# Abstract EFAS/DGA 2007

## Universal neonatal screening in Poznañ

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Since autumn 2002, The Program of Universal Neonatal Hearing Screening UNHS has been in place in Poland. It includes 3 diagnostic level. The first one takes place in all neonatological wards in Poland. Over 98% of newborns are examined. Over 50 audiological care clinics organize the second level of the Program. Babies are examined during ambulatory or 1-day hospitalization. About 3 month old babies enter the second level of the Program. The third level has the aim to reconstruct the hearing threshold on ABR data, early fitting of hearing aid (before the 6 months) and beginning of rehabilitation. When the profound hearing loss is diagnosed, the qualifications for cochlear implants are started. The UNHS Program has been initiated and partly sponsored by Great Orchestra of Christmas Charity Foundation.

THE AIM
The aim of this study was to show our findings of hearing in babies examined in the Department of Phoniatrics and Audiology in Poznan. All the babies were examined by The Universal Newborn Hearing Screening Program during 2002 - 2006 as a second and third level.

MATERIALS
2100 babies have been admitted to the Department of Phoniatrics and Audiology. They were referred from neonatological wards with refer results or because of risk factors of hearing loss in the anamnesis. The methods of audiological examinations were: DPOAE, impedance audiometry and ABR.

RESULTS
2766 of DPOAE tests, 1536 of ABR tests and 960 impedance audiometry were done. Children were divided into 2 groups: 1. with pass result in DPOAE, without risk factors of hearing disorder in anamnesis 2. with refer result or with risk factors of hearing disorder. Babies from the second group had the impedance audiometry and ABR tests done (cross check principle) to state the hearing threshold and define the type of hearing loss .
8,7% babies had the hearing aid fitted. 2,6% children were qualified to Cochlear Implants Program and 1,1% children underwent the cochlear implant surgery before the second year of their lives. The particularly results of the hearing screening examinations were analyzed in 2006 in 410 children. Binaural conductive hypoacusis was diagnosed in 16%, unilateral perceptive hearing loss in 7% and bilateral perceptive hearing loss in 7% of examined children. In 68% of children examined od 2nd level of Newborn Screening the hypoacusis wasn't confirm.