Each month an audiometer is in use, a biological calibration is required. This consists of testing a person having a known stable audiometric curve that does not exceed 25 dB @ any frequency between 250 and 6000 Hz and comparing the test results with the subject’s recorded hearing screening reference data. If the results of a biological calibration indicate HL differences greater than 5 dB at any frequency, if the signal is distorted, or there are attenuator or tone switch transients, then the audiometer shall be subjected to a periodic electronic calibration. (Chapter 401 of the Texas Health and Safety Code.) A copy of this form should be kept with the audiometer for three years.
Audiometer Monthly Biological Calibration Check Procedure

All individuals must be able to hear all frequencies at 25 dB or better.

1. Screen the individual at an intensity of 25 dB HL in each ear at the following frequencies, 1000, 2000, 4000, 6000, 500, and 250 Hz in that order. This is to rule out those individuals that cannot be used.

2. Start with the right ear and set the frequency dial at 1000 Hz.

3. Set the HL dial at 40 dB HL and present the tone for two to three seconds.

4. If the individual responds, lower the intensity by 10 dB HL (to 30 dB HL on the HL dial) and present the tone again.

5. Continue to lower the HL dial in 10 dB steps until no response is obtained or until 20 dB is reached.

6. If no response is obtained, increase the HL dial setting in 5 dB steps until the individual again signals that the tone is heard and record this numeric HL setting at 1000 Hz for the right ear.

7. Reset the HL dial at 40 dB HL, and turn the frequency control dial to 2000 Hz.

8. Repeat the sequence (steps number 3 - 6) until you establish the numeric HL setting for 2000 Hz and record it.

9. Continue in this manner for each of the frequencies in the following sequence: 4000, 6000, 500, and 250 Hz. Remember, each time you begin screening a new frequency, return the HL dial to 40 dB and begin the sequences of down 10 until the individual does not respond and up 5 until the individual responds or 20 dB is reached.

10. Establish and record the numeric HL setting for all six frequencies in the right ear.

11. Set the output selector to the left ear and begin the procedure on that ear at 1000 Hz.

   The sequence remains the same for the left ear: 1000, 2000, 4000, 6000, 500, and 250 Hz. Numeric HL settings are recorded in the same manner as for the right ear.

12. Once the numeric HL settings for all frequencies in the right and left ears have been recorded, the procedure is complete.

   **NOTE**

   If the listener responds to a frequency at 20 dB, record the numeric HL setting as 20 dB for that frequency.

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