BACKGROUND: In May 2003, a newborn auditory screening program was initiated in the Upper Palatinate. METHODS: Sequential OAE- and BERA-screening was conducted in all hospitals with obstetric facilities. The Screening Center at the Public Health Authority was responsible for the coordination of the screening process, completeness of participation, the follow-up of all subjects with a positive screening test and the quality of instrumental screening. RESULTS: A total of 96% of 17,469 newborns were screened. The referral rate at discharge was 1.6% (0.4% for bilateral positive findings). For 97% of the positive screening results, a definite diagnosis to confirm or exclude hearing loss was achieved; for 43% only after intervention by the Screening Center. Fifteen children with profound bilateral hearing impairment were identified of whom eight were only detected by the intervention of the Screening Center. CONCLUSION: The effective structures established in the Upper Palatinate provide a standard for the quality of neonatal auditory screening achievable in Germany.