

# Award-winning occupational health audiometry enabling business to have faster, more efficient and affordable hearing testing procedures, on site

## hearX Group

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In a study conducted in South Africa and published in 2011, 73.2% of miners from 14 mines were exposed to excessive noise, above the legislated occupational exposure limit of 85 dB,<sup>1</sup> despite hearing conservation programmes implemented in the mining sector. Hearing conservation programmes in South Africa are characterised as very complex, expensive, time intensive, and dependent on equipment and soundproof booths.

Audiometric testing in occupational health settings helps to determine if occupational hearing loss is being prevented by the noise control measures in place. As occupational hearing loss occurs gradually, workers often fail to notice changes in their hearing ability until significant deterioration occurs. This can be avoided by conducting annual hearing checks, and taking appropriate action as soon as a change is detected – when comparing audiometry results with those from previous years. Annual hearing checks also contribute to increased productivity in the workforce, reduced workplace injuries and communication barriers, and ensure adherence to regulations.

Developed in close co-operation with audiologists and safety professionals, [hearX Group's hearTest Occ Health](#) solution is an IEC-certified tablet-based audiometer for seamless occupational hearing testing, fully compliant to OSHA and SANS requirements. With automated audiogram threshold tracking and assessments at the click of a button, [hearTest Occ Health](#) allows for simplified patient counselling, efficient on-site screening, and seamless reporting, without the need for third-party vendors. This digital solution provides attenuation equivalent to a single-wall sound booth, allowing the freedom of portable, reliable and cost-effective occupational health audiometry for businesses.

[hearTest Occ Health](#) enables workplace hearing screening anywhere, any time, without the need for bulky equipment, and offers a variety of features including:

- Percentage loss of hearing (PLH) and standard threshold shift (STS) calculations, with the option to enable age adjustments when determining if a valid shift occurred
- Pre-test questions that ensure detailed data capturing by recording patient information to ensure compliance to standards and conformance to operational test requirements
- Optimisation of testing times by preloading patient, facility and testing information to the device
- Monitor of changes in hearing health by manually adding a baseline or importing the screening test as a baseline test
- Smart features that ensure on-site quality control and test reliability. Quality control metrics include noise monitoring, false response counts, response times, and 1 kHz retest
- Use of automated testing and smart algorithms – significantly faster than traditional screening services, allowing for accurate, easy and reliable automated tests
- The [hearScope](#) digital video otoscope, which can integrate with the [hearTest Occ Health](#) device to include eardrum images on patient records
- [mHealth Studio](#), which is included free with any [hearTest Occ Health](#) subscription. [mHealth Studio](#) allows for online data management, surveillance, referrals and report generation, safe and reliable storage of clinical data, and a graphical comparison of baseline and screening tests, providing you with full access and control over all employee test data

## REFERENCE

1. Edwards A, Dekker J, Franz AM. Profiles of noise exposure levels in South African mining. *Journal of the Southern African Institute of Mining and Metallurgy*. 2011; 111(5): 315–322.