

Dehydration and diarrhea in children: Prevention and treatment

What is diarrhea?

Diarrhea is a very common problem in babies and children. It is usually mild and brief. “Acute” diarrhea lasts less than 1 week, and no longer than 14 days.

A child has diarrhea if they have more bowel movements than usual, and if stools are less formed and more watery. Sometimes children with diarrhea have other symptoms, such as fever, loss of appetite, nausea, vomiting, stomach pains, cramps, and blood and/or mucus in the bowel movement.

Diarrhea can be dangerous if not managed properly because it drains water and salts from your child’s body. If these fluids are not replaced quickly, your child can become dehydrated and may need to be hospitalized.

How does diarrhea spread?

Diarrhea germs spread easily from person to person, and especially from child to child. They usually spread quickly among children who have not learned to use the toilet.

What causes diarrhea?

There are many different causes of diarrhea. The most common are viral infections.

How can I prevent diarrhea?

Proper handwashing and safe food handling are the best ways to prevent the spread of germs that cause diarrhea.

What should I do if my child has diarrhea?

Children with diarrhea need to keep drinking the right amount of fluids to avoid dehydration.

- If you are **breastfeeding**, keep feeding on demand. You can also offer your child the foods he or she usually eats.
- If you are **formula feeding**, do not dilute the formula. Continue formula feeding and offer your child the food he or she normally eats.
- If you're not breastfeeding or formula feeding, offer your child a variety of fluids more frequently, in addition to the foods they normally eat.
- At any age, if your child is **not taking other fluids well**, offer an oral rehydration solution (ORS), in addition to the feeding recommendations above.

What is dehydration?

Dehydration is caused by a loss of body fluids, which are made up of water and salts. When children have diarrhea, they can lose large amounts of salts and water from their bodies can become dehydrated very quickly. Children can get dehydrated even more quickly if they are vomiting.

Dehydration can be very dangerous, especially for babies and toddlers.

What are the signs of dehydration?

Call your child's doctor or seek medical advice at a local clinic or hospital if you see signs of dehydration, including:

- decreased urination (fewer than 4 wet diapers in 24 hours in infants and fewer than 3 wet diapers in 24 hours in older children),
- increased thirst,
- absence of tears,
- dry skin, mouth and tongue,
- faster heartbeat,
- sunken eyes,

- grayish skin,
- sunken soft spot (fontanelle) on your baby's head.

Healthy children can spit up, vomit or have a loose stool once in a while without being in danger of becoming dehydrated.

What is an oral rehydration solution?

An oral rehydration solution (ORS) is a mixture of water, salts and sugar in specific amounts. These solutions can be absorbed even when your child has large amounts of diarrhea or is vomiting.

Oral rehydration solutions can be used to:

- keep children well hydrated when they have significant amounts of diarrhea.
- replace lost fluids when children show signs of mild dehydration.

Oral rehydration solutions are available at pharmacies in ready-to-serve preparations. It is best to buy an ORS that has already been mixed.

For the first 4 hours of oral rehydration (for mild dehydration)

Babies under 6 months of age	30 to 90 mL (1 to 3 oz.) every hour
Children 6 months to 2 years of age	90 to 125 mL (3 to 4 oz.) every hour
Over 2 years of age	At least 125 to 250 mL (4 to 8 oz.) every hour

If your child refuses to take the ORS by the cup or bottle, give the solution using a medicine dropper, a syringe, a small teaspoon or frozen pops.

If your child vomits, stop foods and other fluids, but continue to give the ORS using a spoon.

- Give 15 mL (1 tbsp.) every 10 min to 15 min until the vomiting stops.
- Increase the amounts gradually until your child is able to drink the regular amounts.

- If your child continues vomiting for longer than 4 to 6 hours, take your child to the hospital.

After 4 hours until 24 hours: Recovery stage

- Keep giving your child the oral rehydration solution until diarrhea is less frequent.
- Continue feeding your child their regular diet if they are not vomiting.
- When vomiting decreases, it's important to get your child to breastfeed as usual, drink formula or whole milk, or eat regular food in small, frequent feedings.

What should I avoid giving to my child?

- **Do not give your child sugary drinks** like fruit juice or sweetened fruit drinks, carbonated drinks (pop/soda), sweetened tea, broth or rice water. These do not have the right amounts of water, salts and sugar and can make your child's diarrhea worse.
- If your child is having frequent diarrhea, make sure they are drinking an oral rehydration solution (not just plain water) and eating food. Bland foods with complex carbohydrates, lean meats, and fruits and vegetables are encouraged. **Drinking only water** may lead to low blood sugar or low sodium levels in your child's blood.

Talk to your doctor before giving any over-the-counter medications to stop diarrhea.

When should I call the doctor?

Call your doctor or seek medical advice if your child:

- has diarrhea and is less than 6 months of age.
- has stomach pains that are getting worse.
- has bloody or black stools.
- vomits blood or bile.
- is refusing to drink.
- is still vomiting and unable to drink after 4 to 6 hours.
- has diarrhea and a fever.

- has signs of dehydration (see list above).
- If your child vomits green bile, go to the emergency department right away.

Diarrhea lasting for more than 1 to 2 weeks is not considered acute diarrhea. Talk to your child's doctor if this is the case.

Reviewed by the following CPS committees

- Acute Care Committee
- Nutrition and Gastroenterology Committee
- Public Education Advisory Committee

Last updated: July 2018



© 2023 – Canadian Paediatric Society
cps.ca/en/ – info@cps.ca

Available at www.caringforkids.cps.ca