

# Audiogram of the chipmunk (*Tamias striatus*)

**Data from:** : Heffner, R.S., Koay, G., and Heffner, H.E. (2001). Audiograms of five species of rodents: Implications for the evolution of hearing and the encoding of pitch. *Hearing Research*, 157, 138-152.

## Absolute thresholds (in dB re 20 $\mu\text{N/m}^2$ ) for four chipmunks (designated A through D)

Frequency (in kHz)	Individual Thresholds (in dB)				Average
	A	B	C	D	
.004	98	—	98	—	98
.008	86	—	87	—	86.5
.016	80	—	77	—	78.5
.032	66	—	61	—	63.5
.063	51	53	48	—	50.7
.125	39	39	40	—	39.3
.250	33	26	39	27	31.3
.500	20	19	19	—	19.3
1	20	16	14	—	16.7
2	32	29	23	—	28
4	32	31	27	—	30
8	30	13	22	—	21.7
16	22	16	24	—	20.7
32	24	24	24	—	24
45	25	38	18	—	27
50	52	73	37	—	54
56	—	—	85	—	85
64	>90	>90	>90	—	>90

## Lowest and highest frequencies audible at sound pressure levels (SPL) ranging from 30 to 70 dB SPL

SPL (in dB)	Lowest audible frequency (in kHz)	Highest audible frequency (in kHz)
70	.024	53
60	.039	52
50	.067	50
40	.121	48
30	.370	45.5

### Additional Parameters:

**Body weight** = 90 g

**Functional interaural distance**= 108  $\mu\text{s}$

(Time required for sound to travel around the head from one auditory meatus to the other.)

**Comments:** Threshold values taken from original data.