



EMS Focus Webinar FAQ – EMS and 911 Experts Unite to Improve CPR

September 26, 2018

The following answers are provided by:

- Petar Hossick, EMS Training Officer, Bend Fire Department, Oregon
- Megan Craig, Training Manager, Deschutes County 911, Bend, Oregon

1. How do you get the public to buy into bystander CPR?

Petar: Great national question. We offer a 1 hour, free to public, hands-only CPR at the fire station. This occurs once a month and attendance will flux based on media coverage or marketing. We also work with the schools to train high school and junior high students in hands-only CPR. In Oregon it is a graduation requirement.

Megan: We have found that if our assumption is they will do CPR when they call us, they will often comply.

2. We have found that many bystanders do not want to do CPR because they believe they have to do mouth-to-mouth. Was there any public education in Oregon to help the community to understand that they can make a difference with hands-only CPR?

Petar: A number of studies have found that people are more willing to do compression-only and hands-only. The fire department offers a 1-hour, free to public, hands-only CPR class. We also emphasize in all our trainings with the public that if they cannot remember the ratios, to just press on the chest at about 110 compressions a minute and do not stop till relieved or the AED advises to stop.

Megan: Our protocol starts with 600 compressions first before we get to mouth-to-mouth for most cases, so it does not happen often. If it is a respiratory arrest situation, where our protocol has us give two breaths before compressions, and the caller refuses, we just move right into compressions.

3. How do you change the culture so dispatchers believe their actions matter?

Petar: This was the hardest thing to address. Both of our organizations believed that people did not survive cardiac arrest and we saved maybe 1 person a year. That thought

contaminated both EMS and dispatch and became a self-fulfilling prophecy. It took meeting survivors to start to turn the culture and challenge that belief. Also, it was helpful to have data showing an improvement in survival rates.

The ongoing celebrations have been a huge tool to help reinforce we are saving people many times a year. Holding a survivor event at the end of the year is still good but the constant reinforcement seemed to help hasten the cultural change.

Megan: I agree with Petar, this was a challenge. Celebrating survivors and infusing the culture with the reminder that what we do on the phone and on scene MATTERS. We can all experience compassion fatigue in this line of work and taking the time to understand where the call takers are coming from and providing support and training around their concerns is important. When Petar took the time to come in and show us the science behind CPR and tell us that we were the vital link, it made a difference. It is also important to provide ongoing support and recognize when small changes are happening. One of our floor supervisors recently said, "I am of the belief that much of the power in a system lies within the individuals themselves. Leading by example is the best way to help shift a systematic culture issue. A single individual's consistent great effort can impact the call in progress itself for the good, but the bigger picture is its effect on those working around that individual."

The following answers are provided by **Petar Hossick**, EMS Training Captain, Bend Fire Department, Oregon

1. How do you set up reunion celebrations?

Usually about 2 months after an event, we attempt to contact the survivor and see if they are interested. We try to get a press release but do not require them. The press release allows us to promote citizen CPR. Most of the time they invite friends and family of survivor and of the CPR provider. We also make sure to add the dispatcher and any law enforcement who helped with resuscitation.

2. Did you do a single annual survivor celebration? Or survivor celebrations throughout the year? How did you engage local media to cover these celebrations?

We hold them throughout the year usually 2 months after an event. We offer the survivors the option to sign a media release but that does not prevent holding a survivor event. We mainly use media to promote citizen CPR and the Pulsepoint app.

3. What measurement of success have you had so far in Bend?

We use the CARES networks to measure the Utstein survival number, which is a global standard. The Utstein survival is the following; cardiac caused witnessed arrest with the

primary rhythm being shockable. We also watch overall cardiac arrest survival of any call presumed to be of cardiac origin. Bend's survival rate for 2017 was 54.5% Utstein (this is the follow up to the 20% number) and overall of 20.4%.

4. Is there an ultimate survival rate goal to aim for, and does the survival rate include release from the hospital?

Some of the highest performing agencies in the country like Seattle reach witnessed arrest survival rates of 60+% year after year. Minnesota and Arizona also have high save rates. All survival rates only include patients released from hospital alive, which is part of the Utstein Abbey agreement to ensure health professionals are using the same parameters.

5. What is your volume of cardiac arrests per year?

We average 55 episodes per year of cardiac origin.

6. How much did it cost to implement this program, whose permission did you have to get, and how did the two agencies establish/organize your ongoing collaboration?

The cost was mostly in time spent. Based on Bend's volume, I averaged 5-7 hours a month, which includes data input into CARES and feedback from defibrillator data to crews. For permissions, I got clearance from my EMS Division Chief. The collaboration between the two agencies grew organically, and we established our needs with our superiors. It was not questioned when we asked to meet once a month to review calls or to meet with dispatchers.

The following answers are provided by **Megan Craig**, Training Manager, Deschutes County 911, Bend, Oregon

1. How are the 911 EMD (emergency medical dispatch) providers changing their protocols to better support this program?

Deschutes 911 uses the MPDS system through International Academy of Emergency Dispatch (IAED). They created a "Fast Track" so that when an unconscious person that was not breathing for a non-traumatic event was identified at the start of the call, one would begin CPR instructions quickly.

2. Does the MPDS Fast Track play into an EMD's faster hands on instructions?

Yes, when it is recognized early Fast Track is an excellent tool.

3. How do you delineate between end of life cardiac arrest and sudden cardiac arrest in the 911 center?

Unless the patient indicates they are a Hospice patient at the end of life, our assumption is we will start CPR and give those instructions. If the caller declines and states it was an expected death, we will course correct at that time but the initial assumption is that CPR will be done.

4. Can you define what you mean by “timely” feedback? Same week? And in what form? One to one discussion? Electronically?

We strive to have feedback within two weeks of the call for our random Q. We send most of it electronically but also have discussions with people. Some of the best learning happens on the dispatch floor talking about different calls as a group when it is slow.

5. Who provides the feedback? Medical director? Peer navigator?

When we first started and the program was new, it was important to have one on one contact when giving out the Q to make sure that people understood the process. We’ve recently moved to providing feedback electronically and either a floor supervisor or myself will meet with the dispatchers if needed. Our call takers are able to listen to the call if they would like. We are fortunate to have Petar who will touch base about calls and answer questions that are out of my scope. Our Physician Advisor also listens to a few calls and will talk to the call taker or write them a note about how they handled something.

6. Does 911 and field response discuss the collaborative effort – what each can do to improve the process?

Yes. It is a program that needs ongoing care to stay successful.

7. Do you recognize dispatchers whose patients make it out of the field and into the ED even if the patient ends up not making it?

We will provide feedback on the call. Sometimes it will be written but more often Petar and/or I will touch base with the call taker in person, let them know the rest of the story and give them feedback on the call. It is important to recognize although we may not end up with a save, if we did our job well, we gave that person every chance of surviving that we could.
