



## Middle Ear Fluid

### Illustration of the ear

#### What is ear fluid?

Fluid is normally produced in the middle ear (the space behind the eardrum) in small amounts. Usually the fluid drains out of the ear through the eustachian tube into the back of the nose. Ear fluid can cause a problem when it builds up in the middle ear. This condition is called otitis media with effusion, or secretory otitis media.

#### What causes ear fluid to build up in the middle ear?

After an ear infection, the eustachian tube may be temporarily blocked and fluid will build up in the middle ear space instead of draining out normally. After taking antibiotics for the ear infection, your child may still have fluid left in the middle ear, but it is no longer infected fluid.

If there is fluid in the middle ear, your child will probably have:

- a full, congested sensation in the ear
- mildly reduced hearing (temporary).

There is no earache or fever.

#### How long will it last?

Because the middle ear fluid clears up by itself in 90% of children, no treatment is needed for most children. The fluid will slowly go away.

- By 1 month, 50% of children will still have fluid.
- By 2 months, 20% of children will still have fluid.
- By 3 months, only 10% of children will still have fluid.

If there is still fluid in the ear after 3 to 4 months, your child will probably need ventilation tubes or special medicines because the fluid will most likely not clear up by itself.

#### What is the treatment?

- **Help your child with temporary hearing loss** Most children with middle ear fluid have a mild hearing loss (20 to 30 dB). If your child temporarily loses hearing before age 2, it can interfere with normal speech development. Although the fluid will probably clear in 1 to 2 months, help your child deal with limited hearing. Keep in mind that

most children's speech will catch up following a brief period of incomplete hearing. When you talk with your child:

- Get close to your child, get eye contact, and get his full attention. Occasionally check that he understands what you have said.
- Speak in a louder voice than you normally use. A common mistake is to assume your child is ignoring you when actually he doesn't hear you.
- Reduce any background noise from radio or television while talking with your child.

**If your child goes to school, be sure he sits in front near the teacher. Middle ear fluid interferes with the ability to hear in a crowd or classroom.**

- **Restrictions** Your child doesn't have any restrictions because of ear fluid. Your child can go outside and does not need to cover the ears. Swimming is permitted unless there is a perforation (tear) in the eardrum, ear tubes, or drainage from the ear. Air travel or a trip to the mountains is safe; just have your child swallow fluids, suck on a pacifier, or chew gum during descent.
- **Medicines** Your child doesn't need any medicines unless he has allergies or an ear infection.
- **Ear recheck** Your child needs to be checked again to be sure the ear fluid doesn't last longer than 3 months and that it doesn't affect speech development.

### **How can I help prevent ear infections?**

As long as there is fluid in the middle ear, your child is at risk for having another ear infection. The following list includes ways to help prevent getting ear infections.

- **Avoid tobacco smoke.** Protect your child from secondhand tobacco smoke. Passive smoking increases the frequency and severity of infections. Be sure no one smokes in your home or at day care.
- **Avoid excessive colds.** Reduce your child's exposure to children with colds during the first year of life. Most ear infections start with a cold. Try to delay the use of large day care centers during the first year by using a sitter in your home or a small home-based day care.

- **Breast-feed.** Breast-feed your baby during the first 6 to 12 months of life. Antibodies in breast milk reduce the rate of ear infections. If you are breast-feeding, continue. If you are not, consider it with your next child.
- **Avoid bottle propping.** If you bottle-feed, hold your baby at a 45-degree angle. Feeding in the horizontal position can cause formula and other fluids to flow back into the eustachian tube. Allowing an infant to hold his own bottle also can cause milk to drain into the middle ear. Weaning your baby from a bottle between 9 and 12 months of age will help stop this problem.
- **Control allergies.** If your infant has a continuously runny nose, consider allergy as a contributing factor to the ear infections. If your child has other allergies such as eczema, your health care provider will check for a milk protein or soy protein allergy.
- **Adenoids.** If your toddler constantly snores or breathes through his mouth, he may have large adenoids. Large adenoids can contribute to ear infections. Talk to your health care provider about this.

**Call Idaho Falls Pediatrics during office hours if:**

1. Your child develops an earache.
2. Your child's speech development is delayed.

You have other questions or concerns. \*NOTE: This information is provided as a public educational service. The information does not replace any of the instructions your physician gives you. If you have a medical emergency please call 911 or call the Hospital at (208) 529-6111. If you have questions about your child's care, please call Idaho Falls Pediatrics at (208) 522-4600.