

2019 Type and Severity Summary of Identified Cases of Hearing Loss

Data Source: 2019 CDC Early Hearing Detection and Intervention (EHDI) Hearing Screening & Follow-up Survey (HSFS)

Background: The CDC's National Center on Birth Defects and Developmental Disabilities promotes the health of babies, children, and adults, with a focus on preventing birth defects and developmental disabilities and optimizing the health outcomes of those with disabilities. As part of these efforts the Center is actively involved in addressing the early identification of permanent hearing loss among newborns and infants. Hearing loss affects between 1 and 2 per 1,000 infants in the United States and when left undetected, it can delay a child's speech and language, social, and emotional development.¹ To ensure children with permanent hearing loss are identified as soon as possible, states and territories have implemented Early Hearing Detection and Intervention (EHDI) programs. These EHDI programs work to ensure all infants are screened for hearing loss, ideally before 1 month of age, receive diagnostic audiologic evaluation (for those not passing the screening), ideally before 3 months of age, and enrolled in early intervention (for those identified with permanent hearing loss), ideally before 6 months of age². The Hearing Screening & Follow-up Survey is a voluntary survey sent out annually by the CDC to each state and territorial EHDI program that requests non-estimated hearing screening, diagnostic, and intervention information on infants born in a specified calendar year (e.g., 2019). The survey helps to assess the progress of EHDI efforts to identify infants with permanent hearing loss across the United States. This summary highlights type and severity of permanent hearing loss for babies born between January 1, 2019 and December 31, 2019. These data are based on the American Speech-Language-Hearing Association (ASHA) classification system for hearing loss. The ASHA categories are as followed:

Degree of Hearing Loss	Hearing loss range (dB HL)
Normal	-10 to 15
Slight	16 to 25
Mild	26 to 40
Moderate	41 to 55
Moderately severe	56 to 70
Severe	71 to 90
Profound	91+

Number of Survey Respondents Who Provided Type and Severity Data: 52^a (44 states, 7 territories, 1 district) AK, American Samoa, AZ, AR, CA, Commonwealth of the Northern Mariana Islands, CT, DE, District of Columbia, FL, Guam, HI, ID, IL, IN, IA, KS, LA, ME, Marshall Islands, MD, MA, MI, Micronesia, MN, MO, MT, NE, NV, NH, NM, NY, NC, ND, OH, OK, OR, Palau, PA, Puerto Rico, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY

¹American Speech-Language-Hearing Association (ASHA). Effects of hearing loss on development. Available at: <https://www.asha.org/public/hearing/effects-of-hearing-loss-on-development>.

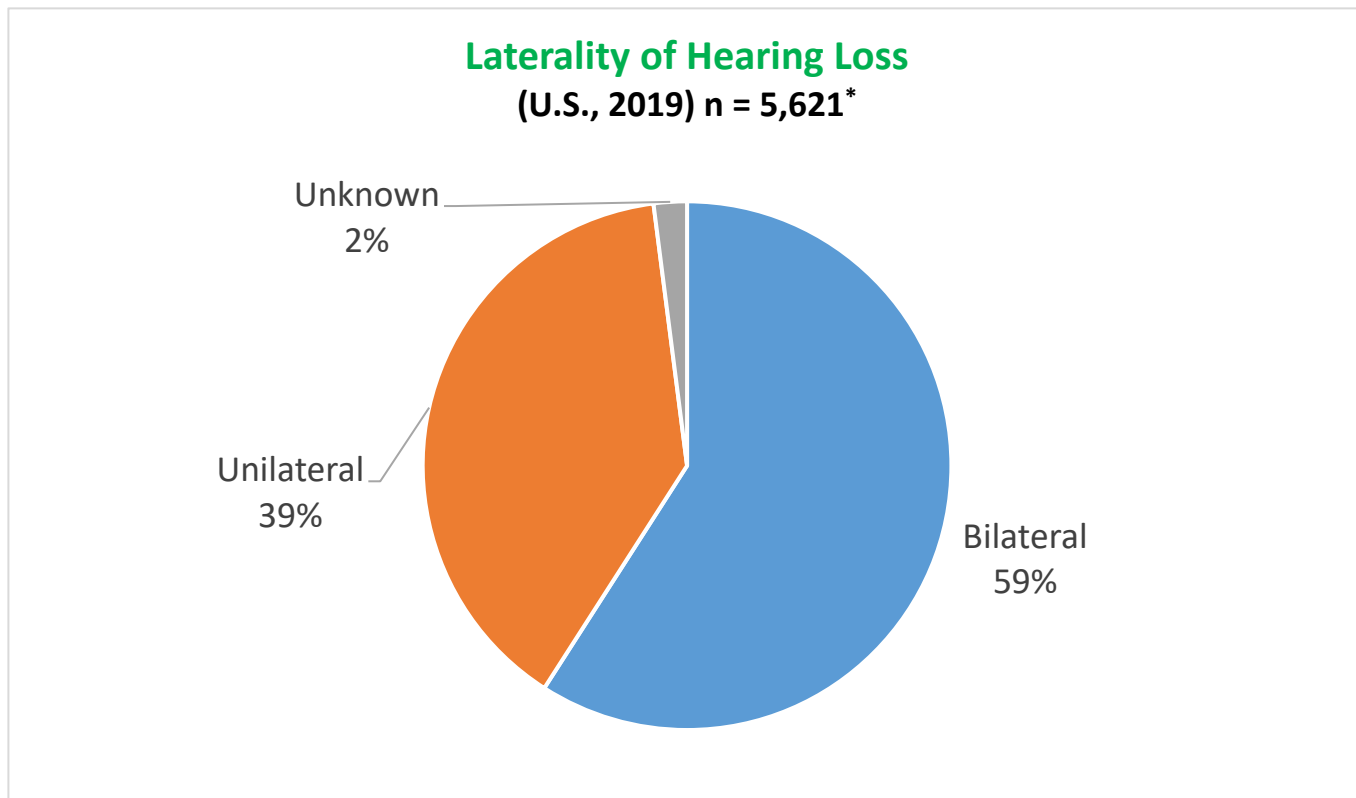
Accessed April 8, 2021

²Year 2019 Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Programs (2019). *Journal of Early Hearing Detection and Intervention*, 4(2), 1-44.

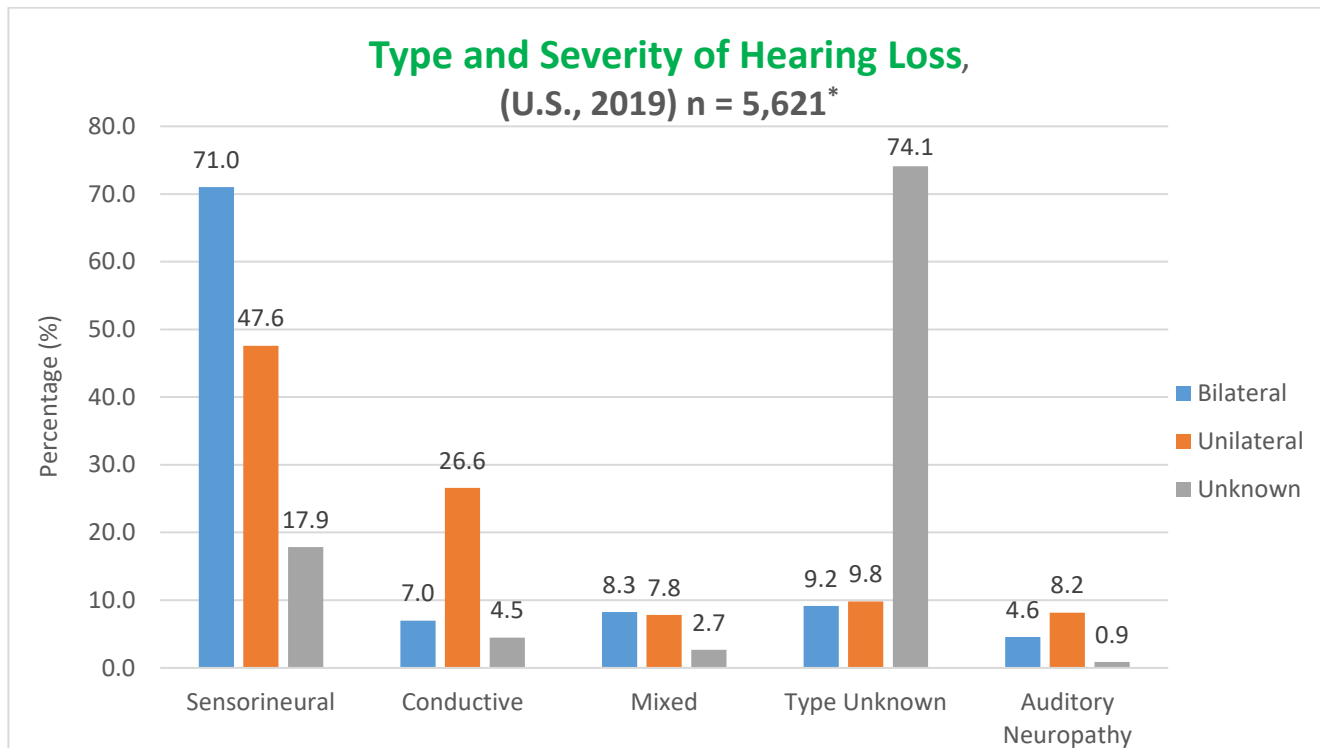
<https://digitalcommons.usu.edu/jehdi/vol4/iss2/1/>

Total Number of Reported Infants with Hearing Loss, 2019 CDC EHHI HSFS									5,621 Children
		BILATERAL (by Ear)				UNILATERAL (by Ear)			LATERALITY UNKNOWN (i.e., Unknown if case is a unilateral or bilateral loss)
		RIGHT EAR	LEFT EAR	UNKNOWN EAR (degree of loss for <u>each</u> ear)		RIGHT EAR	LEFT EAR	UNKNOWN EAR	
Sensorineural	Slight	44	42	0	0	9	7	0	0
	Mild	498	522	0	0	85	98	0	4
	Moderate	631	596	0	0	84	99	1	9
	Moderately Severe	260	276	0	0	61	90	0	4
	Severe	239	243	0	0	95	88	0	3
	Profound	604	601	1	1	141	132	1	0
	Unknown Severity	29	38	0	0	20	9	0	0
Conductive	Slight	5	9	0	0	2	2	0	1
	Mild	42	42	0	0	25	18	0	0
	Moderate	67	58	0	0	101	52	0	1
	Moderately Severe	70	60	0	0	128	87	0	1
	Severe	29	28	0	0	27	17	0	0
	Unknown Severity	24	21	0	0	77	34	0	2
Mixed	Slight	2	0	0	0	3	2	0	0
	Mild	19	29	0	0	2	8	0	0
	Moderate	68	72	0	0	18	16	0	0
	Moderately Severe	80	74	0	0	32	19	0	3
	Severe	61	55	0	0	17	20	0	0
	Profound	30	24	0	0	8	8	0	0
	Unknown Severity	11	13	0	0	10	4	1	0
Type Unknown	Slight	12	16	0	0	5	5	0	3
	Mild	76	84	0	0	24	28	0	15
	Moderate	58	64	0	0	15	20	0	16
	Moderately Severe	31	26	0	0	16	10	0	8
	Severe	31	21	0	0	15	15	0	5
	Profound	20	27	0	0	5	11	0	8
	Unknown Severity	67	64	0	0	24	16	1	28
Auditory Neuropathy	Slight	1	2	0	0	1	1	0	0
	Mild	1	2	0	0	0	2	0	0
	Moderate	5	6	0	0	1	1	0	0
	Moderately Severe	1	0	0	0	5	5	0	0
	Severe	9	8	0	0	8	7	0	0
	Profound	33	33	0	0	23	17	0	0
	Unknown Severity	97	99	0	0	52	52	0	1
Totals by Ear		3,255	3,255	1	1	1,139	1,000	4	112
Totals by Child		3,255		1		1,139	1,000	4	112
Laterality Totals (by Child)		3,256 Bilateral Cases				2,143 Unilateral Cases			
Total all Types and Severity (by Child)									5,511
Cases Resolved (i.e., hearing loss to no hearing loss)									110
Overall Total (by Child)									5,621

Summary of Type and Severity of Identified Cases of Hearing Loss in 2019



*In 2019, 5,621 cases of permanent hearing loss were reported among 52 states and territories. However, 110 cases were reported later as being resolved (i.e., hearing loss to no hearing loss).



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