
Calcium chloride/calcium gluconate			yes
Captopril			yes
Crystalloid isotonic solutions (i.e. lactated ringers)			yes
Crystalloid solutions with potassium (interfacility)			yes
Dexamethasone sodium phosphate			yes

Dextrose (10-50%)		yes	yes
Diazepam			yes
Diltiazem			yes

Diphenhydramine HCL		yes	yes
Dobutamine			yes
Dopamine			yes
Droperidol			yes
EMLA cream			yes
Enalapril			yes
Epinephrine HCl 1 mg/mL		yes *IM only	yes
Epinephrine HCl 0.1 mg/mL for IV infusion			yes
Epinephrine HCl 0.1 mg/mL for cardiac arrest		yes	n/a
Epinephrine HCl auto-injector (patient's prescribed med)	yes	yes	yes
Epinephrine HCl auto-injector (adult and peds)	if approved	yes	yes
Epinephrine HCl, including racemic (by nebulizer)		yes	yes
Eptifibatide (interfacility)			yes
Etomidate			if approved
Fentanyl			yes
Furosemide			yes
Glucagon		yes	yes
Glucagon intranasal (nasal powder spray)	if approved	yes	yes
Glucose, oral	yes	yes	yes
Heparin (IV infusion - interfacility)			yes
Hydrocortisone sodium succinate			yes
Hydromorphone (interfacility)			yes
Hydroxocobalamin			yes
Ibuprofen	yes	yes	yes
Immunizations			if approved
Isoproterenol HCl (interfacility)			yes
Permitted Medications (continued)	**EMT**	**AEMT**	**Paramedic**
Ketamine			if approved
Ketorolac		yes	yes
Levalbuterol (interfacility)			yes
Levetiracetam			yes
Lidocaine HCl			yes
Lorazepam			yes
Magnesium sulfate			yes
Methylprednisolone			yes
Midazolam			yes
Milrinone (interfacility)			yes
Morphine sulfate			yes
Naloxone		yes	yes
Naloxone - auto-injector, IN or IM	yes	yes	yes
Nerve agent antidote kit, auto-injector	if with ALS	if with ALS	yes
Nitroglycerin - IV and topical			yes
Nitroglycerin - sublingual		yes	yes

Nitroglycerin - sublingual (patient's prescription)	yes	yes	yes
Nitrous oxide		yes	yes
Norepinephrine			yes
Normal saline solution (0.9% NaCl)		yes	yes
Ondansetron		yes	yes
Oxygen	yes	yes	yes

Oxytocin			yes
Pantoprazole (interfacility)			yes
Phenylephrine (interfacility)			yes
Pralidoxime			yes
Procainamide			yes
Sodium bicarbonate			yes
Sodium thiosulfate			yes
Sterile water for injection			yes
Terbutaline			yes
Tetracaine, topical		yes	yes
Tirofiban			if approved
Total Parenteral Nutrition (interfacility)			yes
Tranexamic Acid (interfacility)			yes
Verapamil			yes

*updated 10/24/2021

AEMT Protocols for Treatment of the Patient			
Number	**Title**	**Skill Difference from EMTs**	**Skill Difference from Paramedics**
1000i	General	Optional treatments/medications: some protocols or treatments are optional or if available, regions or agencies may choose to use an optional protocol or treatment/medication. EMS agency medical directors may set requirements.	Optional treatments/medications: some protocols or treatments are optional or if available, regions or agencies may choose to use an optional protocol or treatment/medication. Regions may set requirements. EMS agency medical directors may set requirements.
		Optional medications: optional medications are not required on every IALS vehicle or of every AEMT provider. Any optional medications may be carried on an IALS vehicle at the discretion of the EMS agency medical director.	Optional medications: optional medications are not required on every ALS vehicle or of every EMS provider. EMS regions may choose to require the use of some optional medications. EMS agency medical director may require medications.
		IV fluids: crystalloid isotonic solutions including but not limited to: Isolyte, Lactated Ringers, Normosol, Saline (NaCl) listed as permitted in protocols but listed as no on approved medication list 2021	
		Medications: use of IV epinephrine is restricted to cardiac arrests only	Medications: IV epinephrine is used in other protocols
		Medications: epinephrine 0.1 g/ml concentration, optional to carry	Medications: epinephrine 0.1 g/ml concentration, required
		Medications: diphenhydramine HCL, optional to carry	Medications: diphenhydramine HCL, required

		Medications: ondansetron, optional to carry	Medications: ondansetron, optional to carry

Number	Title	Skill Difference from EMTs	Skill Difference from Paramedics
1000i	General (continued)	IV access: may initiate IV when included in treatment protocols	IV access: may initiate IV based on treatment protocols or provider judgement
		IV access: may initiate IO when included in treatment protocols	IV access: may initiate IO based on treatment protocols or provider judgement
		Release to BLS: no protocol - AEMT is generally expected to accompany patient during transport or contact medical command	Release to BLS: protocol available
		ALS dispatch: ALS vehicle should be dispatched to patients needing care exceeding the level of the EMT	
2010i	Indications for ALS Use	Altered level consciousness (except apparent hypoglycemia or opioid overdose that may be managed by IALS)	
		Diabetic problems (except ALOC from apparent hypoglycemia that may be managed by IALS)	
2032i	Confirmation of Airway Placement	Alternative airway (king or gel)	Endotracheal intubation
			Manual defibrillation
		IV/IO access	

3031iA	General Cardiac Arrest - Adult	Epinephrine (0.1 mg/ml) - (if available/optional)	Epinephrine (0.1 mg/ml) every 3-5 minutes
		Alternative airway (king or gel)	Endotracheal intubation

Number	Title	Skill Difference from EMTs	Skill Difference from Paramedics
3031iA	General Cardiac Arrest - Adult (continued)	Monitor capnography	
			Apply ITD, optional
		Obtain and transmit ECG (optional for BLS)	Interpret and monitor ECG
			Recurrent VF/VT: amiodarone (if available) or lidocaine / if torsade then magnesium sulfate (if available)
			Hyperkalemia or tricyclic antidepressant overdose: sodium bicarbonate
			Hyperkalemia in dialysis patient or PEA with wide QRS complex: Calcium Chloride (if available) or sodium bicarbonate
			Hypovolemia - 2 liters NSS
			Tension pneumothorax - needle decompression
3031iP	General Cardiac Arrest - Pediatric	Call ALS if not already dispatched	
			Manual defibrillation
		IV/IO access	
		Epinephrine (0.1 mg/ml) - (if available/optional)	Epinephrine (0.1 mg/ml) every 3-5 minutes

		Alternative airway (king or gel)	Endotracheal intubation
		Monitor capnography	
			Monitor ECG

Number	Title	Skill Difference from EMTs	Skill Difference from Paramedics
3031iP	General Cardiac Arrest - Pediatric (continued)		Recurrent VF/VT: amiodarone (if available) or lidocaine / if torsade then magnesium sulfate (if available)
			Hyperkalemia or tricyclic antidepressant overdose: sodium bicarbonate
			Hyperkalemia in dialysis patient or PEA with wide QRS complex: Calcium Chloride (if available) or sodium bicarbonate
			Hypovolemia - 2 liters NSS
			Tension pneumothorax - needle decompression
3032i	General Cardiac Arrest - Traumatic		Manual defibrillation
		IV/IO access	
		IV/IO NSS	
		Epinephrine (0.1 mg/ml) - (if available/optional)	Epinephrine (0.1 mg/ml) every 3-5 minutes
		Alternate airway (king or gel)	Endotracheal intubation
		Monitor capnography	
			Monitor ECG

			Tension pneumothorax - needle decompression
No Protocol	Newborn Resuscitation	No Protocol for AEMT	

Number	Title	Skill Difference from EMTs	Skill Difference from Paramedics
3035i	General Cardiac Arrest (Hypothermia)	If temperature is 86-93.2 degrees - epinephrine (0.1 mg/ml) - (if available/optional)	Epinephrine (0.1 mg/ml) every 3-5 minutes
		IV/IO access	
		IV/IO NSS	
			Monitor ECG
			Follow cardiac arrest protocol for other medications/treatments
No Protocol	Post-Resuscitation Care	No Protocol for AEMT	
No Protocol	Termination of Resuscitation	No Protocol for AEMT	
4001i	Airway Management	Alternative airway (king or gel)	Endotracheal intubation
			Drug facilitated endotracheal intubation (if approved)
			Surgical airway (if available) (transtacheal jet insufflation or cricothyrotomy)
		Monitor capnography	
4011i	Allergic Reaction		Monitor ECG
		BP >90 systolic: IV access	
		BP >90 systolic: IV NSS - moderate reactions	
		BP >90 systolic: oral diphenhydramine (if available)	BP >90 systolic:diphenhydramine 50 mg IV/IM/PO

Number	Title	Skill Difference from EMTs	Skill Difference from Paramedics
4011i	Allergic Reaction (continued)	BP <90 systolic: epinephrine 1mg/mL (IM)	
		BP <90 systolic: IV/IO access	
		BP <90 systolic: IV/IO NSS	
		BP <90 systolic: diphenhydramine 50 mg IV/IO (if available)	BP <90 systolic: diphenhydramine 50 mg IV/IO
		BP <90 systolic and wheezing: bronchodilators (BLS optional)	
			Methylprednisolone (if available)
4022i	Asthma, COPD, Bronchospasm	Bronchodilators (BLS optional)	
		Severe: CPAP / BiPAP - BiPAP not permitted in AEMT or paramedic scope	
		Severe: IV/IO access	
		Severe: IV/IO NSS	
			Severe: monitor ECG
			Methylprednisolone (if available)
		Epinephrine 1mg/mL (IM) *medical command	Epinephrine 1mg/mL (IM) *medical command
			Consider endotracheal intubation
4023iP	Croup/Stridor/Upper Airway Disease - Pediatric	Bronchodilators (BLS optional)	
		Severe: nebulized epinephrine 1mg/ml	
		Severe: nebulized racemic epinephrine (if available)	

Number	Title	Skill Difference from EMTs	Skill Difference from Paramedics
5001i	Suspected Acute Coronary Syndrome	IV access	
		IV NSS	
		Obtain and transmit 12-lead ECG (BLS optional)	Monitor ECG
		Nitroglycerin (repeat up to 3 doses)	Nitroglycerin (repeat as needed)
			Recognize unstable tachycardia/bradycardia and proceed to dysrhythmia protocol
			Pain management with narcotics: fentanyl or morphine
No Protocol	Congestive Heart Failure	No Protocol for AEMT	
No Protocol	Bradycardia - Adult	No Protocol for AEMT	
No Protocol	Narrow Complex Tachycardia - Adult	No Protocol for AEMT	
No Protocol	Wide Complex Tachycardia - Adult	No Protocol for AEMT	
No Protocol	Ventricular Assist Device (VAD) Management	No Protocol for AEMT	
6002i	Multisystem Trauma or Traumatic Shock	No reference to traumatic brain injury (TBI) protocol	
		IV/IO access - 2 large-bore IV or single IO	
		IV/IO NSS	
			Monitor ECG

Number	Title	Skill Difference from EMTs	Skill Difference from Paramedics
6003i	Musculoskeletal Trauma	Mild to moderate pain with no contraindication for oral medications: acetaminophen, aspirin, or ibuprofen	
		Moderate to severe pain or nausea or contraindication for oral medications: IV/IO access	
		Moderate to severe pain or nausea or contraindication for oral medications: IV/IO NSS	
		Moderate to severe pain or nausea or contraindication for oral medications: if nausea, ondansetron (if available)	
		Moderate to severe pain or nausea or contraindication for oral medications: nitrous oxide (if available)	
			Moderate to severe pain: narcotic pain management - fentanyl or morphine
			Moderate to severe pain: ketorolac (if available)
			Moderate to severe pain: ketamine (if approved)
6004i	Crush Syndrome		Monitor ECG
		IV/IO access	
		IV/IO NSS	
		Before extrication: 2nd IV/IO	

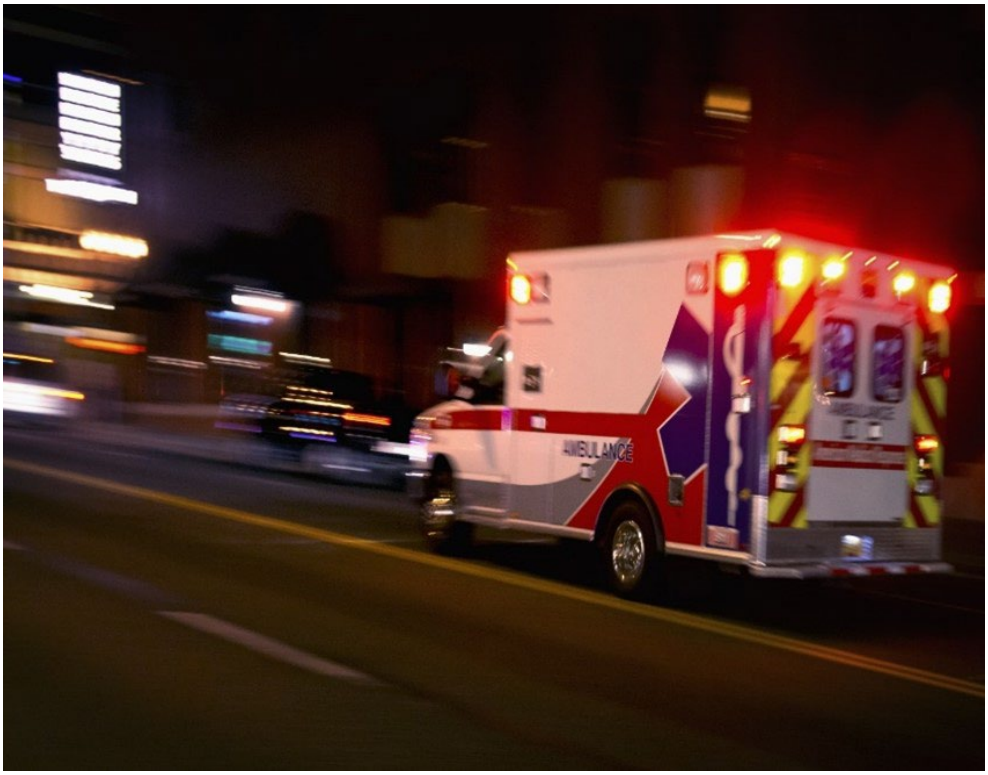
Number	Title	Skill Difference from EMTs	Skill Difference from Paramedics
6004i	Crush Syndrome (continued)		Before extrication: administer pain management
			Immediately prior to extrication: sodium bicarbonate
			Immediately prior to extrication: if hyperkalemia, calcium chloride (if available)
		If hypotension or entrapped >1 hour, NSS bolus	
		After extrication: IV NSS wide open	
			After extrication: if QRS widens, sodium bicarbonate and calcium chloride (if available)
No Protocol	Head Injury / Traumatic Brain Injury	No Protocol for AEMT	
6071i	Burns		Monitor ECG
		IV/IO access, if indicated	
		IV/IO NSS, if indicated	
		Nitrous oxide, if indicated (if available)	
			pain management with narcotics: fentanyl or morphine or nitrous oxide (if available) or ketamine (if approved)
No Protocol	Hypothermia / Cold injury / Frostbite	No Protocol for AEMT	

Number	Title	Skill Difference from EMTs	Skill Difference from Paramedics
7002iA	Altered Level Consciousness - Adult		Monitor ECG
			Draw blood (if required by agency)
		If opiate overdose: naloxone 2 mg IN/IM/IV/IO (BLS optional)	If opiate overdose: naloxone 0.4 mg IV/IO or 2 mg IM or 2-4 mg IN
		Check glucose with glucometer (BLS optional)	
		If glucose <60 mg/dl: IV access	
		If glucose <60 mg/dl: IV NSS	
		If glucose <60 mg/dl: 10% dextrose 25g IV or glucagon 1 mg IM or IN (if available)	
7002iP	Altered Level Consciousness Pediatric		Monitor ECG
			Draw blood (if required by agency)
		If opiate overdose: naloxone IM, IN, IV, IO per pediatric dose chart	If opiate overdose: naloxone 0.1 mg IV/IO /IM/IN
		If glucose <60 mg/dl: IV access	
		If glucose <60 mg/dl: IV NSS	
		If glucose <60 mg/dl: 10% dextrose based on pediatric dose chart or glucagon based on pediatric dose chart IM or IN (if available)	If glucose <60 mg/dl: 10% dextrose 5 ml/kg IV/IO or glucagon IM or IN (if available)
7003i	Non-Traumatic Pain Management	No contraindication for oral medications: acetaminophen, aspirin, or ibuprofen	
		Nausea or contraindication for oral medications: IV/IO access	

Number	Title	Skill Difference from EMTs	Skill Difference from Paramedics
7003i	Non-Traumatic Pain Management (continued)	Nausea or contraindication for oral medications: IV/IO NSS	
		Nausea or contraindication for oral medications: if nausea, ondansetron (if available)	
		Nausea or contraindication for oral medications: nitrous oxide (if available)	
			Nausea or contraindication for oral medications: nonopioid analgesic medication: ketorolac (if available), ketamine (if approved)
7005i	Shock/Sepsis		Monitor ECG
			Serious dysrhythmia, see appropriate protocol
		IV/IO access	
		IV/IO NSS rapid	
			Adult: epinephrine push dose (diluted) 10-20 mcg boluses or infusion
			Adult: Dopamine drip (if available)
			Pediatric: history of congenital adrenal hyperplasia or daily steroid use, give hydrocortisone (if available)
			Pediatric: dopamine drip (if available)
7006i	Stroke		Monitor ECG
		Check blood glucose (BLS optional)	
		IV access	
		IV NSS	
		Consider drawing labs	

Number	Title	Skill Difference from EMTs	Skill Difference from Paramedics
No Protocol	Seizure	No Protocol for AEMT	
7010i	Nausea/Vomiting	IV access	
		IV NSS	
		Check blood glucose (BLS optional)	
		Consider drawing labs	
			Sniff alcohol prep
		Ondansetron (if available)	
			Doperidol (if available)
			Benzodiazepines: midazolam, diazepam, lorazepam
7087i	Post-Partum Hemorrhage	IV/IO access	
		IV/IO NSS	
			Monitor ECG
			Oxytocin IV infusion (if available)
No Protocol	Agitated Behavior / Psychiatric Disorders	No Protocol for AEMT	
No Protocol	Poisoning/Toxin Exposure	No Protocol for AEMT	
9001i	Medical Command		

*updated on 10/25/2021



January 2023 | Toolkit and Recommendations

TOOL #21

DELIVERY METHODS: REGIONALIZATION

EMS Tool Kit		Applicability:
Focus Group:	Delivery Methods	R: Rural / S: Suburban/ U:Urban P:Paid / V:Volunteer
Area:	Regionalization	R-S-U/V-P
Type:	Model Programs/Best Practices	

Introduction:

As local resources for manpower and services diminish, discussions on regionalization may take place. If this is an avenue that is pursued, county representatives should have significant conversations with those municipalities and agencies within the suggested regionalization area. It should be cautioned that a regionalization project requires time and may need to be put on the ballot within the affected municipalities.

Discussion:

Regionalization vs consolidation:

- Consolidation involves two or more smaller agencies merging to form a single, larger agency.
- Regionalization involves two or more smaller agencies working cooperatively under an inclusive, unified approach.
- By taking several small EMS agencies and regionalizing them into one larger service, staffing and call volumes could be monitored to address shortages for units and personnel.
- Regionalization does not only apply to stations and response services, but it could also address billing for services, and ordering of supplies and equipment.
- Items for discussion between municipalities and EMS agencies when considering regionalization.
    - Funding sources
    - Policies
    - Administration
    - Protocols
    - Staffing
- Benefits of regionalization
    - Cooperative purchasing
    - Larger staff pool
    - Combined resources (both personnel and equipment)
    - Efficient resource assignment
    - Supports responder competencies
    - Creates a work environment more attractive to responder opportunity

Both urban and rural areas can share resources. Regionalization can also improve paramedic

competencies and be used to avoid burnout by moving them between busy and non-busy areas under a joint deployment model. When all agencies under the regionalized model speak with the same voice, greater influence can be attained.

Example Program: Northern Lycoming Regional EMS

Northern Lycoming Regional EMS is a partnership formed by Hepburn, Lewis, Lycoming, and McIntyre Townships in Lycoming County to ensure the three volunteer fire companies which serve those municipalities, Hepburn, Trout Run and Ralston, share responsibility and full-time paid staff to respond to emergency calls in their coverage area. Northern Lycoming Regional EMS is one of the first regional EMS partnerships in Pennsylvania to be initiated and funded directly by municipalities, not just volunteer emergency services agencies.

In addition to each municipality contributing $30,000 to form the partnership, they were able to secure a $40,000 donation from EQT and $100,000 from the Lycoming County Commissioners. Eventually, they plan to have billings make up a majority of their operating budget.

Authority Model

Senate Bill 698 of 2021 would have allowed counties and municipalities to create authorities for the purpose of public safety, and allow that authority to fix, alter, charge and collect rates and other services that the authority provides. This would be similar to municipal authorities, housing authorities, transit authorities, etc. An authority would allow EMS agencies to retain their autonomy, while providing funding and structure support.

Recommendations:

Municipalities and Counties

- Counties and Municipalities could act as a moderator to facilitate the discussions between EMS agencies and municipalities.
- A mechanism for continued discussions between municipalities and agencies could be created and fostered.
- Counties and Municipalities could consider contributing funds to the start-up of regional EMS services.
- Regionalization should be inclusive of all EMS agencies, exploring and utilizing the best practices of each service to benefit patient outcome.