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## **RESPIRATORY PROTECTION - "The last line of defence - or is it?"**

### **Abstract**

Occupational disease, particularly those arising from inhalation of airborne substances, is of significant interest, not least because of the potential preventability of exposure in the workplace. Theoretically at least, it should be possible to reduce exposures significantly by engineering or other methods and as a last resort, by RPE (Respiratory Protective Equipment).

There are significant barriers, however, that prevent the effective use of RPE in the workplace and there are many topics that are unknown at the present time that require further research. There are about 17,000 daily users in New Zealand, most using RPE such as the disposable type. There are a huge range of different types, some certified and many others not so. The protection actually afforded may be minimal. There are significant concerns with the latter type of RPE, freely available from hardware and other outlets in this country. Most are not certified by any standard organisation and many DIY (Do-It-Yourself) and large stores market uncertified equipment that, while inexpensive, probably provide little protection from airborne contaminants.

The presentation will focus on some background to RPE, limitations of current equipment and some of the myths that pervade industry. Current research will be described and new resources about to be produced will be summarised.

### **Overview**

This presentation will focus on the reasons for the interest in modern RPE, some typical limitations that may not be realised, types of RPE that are available, the need for insight into the typical considerations necessary but often overlooked and some technical details relevant to RPE such as Peak Inspiratory Air Flows.

Much of the RPE is worn in a variety of workplaces including the health sector without any considerations to the requirements of AS/NZS 1715:2003 or the limitations of RPE.

Prevention of inhalation disease is an important issue for industry, yet much of the information available does not appear to be used in practice.

### **The presentation**

This presentation will give a history of some of the development of RPE, some suggestions for the health care sector and industry as well as limitations and considerations in the use of RPE in the workplace.

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**THE AUTHOR IS ON BOTH THE ISO AND AUSTRALIAN AND NEW ZEALAND STANDARDS FOR RESPIRATORY PROTECTION.**

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