In agencies around the world, a not-so-new type of training is taking place: Emergency Medical Dispatch (EMD). For some agencies, this is painfully new, and in others it’s old hat. The reasons I bring up EMD is because without EMD it’s hard to recognize respiratory distress.

RESPIRATORY DISTRESS IN INFANTS & CHILDREN

Before we can recognize respiratory distress, we must first know what it sounds and looks like and how patients act when they are in true respiratory distress. We’re going to start with infants, mainly because infant calls are among the toughest for calltakers and telecommunicators who perform EMD. It’s at that moment when a mother or father calls 9-1-1 for help because their eight-day-old baby is not breathing and turning blue.

With infants, many things can cause respiratory distress—infections, chronic illness or a blocked airway. When an infant is blue around the mouth, nose or nail beds, they are not getting enough oxygen and are in respiratory distress. This can also be a result of a premature birth when the child is small and the lungs are not fully developed.

When calling 9-1-1 for an infant or child who is not breathing, the parents, grandparents or caregiver will likely be frantic. This is where the EMD must take control of the call and walk the caller through rescue breathing and infant CPR. If the child is not breathing, nothing else matters—you must get that child breathing or someone will die for them. The telecommunicator plays a vital role in the resuscitation of the child.

There are certain signs to look for when it comes to infant/child respiratory distress. For example, a responding ambulance needs to be dispatched if the caller advises that the child has any type of nasal flaring. The body will create this effect to draw in more air.

Another sign to look for will be noisy breathing. When a child is experiencing respiratory distress, they will make sounds while breathing such as grunting, wheezing or as if they have mucus in their throat. Another sign is an increased breathing rate. The normal breathing rate for an infant is 20–30 breaths per minute and 30–50 breaths per minute for a newborn. Anything above these rates is considered increased.

Unfortunately, when a child is in respiratory distress, cardiac arrest can quickly occur.1–4

A child in respiratory distress may also exhibit retractions, which is when the child’s chest pulls in with every breath. The collarbone and ribs will show. The child may assume a tripod position to ease their breathing. They will sit with their knees opened in order to get more air in.

There are medical reasons why children have respiratory distress, and we must ask certain questions to help identify the underlying cause. Example: Can you tell me if the child has any other health problems? How long has the child been exhibiting these symptoms? Has the child taken any new medications and, if so, how long ago? Some of the medical reasons for respiratory distress are infection, asthma, anaphylaxis, choking on a small toy, choking on a small object, obstructed airway, asthma or cystic fibrosis—even choking on a small toy. Respiratory distress can be caused by uncontrolled diabetes or lactic acidosis, a byproduct of diabetes. In children with Type 1 diabetes, lactic acidosis can result from insufficient insulin, not eating enough or having an insulin reaction.5–10

Regardless of the cause, calltakers must do all they can to help the parent or caretaker.

REASONS FOR ADULT RESPIRATORY DISTRESS

Now that we have some basic information on infant and child respiratory distress, let’s get into the adult side of the matter. Adults experience respiratory distress for the same reasons children do, but adults have some unique factors that children don’t have. Respiratory distress can be either acute or chronic. The chronic form is called acute respiratory distress syndrome (ARDS) in adults.11 According to the 1996 Journal of the American Medical Association, a study shows that out of 351 patients enrolled in the ARDS medical study, patients that had a history of alcohol abuse were at a higher risk of contracting ARDS.

Other risk factors for contracting ARDS are sepsis, severe traumatic injury, head injury and massive transfusions of blood. ARDS may appear hours or even days after any of these incidents. This does not mean that ARDS will appear in everyone. Because ARDS is part of the respiratory distress family, let’s talk about some of the symptoms. We will start with the most obvious: severe difficulty in breathing. Just as a fish out of water would flop around and become anxious, so too do people if they can’t breathe. Other symptoms are agitation and fever. These are true emergencies and medical help must be dispatched as soon as possible.

Adults experience ketoacidosis for the same reasons as children. The biggest reason is the uncontrolled diabetic state of the person. With adults this can create a misdiagnosis or even death. If the ketoacidosis is not diagnosed, the patient can go into a diabetic coma and possibly die as a result of the respiratory distress.11–14

Other causes of respiratory distress are hemorrhagic pancreatitis, pneumonia and hypotension. These are not the only reasons for respiratory distress. There is also anaphylactic shock—an allergic reaction in which the respiratory distress comes from swelling. The face and tongue swell and can block respirations all together. Another...
Recognizing medical emergencies such as respiratory distress is valuable training for telecommunicators at Cypress Creek EMS just outside of Houston. The comm center dispatches for 12 different agencies and is a secondary PSP for the Greater Harris County 9-1-1 network in your center. You just completed the EMD class three days before. A man calls in and says his wife is having trouble breathing and they are at a well-known seafood restaurant. Where do you start with the questions, and where do you go from there? What EMD guidecard would you use? What is the best tactic to use to keep this man calm enough to help you help his wife? The first thing you should do is verify the location and get EMS deployed as quickly as possible. You should continue the all calls interrogation to get as much information as possible for the responding EMS providers. Is it possible that she is going into anaphylactic shock? What did she eat? Is she wearing a medical alert bracelet? The best rule of thumb is to follow the questioning on your guidecards word for word. Doing this will get the information you need and get you help on the way.

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REFERENCES


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