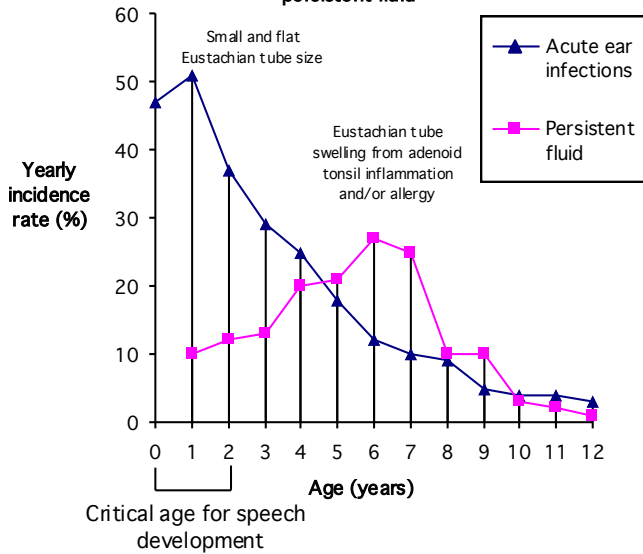


**OTITIS MEDIA IN CHILDREN**

**Age distribution of acute ear infections and chronic persistent fluid**



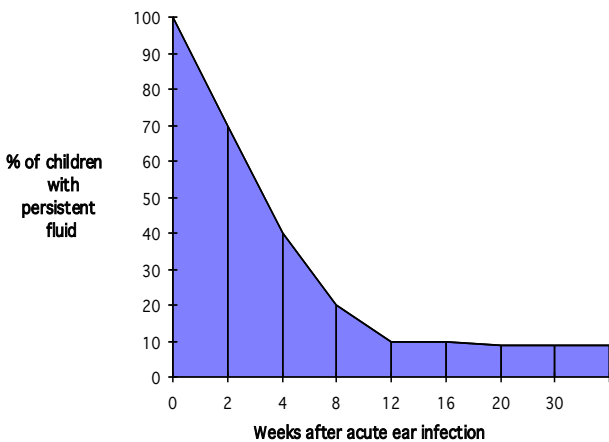
**Risks Factors for Ear Infections**

- Colds (upper respiratory infections)
- Winter months
- Daycare or preschool exposure
- Family history of middle ear problems
- Passive smoke exposure
- Allergy (inhalants and foods (especially dairy))
- Pacifier use, bottle feeding on the back (unproven yet)

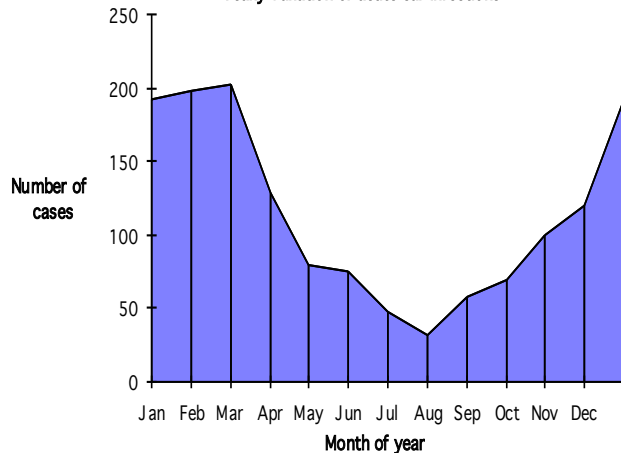
**Treatment Options**

- Observation
- Antibiotics for each recurrent infection with symptoms
- Preventive antibiotics (*no longer recommended!*)
- Immune boosters (Echinacea, Vitamin C, etc.)
- *Otovent Auto Ear Inflation* therapy, *EarPopper*, autoinflation
- *Prevnar* pneumococcal vaccination
- Tympanostomy tube placement
- Adenoidectomy
- Aggressive allergy treatment (environmental control, dietary changes, medication, immunotherapy)

**Duration of fluid after an acute ear infection**



**Yearly variation of acute ear infections**



**Risks for Speech Developmental Delay**

The most critical time period for your child's development of speech is during the first 2 years of life. All children need auditory stimulation to develop and mature their brains for interpretation of speech and sounds. This is when children are most sensitive to auditory deprivation. Fluctuating or changing hearing loss from recurrent ear infections seem to be even more problematic than a persistent hearing loss from a chronic fluid buildup.

Although the majority of children under 2 years old will "outgrow" their ear infection using a "wait and see approach", auditory deprivation from ear infections during this critical period can have lifelong, irreversible effects on language and cognitive development. These deficits are in tasks involving discrimination of sound and speech. This subtle auditory learning disability can only be diagnosed at older ages. As a result, aggressive treatment is recommended unless improvement is expected in the short term.

Although ear infections can "permanently damage" the ear and hearing, the incidence of this is rare at this age particularly if monitored and treated by your physician. It is also important to document your child's hearing with a formal hearing test.

Fortunately, despite ear infections being the most common disease of childhood, permanent speech and hearing problems are rare. Some studies have suggested that good parenting with frequent auditory stimulation can have a protective effect on normal speech and hearing.

## **Suggestions for Parents of Preschool Children with Ear Problems**

### **Listening comes first**

Children with normal hearing spend their first 12 to 18 months of life learning to listen before they begin to talk. With repeated ear infections and a mild hearing loss, much of this important listening time is decreased. Therefore, helping your child develop good listening skills is an essential first step in learning to talk.

### **Prevent a hearing loss**

Children who have a history of repeated middle ear-problems often have a fluctuating or changing hearing loss. If your child's hearing seems to change, don't wait; trust your intuition that something is wrong. Take him/her to the doctor as soon as possible for treatment. Since audiologists can evaluate the hearing of children even in preschool years, your doctor may refer you for hearing tests. In many cases, there is no indication of pain or a temperature, even when there is fluid behind one or both eardrums. Another reason not to wait.

### **Look and listen**

Alert your child by calling his/her name before you begin to talk. We all tend to stop, turn, then look and listen when we hear our name. Children often do not respond if you talk to them while they are busy playing or looking at something interesting.

### **Control distance**

Even with a mild hearing loss, it is hard to listen at a distance. Make certain that you are in the same room and no more than 5 or 6 feet away from your child when you talk. At this distance, you give the youngster the opportunity to both look and listen. Remember: the closer you are, the louder your voice is.

### **Be a good model**

Don't try to force your child to say words clearly. You will only frustrate yourself and your child. Work on becoming a good speech model for your youngster to imitate. For example, if your child points to an empty glass and vocalizes, you might say: "You want milk." "I'm getting the milk." "Here is the milk." This simple approach helps a youngster both build better listening skills and expands their vocabulary. Again, make certain your child is looking and listening as you talk to him/her.

### **Use praise, not criticism**

When your child tries to talk, learn to praise the effort. Don't criticize and act irritated. Children usually are anxious to please. They would talk clearly if they could. So don't fall into the habit of thinking the child is being stubborn, naughty, or lazy if his speech is limited or not clear.

### **Learn to expand**

Once your child is using single words or short phrases, help him/her use sentences. For example, if he points and says "car," you should expand what he says by adding a few words and saying: "I want the car." "Here is the car." Again, be a good speech model.

### **A quiet room**

Turn off the radio or TV when talking with your child. Most of us find it more difficult to listen carefully when there is a lot of noise around us. This is even more of a problem for the young child.

### **Play and listen**

As part of each day, try to set aside a "play time" for just you and your child. Let your child choose a game, toy or book. During this time talk about your activities but keep your conversation at the child's level. Gradually introduce new ideas and words.