

- Title** PortaCount®Pro+ Respirator Fit Tester
- Agency** HTA Malaysia, Health Technology Assessment Section, Medical Development Division, Ministry of Health Malaysia
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- Reference** Technology Review Report - 001/2015, online:
http://www.moh.gov.my/index.php/database_stores/store_view_page/30/259

Aim

To assess the accuracy, safety and efficacy/effectiveness of PortaCount®Pro+ Respirator Fit Tester for fit testing of N95 respirators in healthcare workers.

Conclusions and results

PortaCount Plus with the N95 companion may be suitable for fit assessment as recommended in the Guidance for Industry and FDA Staff Class II Special Controls Guidance Document: Filtering Facepiece Respirator for Use by the General Public in Public Health Medical Emergencies. It has demonstrated practical application of fit testing using various models of N95 respirators in adult.

Passing a fit test may improve the probability of wearing an individually fit respirator. Hence, it will increase the level of respiratory protection for the health care workers. Face dimensions, user's training, size and type of respirators are among the possible factors that contribute to the fit of respirators. Individual fit test using different N95 respirators may be needed for each healthcare worker to determine the best fitting respirator based on the factors that affect each individual.

Recommendations (if any)

PortaCount® Pro+ Respirator Fit Tester may be used in research environment for fit testing of N95 respirator for healthcare workers as it may improve the probability of healthcare workers wearing an individually fit respirator based on the face dimension, size and type of respirator. Outcome data should be collected.

Fit testing may be considered prior to respirator's use and whenever different respirators are used by the workers, It is also important to provide adequate training for the respirator users

Methods

Electronic databases were searched through the Ovid interface: Ovid MEDLINE® In-process and Other Non-indexed citations and Ovid MEDLINE® 1946 to present, EBM Reviews - Cochrane Central Register of Controlled Trials - December 2014, EBM Reviews - Cochrane Database of Systematic Reviews - 2005 to December 2014, EBM Reviews - Health Technology Assessment – 4th Quarter

2014, EBM Reviews-NHS Economic Evaluation Database 4th Quarter 2014, EBM Reviews- Cochrane Methodology Register 3rd Quarter 2012, EBM Reviews- Database of Abstracts of Review Effects 4th Quarter 2014, EBM Reviews- ACP Journal Club 1991 to December 2014, EMBASE – 1996 to 2015 January 19.

Google was used to search for additional web-based materials and information. Additional articles were identified from reviewing the references of retrieved articles. Last search was conducted on 10th February 2015.

Relevant articles were critically appraised and evidence graded using US/Canadian Preventive Services Task Force.

Further research/reviews required

Clinical research at local setting is warranted

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