

Universal Screening for Hearing Loss in Newborns: US Preventive Services Task Force Recommendation Statement

US Preventive Services Task Force

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ABSTRACT

DESCRIPTION. This is the 2008 update of the 2001 US Preventive Services Task Force recommendation on universal newborn hearing screening.

METHODS. The US Preventive Services Task Force weighed the benefits and harms of universal newborn hearing screening, incorporating new evidence addressing gaps identified in the 2001 US Preventive Services Task Force recommendation statement. Published literature on this topic was identified (by using Medline and Cochrane databases) and systematically reviewed.

RECOMMENDATION. Screen for hearing loss in all newborn infants (B recommendation). *Pediatrics* 2008;122:143–148

- The US Preventive Services Task Force (USPSTF) makes recommendations about preventive care services for patients without recognized signs or symptoms of the target condition.
- It bases its recommendations on a systematic review of the evidence of the benefits and harms and an assessment of the net benefit of the service.
- The USPSTF recognizes that clinical or policy decisions involve more considerations than this body of evidence alone. Clinicians and policy makers should understand the evidence but individualize decision-making to the specific patient or situation.

SUMMARY OF RECOMMENDATION AND EVIDENCE

The USPSTF recommends screening for hearing loss in all newborn infants (B recommendation). See figure for a summary of the recommendation and suggestions for clinical practice. Table 1 describes the USPSTF grades, and Table 2 describes the USPSTF classification of levels of certainty about net benefits.

RATIONALE

Importance

Children with hearing loss have increased difficulties with verbal and nonverbal communication skills, increased behavioral problems, decreased psychosocial well-being, and lower educational attainment compared with children with normal hearing.

Detection

Because half of the children with hearing loss have no identifiable risk factors, universal screening (instead of targeted screening) has been proposed to detect children with permanent congenital hearing loss (PCHL). There is good evidence that newborn hearing screening testing is highly accurate and leads to earlier identification and treatment of infants with hearing loss.

Benefits of Detection and Early Treatment

Good-quality evidence shows that early detection improves language outcomes.

Harms of Detection and Early Treatment

There is limited evidence about the harms of screening, with conflicting research findings regarding anxiety associated with false-positive test results. There is limited information about the harms of treatment. Complications of cochlear implant surgery include increased risk of meningitis; however, the overall risks of complications of screening and treatment are estimated to be small.

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Key Words

hearing loss, newborn screening, preventive services

Abbreviations

USPSTF—US Preventive Services Task Force
PCHL—permanent congenital hearing loss
OAE—otoacoustic emission
ABR—auditory brainstem response
UNHS—universal newborn hearing screening
JCIH—Joint Committee on Infant Hearing

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