A 2009 study was conducted at Towson University to examine hearing screening training in the U.S. A survey was sent to educational audiologists who conduct hearing screening training. The survey indicated a number of mistakes made by new hearing screeners across the U.S. These mistakes, and ways to fix the mistakes, are described in this portion of the video.

#1: Collapsing Ear Canal
- Collapsing ear canal can occur in one or both ears.
- This is due to narrow or oval-shaped ear canals.
- The walls of ear canal come together due to pressure from the earphones on the ear(s).
- Students may fail screening because of this even if they have normal hearing.
- Solution:
  - Rescreen child with his/her mouth slightly open.
  - Rescreen child with earphone held slightly away from ear.

#2: Presenting tones in a predictable pattern
- Occurs because screeners present tones in a rhythm, so listeners can guess when the beeps are presented.
- Solution:
  - Insert irregularly timed pauses between tones.

#3: Improperly placed earphones
- Earphones are placed over hair, away from ear; earlobe may be folded under earphone.
- Earphones are placed over the wrong ears (signal for right ear directed to left ear).
- Solution:
  - Watch the video to see the proper way to place earphones.
  - Use color code on earphones (right = red) or mark with tape. Always check to make sure earphones are on the correct ears.

#4: Providing visual cues
- Children with hearing loss are very good at using visual information to supplement what they are hearing in the classroom.
- If you set up your hearing screening in such a way that children can see what you are doing, they can pass a screening even with a hearing loss.
• Solution:
  o Do not face students towards mirrors, windows, or reflective metal surfaces.

#5: Not switching from right to left ear
• It is a common mistake is to accidentally test one ear twice.
• Solution:
  o During the listening check, be sure the way to switch ears is clear (may be a toggle switch, button, etc.).
  o Always test the right ear and then remember to switch after testing 4000 Hz in the right ear.

#6: Not performing listening checks
• Hearing screeners may assume the audiometer works because it worked during a prior day or the audiometer was just moved from one room to another.
• Audiometers may fail at any time, even in the middle of a screening.
• Solution:
  o Check the audiometer every time it is plugged into the wall and every time it is turned on. It takes less than a minute to check the equipment.

#7: Using a noisy room & #8: Increasing intensity of a tone because of a noisy room
• If you cannot find a quiet room, you cannot conduct a hearing screening.
• DO NOT waver on this because of pressure from the school system or health department.
• The false positive rate increases in noisy rooms. This means:
  o Children will miss school and family will miss work unnecessarily to go for follow-up audiological testing.
  o Healthcare costs go up as a result of unnecessary follow-up testing.
  o Too many false positive referrals will make the screening program appear to be inaccurate.
• The false negative rate increases if the intensity is turned up to compensate for the noisy room. This means:
  o Children with hearing loss may be missed by the screening, and this can cause long-term harm to their development.
  o Children with hearing loss that is not treated may have a reduced long-term earning potential as a result of poor development.
  o In summary, the costs to student, family, and society when hearing loss is missed are too high to make this mistake.
• Solution:
  o Find a quieter room or re-schedule the screening.

#9: Increasing the intensity of a tone to try and find the child’s actual threshold
• It is never OK to increase the level of a tone in order to find out the extent of the hearing loss.
• A hearing loss can only be confirmed following comprehensive audiological testing.
• Solution:
  o Screen at 20 dB HL and do not increase the level of the tone.

#10: Not wanting to fail or refer the child
• This is a normal human reaction. Hearing screeners may think children should hear the tone because they are able to communicate and they may want all of the children to pass the test. However, it is not in the best interest of the child to pass him/her if the child does not respond to the tones following standard procedure.
• Solution:
  o Do not present the tone a little longer or a few extra times. Use the 2-3 second rule for all tones.
  o Reinstruct the child if you think he/she did not understand the directions.
  o Refer for further testing if the child does not hear one or more of the tones.

#11: Not cleaning earphones
• Studies have shown that nasty organisms can grow on the earphone cushions, just like many other medically-related devices.
• Solution:
  o Be sure to clean earphones between each child.

#12: Not feeling confident as a screener
• It is perfectly natural to be unsure of your testing skills when you first do hearing screenings.
• Solution:
  o Watch the video carefully.
  o Get hands-on practice from your supervisor if possible.
Practice the skills you learned from the video with an adult first, then practice screening with a few older children. Confidence will come with experience.

#13: Not realizing equipment has failed in the middle of a test
- Sometimes equipment fails in middle of a hearing screening even though the listening check was normal.
- This may appear as an unusual pattern of response, such as if several children in a row fail the same frequency.
- This may also appear as a blinking power light on the audiometer.
- Children may also report that they hear strange noises, such as crackling sounds, or they may not hear a sound at all.

Solution:
- Watch out for these issues.
- If the equipment is faulty, discard results from children affected, send the audiometer for repair, and re-screen with another audiometer, if available, or re-schedule the screening for a later date.

#14: Passing a child who only missed one response
- In order to pass a child must respond to all tones in both ears; there are no exceptions to this rule. Hearing loss may be present in one ear and just at one or two frequencies.

Solution:
- Mark “fail/refer” even if the child missed one tone.

#15: Wanting to counsel child (or parents) about screening results
- It is natural for a parent or student to ask if a hearing loss is present, when a child fails a hearing screening; however, the hearing screening does not diagnose a hearing loss, so counseling should be avoided. Hearing screening results should only be reported as “pass” or “fail/refer” and only to the individuals designated by the school system or health department to receive the information.

Solution:
- Do not counsel students or parents about screening results. Report only the result of the screening.

#16: Assuming the child hears the tone but is just not raising his/her hand
- Children may act like they have normal hearing when a hearing loss is present. Do not assume normal hearing.
• Solution:
  o Reinstruct the child and test a second time.
  o Refer the child for further testing if he/she does not respond to the tone(s) after re-instruction.

#17: Talking in the screening room
• Multiple children and multiple screeners can make a screening room noisy and this will interfere with testing.
• Solution:
  o Clearly communicate to all children and screeners that talking in the screening room is not acceptable.
  o Use an assistant to control the noise level, if possible.
  o For multiple screeners in a room, be sure that everyone starts screening at the same time.

#18: Screening children with hearing aids or previously documented hearing loss
• Students who have known hearing loss do not need to be screened because a hearing loss has already been diagnosed and treated.
• Solution:
  o Do not place earphone on top of hearing aids, cochlear implants or other listening devices.