

## **Instructions for Parents of a Child with Croup**

### **What is Croup?**

Your child has croup, which is caused by a virus that triggers swelling of the windpipe around the voice box. The swelling can cause a ‘barky, seal-like’ cough, a hoarse voice, and often a ‘crowing’ sound as your child breathes in. This sound is referred to a ‘stridor’.

The virus that causes croup is contagious. It is spread when your child coughs and breathes. In other family members – specially adults – this same virus can cause simple ‘cold-like’ symptoms such as hoarseness, cough, sore throat, and a runny nose.

Your child’s croupy cough will most likely disappear within a couple of days, though a few children continue to have a croupy cough for up to 7 days. Croup often disappears as quickly as it started, but in some cases, the harsh barky cough is followed by a loose cough and runny nose. Some children also develop ear infections.

Croup is usually worse at night. Children who seemed well at bedtime can suddenly wake up with a barky cough and difficulty breathing. They often seem better during the day but then worsen again the next night.

Croup recurs in some children but they usually “outgrow” the croup symptoms by ten years of age (though some not until they are teenagers.)

### **What can I do to make my child more comfortable?**

If your child has fever or a sore throat, you may give him or her acetaminophen (Tempra or Tylenol) or ibuprofen (Advil or Motrin). Doses are recommended on the side of the bottle, or ask a health care professional. **Never give your child more than 5 doses of acetaminophen or more than 4 doses of ibuprofen in a 24 hour period.**

You can open your child’s bedroom window a bit to let the cold air in, but remember to dress your child warmly.

Don’t worry – neither you nor your child will get sick from breathing cold air.

Encourage ‘cold’ fluids such as juice, a slushy, or a popsicle. Children with croup usually have a ‘sore throat’, and this may help to soothe it.

If your child starts to make easily heard ‘croupy sounds’, and they are **NOT** ‘blue in the face’ or very restless with trouble breathing, try these home treatments:

- In colder weather, bundle him/her up in warm clothes and take him or her outside in the colder air for 5 to 10 minutes.
- In warmer weather, after making sure that your child is warmly dressed, open the freezer door and allow him or her to breath the cold air.
- **Most importantly – if your child is upset – comfort him/her and speak calmly and in quiet tones. This will help more than anything to reduce the breathing problems.**

### **How can I monitor my child to be sure they are okay?**

Croup is a 'noisy' disease, so you can check up on your child by always being within hearing range.

Every once in a while watch and listen to your child breathing without a shirt or blanket covering their chest so that you can tell if they are having difficulty breathing and need to be checked by a doctor:

- Listen for a 'crowing sound' while your child is breathing in. If you hear this sound, note whether you hear it all the time, even when he/she is calm, or only when he/she is upset and crying.
- Look to see whether your child's chest wall or the notch just below their 'Adam's Apple' is 'sucking' or 'caving in'.
- See if you can get them to calm down or if they remain upset and restless even when you try to calm them. After making sure that have enough light to see well, notice the coloring of your child's lips and face, checking for a 'bluish-grey' color.

### **Should I call 911?**

**Call if:**

- **Your child's face is bluish-grey in color for more than a few seconds; or**
- **Your child becomes unusually sleepy or 'glassy-eyed' while making croupy sounds; or**
- **Your child is really stressed, is struggling to breath, and you can not calm them within a few minutes.**

**Remember that ambulance paramedics can start treatment for your child immediately, so that, if your child has very severe symptoms, it is safer to call '911' than to drive to the nearest hospital in your car.**

### **Should I seek medical care right away?**

Seek care right away if – after exposing our child to cold air:

- Your child makes a persistent, easily heard 'crowing sound' with breathing.
- Your child's chest wall 'sucks in' or 'caves in' as they breath.
- Your child continues to have croupy symptoms that cause them to be significantly agitated or restless.

When getting ready to go to the emergency department (or your doctor's), remember to dress both you and your child warmly, and – if it is not too cold outside – roll down your car window at bit, breathing the cold air improves children's croupy symptoms, so that your child will most likely be quite a bit better when you arrive at the emergency department (or your doctor's office).

### **What medical treatment improves croup?**

Because a virus causes croup, antibiotics do not help.

Anti-histamines and decongestants (over-the-counter 'cold' medications) DO NOT improve croup symptoms.

'Mist' therapy has been used for many years but it has never actually been shown to help improve croup symptoms.

The most effective treatment for croup is dexamethasone, a kind of corticosteroid.

Usually only one dose given by mouth is necessary. This medication, which is very safe, helps to reduce breathing troubles, reduces the changes that your child will need to come into hospital or return for medical care. This medicine starts to work within 2 or 3 hours, and lasts for a couple of days.

Another effective treatment is an adrenaline (epinephrine) breathing mask, which works within minutes but lasts less than two hours. This is usually used only in children with more severe symptoms.

### **Is it safe for my child to come home (or should they stay in the hospital)?**

Most children with croup have mild symptoms so that it is safe for your child to be at home while they get better.

About one in 25 children (4%) with croup needs to be kept in hospital for a few days until their breathing improves. If your child has to stay in the hospital, they will be watched, and if their breathing becomes really hard they will be given more adrenaline masks.

Of those children who have to stay in hospital, one in every 100 (1%) have so much problem breathing that they need to have a special breathing tube put down their windpipe to help them breath for a few days. If this is necessary, your child would be transferred to an Intensive Care Unit (ICU). Even children with the most severe symptoms almost always get completely better within one or two weeks, without any left over problems.

### **Can I prevent my child from getting croup?**

There is no way to prevent your child from getting croup but hand washing helps to stop the spread of the viral infection that causes croup.