

Breath-Holding Spells

McKenzie Pediatrics 2011

What Are Breath-Holding Spells?

Breath holding spells are brief periods when young children stop breathing for up to 1 minute. These spells often cause a child to pass out (lose consciousness), and lose tone (go limp). They are usually NOT serious, do NOT cause children to have permanent brain damage, or lead to seizure disorders.

Breath-holding spells usually occur when a young child is angry, frustrated, in pain (acutely, such as a traumatic event), startled or afraid. But the spell is a reflex of the nervous system, causing a temporary slowing of the heart rate or breathing.

Although they often occur with tantrums, breath holding spells are NOT a deliberate behavior, a willful act of defiance, on the part of the child. And a breath-holding spell is NOT a seizure.

Breath-holding spells occur in approximately 1 in 20 young children, usually between the ages of 6 months to 18 months, though they may be seen in infants as young as 2 months and children as old as 6 years. Their frequency varies, with some children having a spell once a year, while others have spells several times daily.

Males and females are affected equally. A family history of breath-holding spells (parents, siblings, and/or grandparents) is found in 25% of cases.

What Are The Different Types of Breath-Holding Spells?

There are four types of breath-holding spells:

1. Simple Breath-Holding Spells: the child holds his or her breath at the end of expiration (breathing out). The usual precipitating event is a frustration or injury. There is no color change, and recovery is spontaneous.
2. Cyanotic Breath-Holding Spells: the child has a short-burst of rigorous crying lasting <30 seconds, begins hyperventilating (over-breathing), then holds his or her breath at the end of expiration long enough to turn blue (especially around the lips), lose muscle tone, and pass out. Mild twitching may occur while passed out. The usual precipitating event is anger, frustration, or pain. The majority of children regain consciousness within 1 to 2 minutes, though some may be sleepy for up to an hour afterwards.
3. Pallid Breath-Holding Spells: the child turns pale (as opposed to blue) and loses consciousness with little if any crying. His heart rate is noted to be slowed, and he may be noted to be sweating. Mild twitching may occur while passed out. The usual precipitating event is a painful event, such as a fall and/or head injury. The child usually regains consciousness within 1 to 2 minutes, though he may be sleepy after the episode. Some of these children go on to have episodes of fainting spells as older children or adults.
4. Complicated Breath-Holding Spells: these may simply be a more severe form of cyanotic or pallid breath-holding spells, and are associated with seizure-like activity (different than simply mild twitching) and/or incontinence (loss of bowel and/or bladder control)

What Causes Breath-Holding Spells?

Breath-holding spells are usually caused by either a change in the usual breathing pattern or a slowing of the heart rate. These reactions may be brought on by sudden pain or strong emotion, such as fear, anger, or frustration. In a

small number of children, breath-holding spells may be related to iron-deficiency anemia, a condition in which the body does not produce a normal number of red blood cells.

What Is The Treatment For Breath-Holding Spells?

There is no medical treatment for breath-holding spells. Only in rare occasions are they caused by an irregular heart rhythm, or a seizure disorder. While breath-holding spells can be a frightening experience for parents, parents can be reassured that they are almost always harmless, and will naturally end.

Breath-holding spells that do NOT cause a child to become unconscious are best ignored, in the same way temper tantrums are ignored.

If your child's breath-holding spells DO lead to a period of unconsciousness, the biggest risk is injury, especially head injury, due to a fall during a spell. Do NOT walk away and ignore the spell. Instead, help protect your child from injury during a spell by laying him or her on the floor and keeping the arms, legs, and head from hitting anything hard or sharp. Touch and talk to your child; this may also help you to stay calm.

Try not to overreact while the spell is going on. Try to measure the length of the time of lost consciousness, and observe closely for color changes and for return of regular breathing. If seizure activity begins (rhythmic jerking of the arms and legs), and your child has been unresponsive for more than 2 to 3 minutes, call 911.

After a spell, briefly reassure your child. Keep in mind that the child is NOT doing this on purpose. He is NOT trying to manipulate or punish you. Breath-holding spells are entirely involuntary. Therefore, do NOT punish your child for having a breath-holding spell. However, avoid giving it too much attention, because this can reinforce the behaviors that lead to the spells.

You can help decrease the chance of breath-holding spells by making sure your child gets plenty of rest (so he is less likely to become overly tired and easily frustrated), helping him or her feel secure (by giving her the chance to make simple choices and by having regular routines), and helping minimize and manage his or her frustration.

If your child has had his or her first breath-holding spell, contact your doctor to discuss the specifics of the event, and whether any further evaluation is necessary.