REFERENCE	DESIGN	RECRUIT-MENT	CASE DEFINITION	SUBJECTS	ASSESSMENT TOOLS	RESULTS	AUTHOR'S CONCLUSIONS
Shepard NT, Davis JM, Gorga MP, Stelmachowicz PG. Characteristics of hearing-impaired children in the public schools: part I—demographic data. J Speech Hear Disord. 1981;46(2): 123–9.	Survey, question-naire	Audiologists in 13 of 15 Area Education Agencies completed question-naires in an attempt to describe characteristics of children with hearing loss in public-school settings.	*Group A:* Bilateral or unilateral conductive loss = normal air conduction air-bone gaps of >10 dB* (3 subgroups) *Group B:* Bilateral or unilateral high frequency hearing loss >25 dB at 4 kHz,* 6 kHz or both (4 subgroups) *Group C:* Sensori-neural or mixed hearing loss at more than one frequency (6 subgroups See appendix for subgroups.	Total: N = 1,250 With hearing loss: N = 1,250 Controls: N = 0 1,250 children with hearing loss who had files for the 1976–1977 academic year. Number of subjects in groups A, B, and C and their subgroups varied because not all children had the same battery of tests.	Survey questionnaires about degree and type of hearing loss, educational placement, use of amplification, and other demographic data using information available in children's personal school files. Audiologists in 13 of 15 Area Education Agencies completed questionnaires.	87% no other condition. Age of onset and identification unknown for most children. ~50% of all conductive and high-frequency hearing losses were unilateral; higher percentages of sensorineural or mixed losses were bilateral; more unilateral than bilateral in profound range. In general, males had slightly higher prevalence; far more males had high-frequency hearing loss. High-frequency hearing loss showed steady increase to grade 11; conductive hearing loss highest in grade 1 and decreased by grade 11; sensorineural and mixed losses remained constant as function of grade. Only children with severe–profound losses received services from teacher of the deaf; most children with mild–moderate losses were in regular classrooms, with and without support services; number of placement options increased as degree of loss increased. Only children with severe–profound losses used hearing aids; children with mild losses rarely used hearing aids.	Prevalence of unilateral hearing loss was high; has implications for interpretation of prevalence data and educational planning. High-frequency loss was more prevalent in males; might have been due to noise exposure; shows need for hearing conservation program. Sensorineural and mixed losses distributed evenly over sex and grade level; has implications for educational planning at all grade levels. Monitoring hearing aids and group amplification were not performed in regular classrooms. Most children in the school setting were therefore, probably not making maximum use of amplification.

*dB = decibel; kHz = kilohertz

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Watkin PM. The age of identification of childhood deafness—improvements since the 1970s. Public Health. 1991;105(4): 303–12.	Retro-spective, survey	198 children with permanent hearing loss, born January 1973–1988 who resided in Waltham Forest, East London (disadvant-aged urban area).	PTA*: 250 Hz*–4 kHz*. Bilateral: *Mild:* 21–40 dB* HL* *Moderate:* 41–40 dB HL *Severe:* 71–95 dB HL *Profound:* >95 dB HL Unilateral: *Moderate:* 55–74 dB HL *Severe/ Profound:* >75 dB HL	Total: N = 144 With hearing loss: N = 144 Controls: N = 0 Only children with complete records were used in the study	Children classified as to degree of hearing loss and divided into 3 time-period groups: 1973–1977 (N = 47); 1978–1982 (N = 64), and 1982–1987 (N = 33). 5-year cohorts were representative of stages of development of audiology services. Only children with non-acquired sensorineural hearing loss and adequate records were used for the 5-year comparisons. Possible that children in the 1982–1987 group not yet identified at the time of the study, which would have biased the study in the direction of a reduced age of identification for this group.	*Prevalence:* 8.2/1000 children had hearing loss excluding acquired losses: Severe–profound = 1/1000; Mild–moderate = 2/1000; Unilateral = 1.7/1000. *Age of identification:* For total group, modal age for severe–profound–moderate bilateral was <1 year; Mild bilateral or unilateral was 5–6 years. Mean age for unilateral was 69 months; for mild bilateral was 60 months; for moderate bilateral was 46 months, and severe–profound was 19 months. Ascertainment was incomplete for mild losses and UHL* for children born since 1982. Because of significant bias, children with mild or UHL were omitted from most recent 5-year cohort. For the last 5-year cohort, the mean age of diagnosis for severe–profound bilateral loss was reduced to 8 months; and moderate bilateral loss was reduced to 16 months.	Improved community-based diagnostic and screening audiology service achieved improvements in early identification. Age of identification had biggest reduction in children with moderate bilateral losses: from school age to just over one year of age. Authors attributed improvement to the greater sensitivity of Infant Distraction Test. Yield of lesser degrees of hearing loss and UHL confirmed low sensitivity of the Infant Distraction Test and Intermediate Screening Test- the modal age for both remained the first year of primary school.

*PTA = pure tone average; Hz = hertz; kHz = kilohertz; dB = decibel; HL = hearing level; UHL = unilateral hearing loss.