Dehydration

What is dehydration?

Dehydration is a condition in which the body doesn't have enough water to function properly. Your child's body can lose a lot of water if he or she has diarrhea, is vomiting, or has been exercising for a long time without having anything to drink. If water is not adequately replaced in the body, complications can include decreased activity, weakness, electrolyte imbalances, and, in cases of extreme dehydration, death.

Infants and young children are at greatest risk for dehydration. Sick children may become dehydrated if they do not feel well enough to drink, have stomach pain, or a fever.

With mild dehydration, children may:

- · have sticky or dry mouths
- urinate less
- be thirstier than usual.

With more severe dehydration, children often:

- have decreased alertness
- have sunken eyes
- urinate much less, if at all
- · lose weight.

Dehydration can be a medical emergency. Call your doctor IMMEDIATELY because your child may need to be seen at hospital if:

- Your child's activity level is greatly decreased.
- Your child is difficult to arouse.
- Your child appears limp and weak.
- Your child doesn't seem to recognize you.

How can I help take care of my child?

Encourage your child to drink. Since dehydration, no matter what the cause, involves high loss of body water, the goal is to replace it. The method used to give your child fluid may depend on the type of illness causing the dehydration. For instance, the type and rate of fluid replacement in a child who is vomiting and has diarrhea is different from fluid replacement in a child who is dehydrated from sports activity.

Mild dehydration due to illness in infants under 1 year old

Encourage, but do not force, your child to drink. If you are not breast-feeding your child, give him or her special clear liquids with electrolytes, such as Pedialyte or Kao Lectrolyte, instead of formula for the first 12 to 24 hours. These oral electrolyte solutions are available without prescription at supermarkets and drugstores. If you are breast-feeding and your baby is urinating less often than normal, offer an electrolyte solution between breast-feedings for the first 6 to 24 hours.

If your child is vomiting, give frequent small amounts of breast milk or the electrolyte fluids rather than less frequent large amounts. The child will be better able to keep the liquid down and will still get the same amount of fluid.

For most illnesses, start giving a bottle-fed baby full-strength formula again after 12 to 24

Dehydration

hours of the clear liquids.

Mild dehydration due to illness in children over 1 year old

Encourage but do not force your child to drink. Popsicles and half-strength lemon-lime soft drinks (half water, half soft drink) may be given to start. You can also try giving your child water or ice chips. Avoid all fruit juices.

If your child is vomiting, he or she should drink small frequent amounts of liquid rather than large infrequent amounts. Start with 1 teaspoon to 1 tablespoon every 5 minutes and increase gradually.

If your child is not vomiting or having diarrhea, water alone works well for rehydration in the first few hours, although your child may eat regular food if he or she is hungry.

After a few hours of clear liquids, start giving your child liquids and foods with energy sources (sugar) and nutritional value.

Mild dehydration due to exertion in older children

Follow the instructions given above for mild dehydration in children over 1 year old. Your child will probably be quite thirsty and should be allowed to drink as much as she or he wants. Pure water is acceptable for the first hour or two, but after this, your child will need drinks containing sugar or regular food. Also, your child should rest from the activity in a cool, shaded environment until he or she is rehydrated.

Mistakes to avoid

- Clear liquids should not be used alone for longer than 12 to 24 hours.
- Avoid highly concentrated solutions, such as boiled milk, and drinks with a lot of sugar such as colas and apple juice (unless they are diluted with water).
- If your child is vomiting and you are giving him small, frequent amounts of fluid, remember to gradually increase the amount of fluids you are giving.

How can I help prevent dehydration?

- Make sure your child drinks often during strenuous activities, such as prolonged sports, or during exposure to hot, dry, or windy environments.
- Remember that children frequently become mildly dehydrated during travel or when fluids aren't readily available. Encourage drinking during travel and carry water with you whenever possible.
- At the first sign of vomiting or diarrhea, encourage fluids as advised for those illnesses.

When should I call the doctor?

Call IMMEDIATELY if:

- Your child does not make tears while crying.
- Your child has a dry or sticky mouth.
- Your child has no urine in over 8 hours.
- Your child is dizzy or unsteady while standing or walking.
- Your child appears less alert than usual.
- Your child refuses to drink fluids despite your encouragement.
- Your child starts to act very sick.
- Your child's vomiting is worsening or lasting longer than 24 hours.

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 $\label{thm:continuous} \mbox{Written by the Section of Pediatric Emergency Medicine, The Children's Hospital, Denver.}$

This content is reviewed periodically and is subject to change as new health information becomes available. The information is intended to inform and educate and is not a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional.