

SCREENING TESTS

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Screening is a mass survey technique which seeks to identify those persons whose hearing is outside normal limits and requires further evaluation. It is possible in survey work to use any of a wide variety of audiometric measuring procedures, including threshold tests. Most of the standard threshold tests, however, were devised for diagnostic rather than survey purposes, and are not economical of either time or money.

In screening it is not necessary to make a complete audiometric evaluation or to concentrate on factors of hearing such as sensitivity, pitch recognition, discrimination and tolerance. It is necessary only to obtain the answer to one question: Does this person hear the tone when it is presented at a pre-determined db level (re audiometric zero)? If he does hear it, he may be presumed to have hearing within "normal" limits. If he does not, then he must be referred for a complete audiometric evaluation.

Considerable work has been done to develop techniques and measuring instruments which permit such an assessment. Although there are several variations within these categories, the tests and instrument fall into three general groups: Individual pure-tone sweep-check screening devices, group screening (manual or automatic), and limited frequency screening (monitoring audiometry).

Individual Pure-Tone Sweep-Check Test

This test requires an audiometer with air conduction earphones, properly calibrated to meet the screening criteria of the American Standards Association. The person being tested is seated so he cannot see the operation of the audiometer and is instructed to raise his hand (or finger) when he hears a tone through the earphone. The intensity dial of the audiometer is set at pre-determined level, preferably 5 db on the Proposed International Standard). The test frequencies of 1000, 2000, 3000 and/or 4000, and 6000 cps are then presented in this order. If the person being tested fails to respond to the tone at 1000 cps and/or 2000 cps — or, if he fails to hear the tone at **any two of the three frequencies** of 3000 cps, 4000 cps, and 6000 cps, he should be referred for a threshold audiogram.

The sweep-check test is preferred by many audiometrists because it presents great reliability in case finding. Using this method, a good audiometrist can screen a cooperative person in approximately two minutes. This, of course, does not compare favorably with the numbers who can be screened by group methods in the same amount of time, but it still represents the most **reliable** and most practical screening method available today.

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Le "screening" est une technique qui a pour but de déceler, entre un grand nombre de personnes, celles dont l'audition se situe en dehors des frontières normale et chez qui un examen plus approfondi se révèle nécessaire.

Les tests et les instruments se répartissent en 3 groupes:

- 1) Le screening individuel avec "sweep-check" test pour sons purs.
- 2) Le screening à nombre restreint de fréquences (audiométrie d'avertissement-"monitoring audiometrie".)
- 3) Le screening de groupe (à la main ou automatique).

"Sweep-check Test" pour sons purs

Le bouton d'intensité est mis sur 15 db (en rapport avec le standard international proposé). Les fréquences à examiner sont 1000, 2000, 3000 et/ou 4000, et 6000 Hz dans l'ordre indiqué. Lorsque le sujet examiné n'entend pas le son de 1000 et/ou 2000 Hz, ou lorsqu'il n'entend pas deux des trois sons de 3000, 4000 ou 6000 Hz, on s'en réfère à un audiogramme de seuil détaillé. Cet examen donne des résultats dignes de confiance, et peut-être effectué en deux minutes.

Dans l'examen de groupe, on a à examiner plus de personnes dans le même temps, mais la méthode individuelle est pour le moment la plus sûre et la plus pratique.

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