

IOWA DEPARTMENT OF PUBLIC SAFETY
Vision and Hearing Standards for Peace Officer Applicants

Vision Standard:

Applicants must have uncorrected vision (without the aid of contact lenses or glasses) of not less than 20/100 in both eyes, corrected to 20/20.

Surgery to correct vision will not be considered an automatic disqualifier.

Applicants will have their vision screened during the medical examination.

Color Vision

Applicants must have color vision consistent with the occupational demands of law enforcement.

Passing any of the following color vision tests indicates that the applicant has color vision abilities consistent with the occupational demands of law enforcement: Pseudoisochromatic plates tests such as but not limited to: Tokyo Medical College, Ishihara, Standard Pseudoisochromatic Plates, Dvorine, American Optical HRR Plates, American Optical. Panel tests such as: Farnsworth Dichotomous D-15 Test or any other test designed and documented to identify extreme anomalous trichromatic, dichromatic or monochromatic color vision.

Individuals with extreme anomalous trichromatism or monochromasy color vision, as determined through testing, are not eligible to be hired as law enforcement officers in the state of Iowa.

Applicants will be checked during the medical examination for color blindness.

Hearing Standard:

Applicants must meet the hearing standards as outlined below. Hearing will be checked during the medical examination.

1. The person shall have normal hearing in each ear. Hearing is considered normal when, tested by an audiometer, hearing sensitivity thresholds are within 25dB measured at 500Hz, 1000Hz, 2000Hz and 3000Hz averaged together.
2. If the person does not have normal hearing as described above and any of the following (as recommended by the American Academy of Otolaryngology) conditions exist, a medical specialist's evaluation (otologic evaluation) is required in order for the candidate to be considered for hire:
 - a. Average hearing level at 500Hz, 1000Hz, 2000Hz, and 3000Hz greater than 25dB, in either ear.
 - b. Difference in average hearing level between the better and poorer ear of:
 - More than 15dB at 500Hz, 1000Hz, and 2000Hz, or
 - More than 30dB at 3000 Hz, 4000Hz, and 6000Hz.
 - c. History of ear pain; drainage; dizziness; severe persistent tinnitus; sudden, fluctuating, or rapidly progressive hearing loss; or a feeling of fullness or discomfort in one or both ears within the preceding 12 months.
 - d. Cerumen accumulation sufficient to completely obstruct the view of the tympanic membrane or a foreign body in the ear canal.
 - e. Use of a hearing aid.

1. Functional hearing evaluation required. Issues of reversibility and prognosis should be addressed during the otologic evaluation. The evaluation should consist of directional speech comprehension in noise and speech comprehension in quiet using the High Intensity Noise Test (HINT) or other tests that meet the performance characteristics as outlined below. Candidates who perform more poorly than the fifth percentile of the normal hearing group under any of the three background noise conditions (noise in front, right, or left) are not eligible for hire. Candidates with quiet thresholds greater than 28dB(A) on the HINT or other tests that meet the performance characteristics as outlined below are not eligible for hire.
2. Required performance testing characteristics include the following:
 - a. Testing is available in both headphone and sound field versions.
 - b. The testing has an adequate normal hearing control group.
 - c. The testing is capable of spatial separation between the speech and the noise source.
 - d. The testing uses adaptive testing techniques.
 - e. The testing uses a stationary background noise with the same average level across frequencies as the speech.
3. A candidate who uses a hearing aid(s) should be administered the HINT or other tests that meet the performance characteristics as outlined above to assess speech comprehension ability in noise and quiet. Both tests must be administered by sound field methods rather than headphones. An aided audiogram can be reviewed to evaluate sound detection ability. Before functional testing, the examining physician must ensure that the aid(s) has been worn regularly for at least one month, since it takes some practice before an individual obtains the maximum benefit from the hearing aid(s). Furthermore, the examining physician should obtain all records from the audiologist who dispensed the hearing aid(s). The records must include documentation of the fitting program and other hearing aid settings, which are used on a regular basis by the candidate. This information shall be reviewed by the certified audiologist performing the testing procedure to verify that the settings have not been intentionally altered. The following protocol must be used. No modifications to the candidate's hearing aid program or settings should be made prior to or during the performance of this protocol.
 - a. Evaluate whether the hearing aid(s) is working properly. The electroacoustic response characteristics of each hearing aid worn by the candidate should be measured in an appropriate acoustic coupler and test chamber according to ANSI specifications (ANSI 1992 and 1996). The response of the hearing aid(s) should be measured at the four designated input levels with a broadband test signal, as specified in the specifications. All measurements should be printed and retained in the candidate's records. If the hearing aid(s) is not in proper working condition, no further testing should be performed at that time. The candidate may elect to have the hearing aid(s) repaired or replaced and may return to repeat the protocol. In this event, the entire protocol, including measurements of the electroacoustic response characteristics of the hearing aid(s), should be repeated with the new or repaired

hearing aid(s). Hearing aid sales, repairs, and replacements should be from an independent provider other than the provider of the functional assessment services.

- b. Review the candidate's regular fitting program and settings. The fitting program and settings should be equivalent to those measured according to subparagraph (1). If they are not equivalent, no further testing should be performed at that time.
- c. Determine whether the functional gain is both physiologic and appropriate for the candidate's hearing loss. Unaided and aided binaural sound field thresholds should be measured at 250Hz, 500Hz, 1000Hz, 2000Hz, 3000Hz, 4000Hz, and 6000Hz, using warble tone stimuli presented from a loudspeaker positioned 1 meter in front of the candidate at 0 degrees azimuth. If the functional gain is not physiologic and appropriate, then no further testing should be performed at that time.
- d. Perform aided sound field HINT or other approved testing in noise and quiet. Compare the results to the site-specific normal values for sound field noise front, noise right, and noise left conditions. If the measured thresholds are better than the fifth percentile under all three conditions, then the noise testing shall be repeated with the background noise fixed at 80dB(A). The same normative values used with the standard background noise levels may be used to assign percentile scores to these results.

The examining physician may use the evaluation algorithm described in Hearing Guidelines—

Abnormal Audiogram, with one exception. Many present-day hearing aids employ methods of sound processing that vary as a function of the background noise level, and it is necessary to measure aided sound field HINT thresholds through a range of background noise levels. Therefore, candidates who use hearing aid(s) should be functionally normal both under standard HINT background noise levels (i.e., 65dB) and at levels that are commonly encountered in the field (80dB).

The candidate has met the required hiring standards if the candidate has demonstrated acceptable functional ability when wearing a hearing aid(s) and wears a hearing aid(s) when assigned to field duty.