

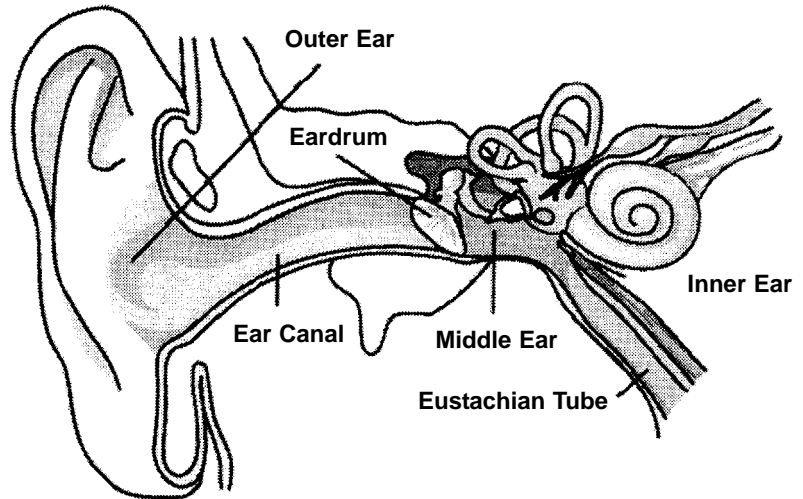


# Sound Beginnings

## Illinois Newborn Hearing Program



### How the ear works – parts of the ear



#### OUTER EAR

1. **Pinna** – also known as auricle) the outer portion of the ear that can be seen; helps with localization
2. **Ear canal** – the passage between the pinna and the eardrum

#### MIDDLE EAR

1. **Eardrum** – or tympanic membrane. A three layer membrane that separates the outer and middle ear; vibrates to transfer sound to the middle ear bones
2. **Ossicle** – three tiny bones of the middle ear; all three together are not larger than a dime
3. **Hammer** – or maleus; first and largest of the three bones, connects the eardrum to the anvil; mechanically moves to transfer sound
4. **Anvil** – or incus; second of the three bones; connects the hammer to the stirrup; mechanically moves to transfer sound
5. **Stirrup** – or stapes; the third and smallest of the middle ear bones; connects the anvil to the oval window; mechanically moves to transfer sound to the cochlea

#### INNER EAR

1. **Cochlea** – snail shaped part of the ear than contains the sensory organ of the hearing. Changes vibrations to nerve impulses
2. **8th nerve** – or auditory nerve; carries nerve impulses for the cochlea to the brain
3. **Semi-circular canals** – three U-shaped canals of the vestibular / balance system; tells the body where the head is in space; responsible for the awareness of movement

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