Brian Kendall, M.D. – Fireworks and Summer Heat

What are some firework safety tips?

0:06

So fireworks are a huge issue in the emergency department over the summer, usually around July 4, but most people have fireworks laying around all summer because you know, maybe they didn't use them all during July 4, or they're using them during memorial day too, or, you know, somewhere they have some leftover from New Year's that they're trying to get rid of. So yes, again, seeing safety is imperative here. So you want to make sure that you're in an area that number one isn't at risk of fire. So you want to have an area that either has nothing but dirt or at least not covered in dry grass or anything's the last thing you want to do is start a wildfire. You also want to make sure that you have some sort of fire retardant available, either that's a hose, or you know something else that a fire blanket or something so that if a fire does start that you have something that you can attempt to control it with, you also want to make sure that you have a safe way of getting out of that area should a fire start. That's some of the biggest tips you can have as far as making sure that you have a safe scene. Also, you want to make sure that with the fireworks, and you have a designated person who's going to be lighting those fireworks, and then everybody else is a certain distance back depending on what your lighting, you know, it's best to be, you know, several yards back at least if not more, to enjoy the fireworks but not be in the in the vicinity if something goes wrong, if the tube that you're using to shoot a mortar out of falls over or you know, something else, if the firework lights prematurely or something, you don't want anybody in that general vicinity that could potentially get injured. So I always like to make sure that if we do have fireworks, I have a designated person who's lighting those fireworks and all kids and all other adults are standing far back and not getting, you know in the way of a potential accident there. And then I The other thing I would say too is don't mess with fireworks, I've seen a lot of people who try to modify them to do certain things. And we have significant injuries from that not necessarily because they're tampering with the firework itself. But usually when they light it, then it lights it goes off a little bit sooner than they were expecting. So I've seen a lot of facial injuries and hand injuries because people are tampering with fireworks and not using them in the way that they were made to be used.

What types of injuries can fireworks cause?

2:30

The most common one we see is burns burns to the hands, which that can be difficult because our hands are obviously something that we use on a daily basis. And when you burn your hand that can lead to scar tissue that can lead to difficulty in mobility of your hand. You can also lose fingers, lose ears lose nose, lose eyes, you can have significant facial burns, which can lead to difficulty breathing. And so then we have to do things to help you continue to breathe. And so those things are very serious.

Brian Kendall, M.D. – Fireworks and Summer Heat

What precautions can we take to avoid heat related injuries?

3:06

I think the most pressing issue that we should talk about is car safety in the summer, whether that's a child or a pet, and people leaving those either those pets or those children in their car while they're just running in real quick to go into the store. Or you know, just oh, I had to just go get something, you know from my friend real quick and I was gonna come right back, they turn their car off, they close the doors, and the temperatures in that car can elevate extremely fast. There's lots of stories that have been done on this in the past where they'll put a thermometer in the car. And within minutes, the temperature in that car is over 120 degrees Fahrenheit, which is more than enough to start causing some significant issues with someone's body.

How does the body react to being too hot?

3:53

Once our body starts to overheat, and it doesn't even have to be that hot, it could be 90 degrees and your body could start to overheat. We go through different stages of hyperthermia, starting off with heat exhaustion and then ending up in heat stroke and then eventually death. So heat exhaustion is typically where maybe we stop sweating or we start to feel a little bit lightheaded or feeling like we're gonna pass out or just feeling extremely hot. Those are all kind of symptoms of different forms of heat exhaustion. If that goes untreated, if you don't seek shelter or shade at that point, you don't sit down and take a break, drink some water or maybe go inside to cool off a little bit. If you continue to try to push through that can then eventually evolve into what we call heat stroke. Which is where you become completely unaware of what's going on what we call altered mental status or becoming very confused and delirious, to where you can even stop having function of your or control of your body. So people around, you then will start to notice, oh, my goodness, this person isn't acting right. They're not talking, right, they're not walking or whatever it is that they normally can do. And that's a life threatening emergency, because heat stroke can lead to your brain, in your heart and everything else kind of shutting down and not able to function correctly. And that can lead to death. So very important that if you start to see somebody or you yourself start to experience signs of heat exhaustion, that not sweating, the lightheadedness of, you know, feeling like you're just really overheated that you sit down, you get some water, find some shade, or go inside to a cool area, get yourself cooled down as much as you can. And that's it for the day, you take it easy the rest of the day. And if you start noticing somebody with those signs of heat, stroke, confusion, delirium, hallucinations, if they start having like seizure activity, if they stop being able to move one side of their body or can't walk, those are all life threatening emergencies you call 911 immediately have been brought to the emergency department.

Brian Kendall, M.D. – Fireworks and Summer Heat

How does alcohol affect our ability to function in high temperatures?

6:01

So of course, you know, alcohol in the summer, it's common for people to drink alcoholic beverages while they're out outside, whether that's at, you know, at the lake or out or their pool, or whatever it might be. But alcohol can really affect your body's ability to self regulate its temperature.

How can drinking alcohol lead to dehydration?

6:20

Alcohol is what we call a diuretic or makes you urinate more, so you lose more fluids than what you're actually taking in. So if all you're doing is drinking alcohol, then you will become more dehydrated. And that can lead to you being more at risk of developing heat exhaustion, heat stroke, or at risk of developing symptoms of dehydration and severe dehydration, with issues surrounding again, your cardiac or heart function, your kidney function and your brain function. So very important to stay well hydrated when you're out in the heat.

Anything else to add?

6:56

And I get it, a lot of you know, I have kids myself. And a lot of these safety things are sometimes a nuisance, honestly, it's like, oh, it'd be so much easier just to let my kids just go swim in the pool and I can go do stuff that I need to get done. be so much easier to not fight my child about wearing a helmet today be so much easier just to leave my kid in the car while it's running, just run into the store real quick and grab the milk. But in the end, those are those split second decisions that people regret for the rest of their lives. And so I hope that you know, by talking about this and you know, saying these are the correct things to do, nobody likes doing them necessarily, but by doing them you can save a life maybe it's not your child's or somebody that you know, but it may be somebody else's and very important to do these things just to keep everybody safe this summer.