



# Tympanometry References

## Otitis Media with Effusion

American Academy of Pediatrics. Vol. 113, No. 5, May 2004.

### Abstract/Excerpt:

The subcommittee gave as options that 1) tympanometry can be used to confirm the diagnosis of otitis media with effusion (OME) and 2) when children with OME are referred by the primary clinician for evaluation by an otolaryngologist, audiologist, or speech-language pathologist, the referring clinician should document the effusion duration and specific reason for referral (evaluation, surgery) and provide additional relevant information such as history of acute otitis media and developmental status of the child.

The guideline is intended for use by providers of health care to children, including primary care and specialist physicians, nurses and nurse practitioners, physician assistants, audiologists, speech-language pathologists, and child-development specialists.

The guideline is applicable to any setting in which children with OME would be identified, monitored, or managed.

## Year 2007 Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Programs

American Academy of Pediatrics. Vol 120, Number 4, October 2007.

### Abstract/Excerpt:

It has long been recognized that unidentified hearing loss at birth can adversely affect speech and language development as well as academic achievement and social-emotional development. Historically, moderate to severe hearing loss in young children was not detected until well beyond the newborn period, and it was not unusual for diagnosis of milder hearing loss and unilateral hearing loss to be delayed until children reached school age.

Despite the fact that approximately 95% of newborn infants have their hearing screened in the United States, almost half of newborn infants who do not pass the initial screening do not have appropriate follow-up to either confirm the presence of a hearing loss and/or initiate appropriate early intervention services (see [www.infanthearing.org](http://www.infanthearing.org), [www.cdc.gov/ncbddd/ehdi](http://www.cdc.gov/ncbddd/ehdi), and [www.nidcd.nih.gov/health](http://www.nidcd.nih.gov/health)).

## Tympanometry in Newborn Infants—1 kHz Norms

Journal of the American Academy of Audiology. Vol. 14, No. 7, 2003.

Robert H. Margolis, Sandie Bass-Ringdahl, Wendy D. Hanks, Lenore Holte, David A. Zapala.

### Abstract/Excerpt:

With the rapid implementation of universal newborn hearing screening (UNHS) programs, a test of middle-ear function for infants is urgently needed. Recent evidence suggests that 1 kHz tympanometry may be effective. Normative data are presented for newborn intensive care unit (NICU) graduates tested at a mean age of 3.9 weeks (Study 1) and full-term infants tested at 2–4 weeks (Study 2) who passed an otoacoustic emissions (OAE) screen.



Welch Allyn MicroTym<sup>®</sup>3  
Portable Tympanometric  
Instrument

## Persistent Effusion Following Acute Otitis Media Tympanometry and Pneumatic Otoscopy in Diagnosis

The Journal of the Royal College of General Practitioners. 1988 April; 38(309): 149-152.

[www.pubmedcentral.nih.gov](http://www.pubmedcentral.nih.gov)

John F. Wilmot and Hugh R. Cable

### Abstract/Excerpt:

Children aged six months to 10 years in one practice who were diagnosed with acute otitis media were examined one, three, six and 12 months after diagnosis by a general practitioner and an otolaryngologist on the same day using pneumatic otoscopy. Tympanometry and pure tone audiometry were also carried out. Tympanograms were combined with the specialist's otoscopy findings to determine whether effusion was present. The outcome categories three months or longer after diagnosis were compared with the otoscopic findings up to that stage.

## Tympanometry

American Family Physicians. November 1, 2004, Vol. 70, No. 9.

Edward Onusko, M.D., Clinton Memorial Hospital, Wilmington, Ohio

### Abstract/Excerpt:

Tympanometry provides useful quantitative information about the presence of fluid in the middle ear, mobility of the middle ear system, and ear canal volume. Its use has been recommended in conjunction with more qualitative information (e.g., history, appearance, and mobility of the tympanic membrane) in the evaluation of otitis media with effusion and to a lesser extent in acute otitis media. It also can provide useful information about the patency of tympanostomy tubes.

## Tympanometry Interpretation by Primary Care Physicians

Journal of Family Practice. October 2000. [www.jfponline.com](http://www.jfponline.com)

Larry A. Green, Larry Culpepper, Ruut A. DeMelker, Jack Froom, Frank Van Balen, Paul Grob, Timothy Heeren

### Abstract/Excerpt:

The accuracy of data gathered by primary care clinicians in practice-based research networks (PBRNs) has been questioned. Tympanometry, recently recommended as a means of improving accuracy of diagnosing acute otitis media, was included as an objective diagnostic measure in an international PBRN study. We report the level of agreement of interpretations of tympanograms between primary care physicians in PBRNs and experts.

## Using the 1000-Hz Probe Tone to Measure Immittance in Infants

The Hearing Journal. October 2004, Vol. 57. No. 10.

Johannes Lantz, Michelle Petrak, and Laura Prigge

### Abstract/Excerpt:

Recent studies using high-frequency immittance measurements have led to clinical recommendations for middle ear assessment in infants. This is especially important in light of the proliferation of universal neonatal hearing screening programs. This article examines the theory of immittance and the differences between infant and adult middle ear anatomy. It is designed to introduce readers to the high-frequency immittance concepts and their application to infant middle ear assessment.

To learn more about the Welch Allyn MicroTymp<sup>®</sup>3, call your local Welch Allyn sales representative or Welch Allyn Customer Service at 1.800.535.6663 opt 3.

Or visit [www.welchallyn.com/microtymp3](http://www.welchallyn.com/microtymp3).