

QUEENSLAND MINING INDUSTRY HEALTH & SAFETY CONFERENCE

2015



PPE – a Cautionary Tale

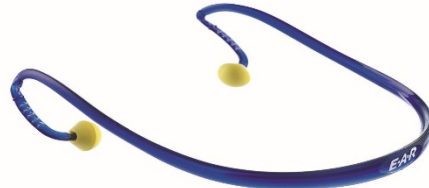
Terry Gorman
Senior Occupational Hygienist
3M Australia



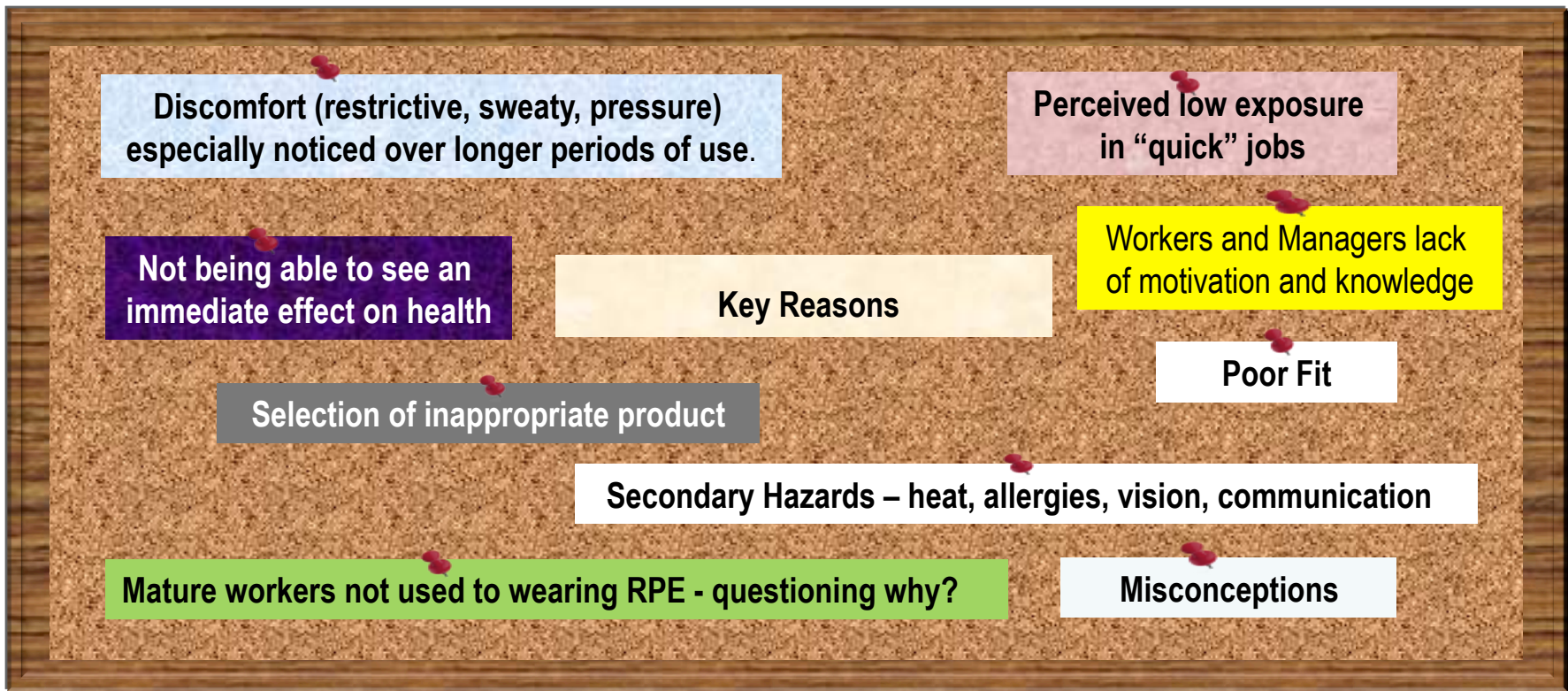
PPE: Use and Misuse – why is it commonly not used correctly?

Personal Protective Equipment (PPE) = any device or appliance designed to be worn by an individual for protection against one or more health and safety hazards.

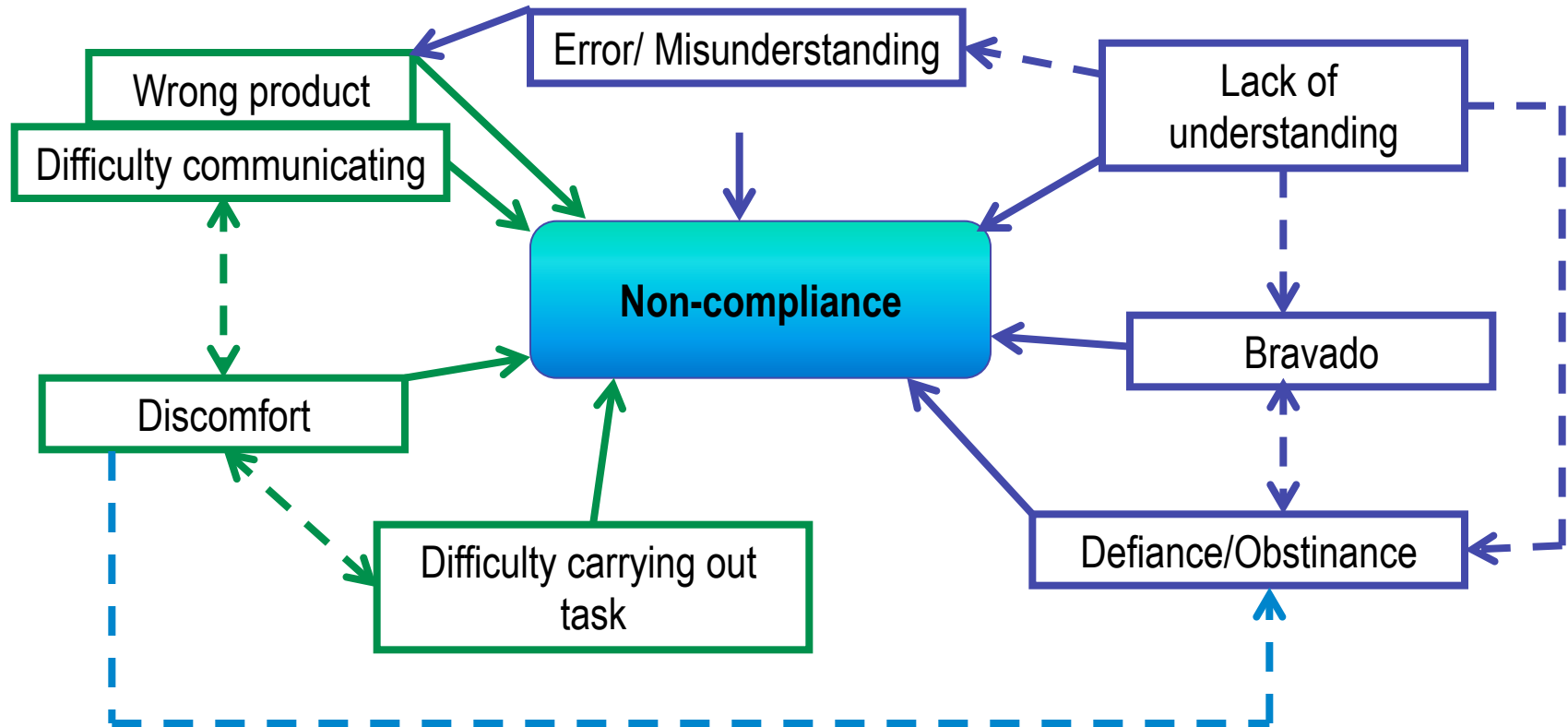
Studies have found that 50%-80% of workers fail to properly use the PPE provided - achieving the expected and required protection is a real issue in workplaces.



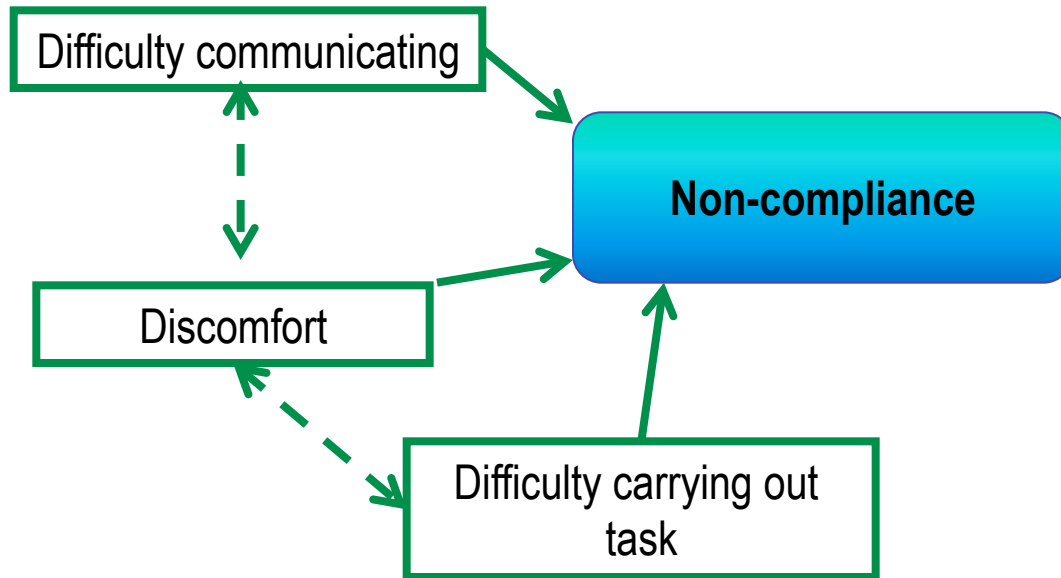
What are some reasons for non-compliance?



What are reasons for non-compliance?

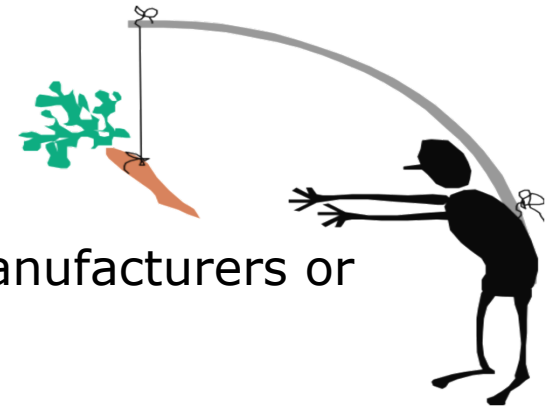


How can compliance be improved?

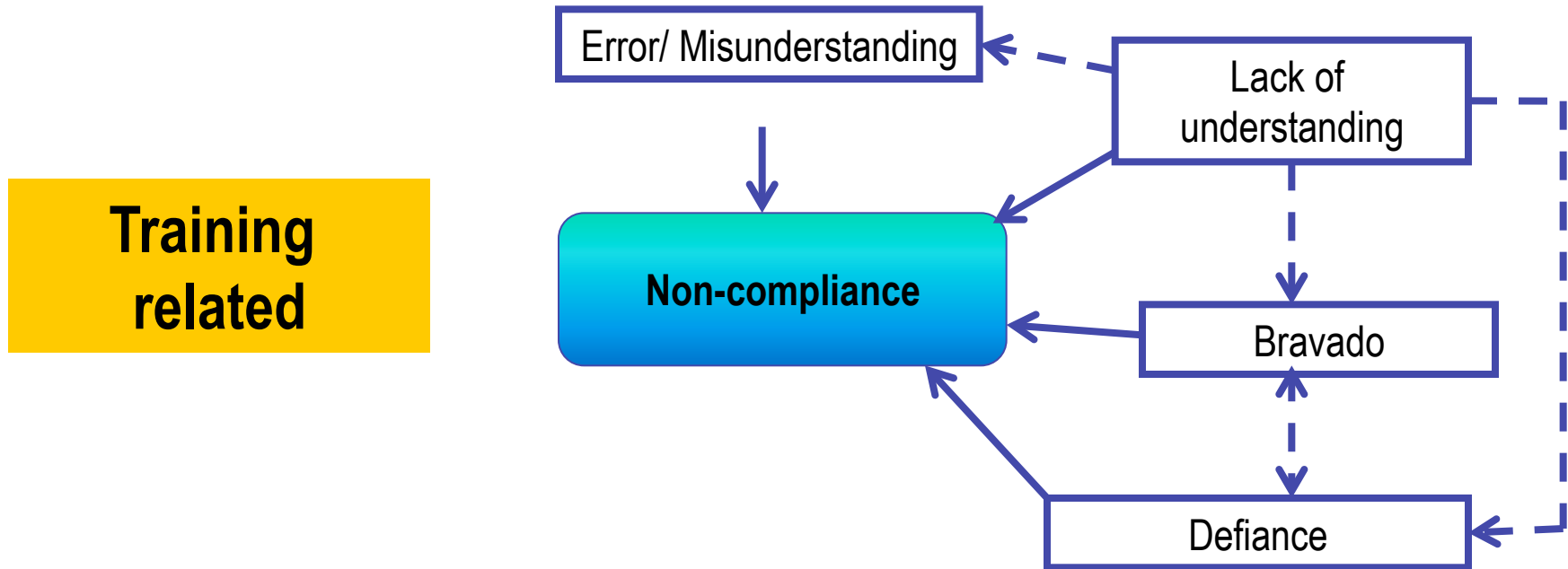


**Product
related**

- Worker buy-in: field trials and feedback
- Product design and features, cost, availability
- Access to relevant information e.g. Internal, manufacturers or Government sources
- Reward best practice
- Disciplinary action.....



How can compliance be improved?



- Managers must understand full picture – use, maintenance, storage
- Managers must be consistent with PPE message
- “Enforcement” for rule breakers
- Overcome perception that PPE is common sense and obvious and inaccurate perception of risks/health effects e.g. in the USA, over 50% of eye injuries occur to workers not wearing eye protection or wearing the wrong type or size.

How can compliance be improved?

Training related



The need for protection



Getting a good fit



Limitations of use



Maintenance procedures



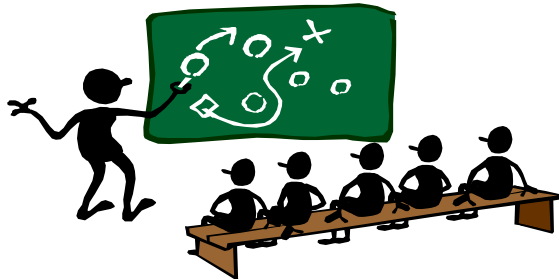
Putting on & removing



Storage

How can compliance be improved?

Training related



Classroom Sessions



Mentoring



eLearning



Posters

3M General Respirator Selection Guide

Respirators protect against nose, throat & lung irritation, headache, nausea, asthma, liver & kidney damage.

• Recommended Selection.

• 3M Respirator Specialists preference.

When you are...

To protect against...

Working in areas with dust, dirt, lint, pollen, etc.

Dust, dirt, lint, pollen, etc.

Working in areas with organic vapors (e.g., solvents, paints, etc.)

Organic vapors

Working in areas with inorganic vapors (e.g., acids, alkalis, etc.)

Inorganic vapors

Working in areas with gases (e.g., carbon monoxide, etc.)

Gases

Working in areas with aerosols (e.g., bacteria, viruses, etc.)

Aerosols

Other tasks

Other tasks

Disposable Respirators

Reusable Respirators

3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 Series	3M 6100 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Selection Guides



Toolbox Talks

Fitting

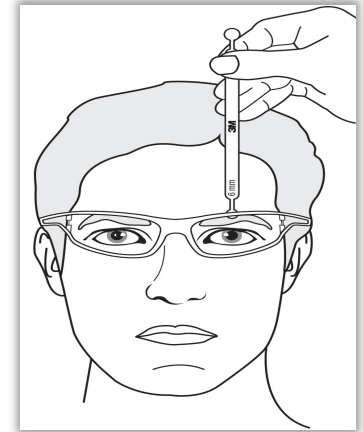
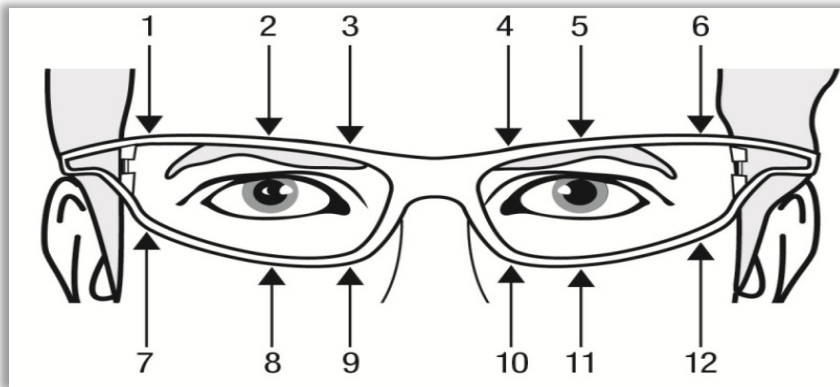
- Fit is critical for most types of PPE.
- An appropriate assessment should be made to determine acceptable fit for the individual.



Eyewear Fit System

- Gaps

- Working from largest to smallest (12mm to 6mm), gently probe the gap clearance around the perimeter of the eyewear.
- Find the sphere size that fits loosely into the gap for each of the 12 locations defined.



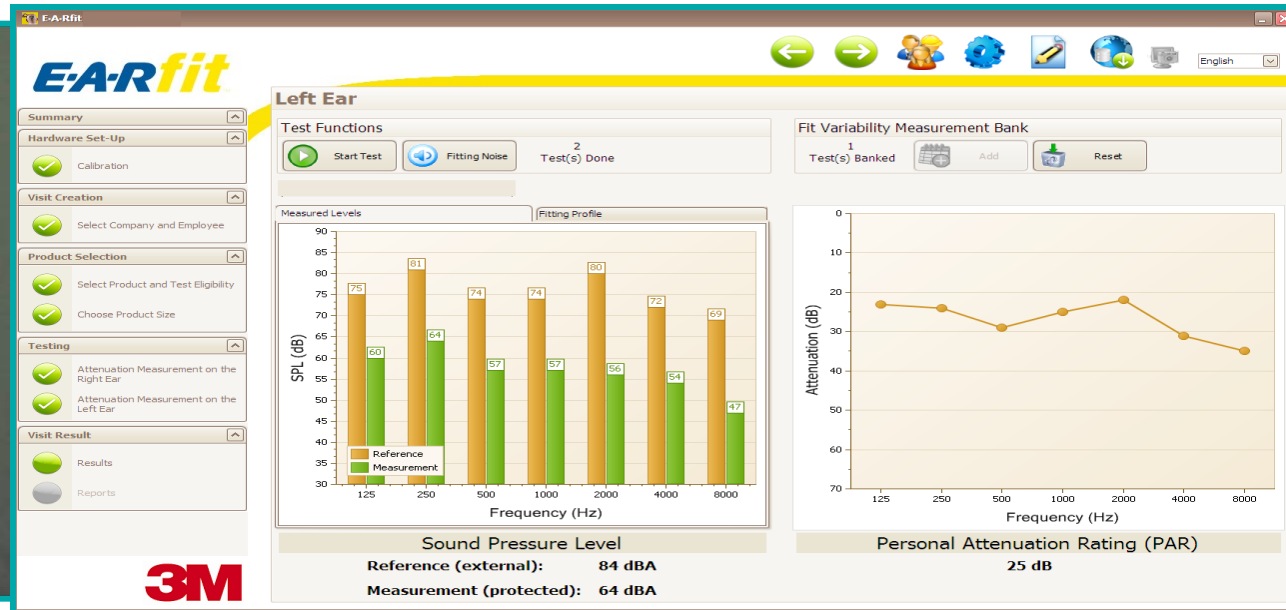
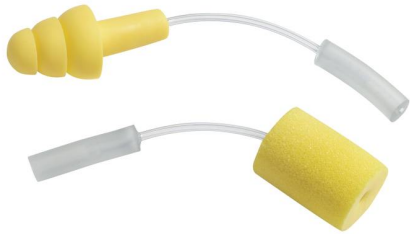


Poor Fit



Good Fit

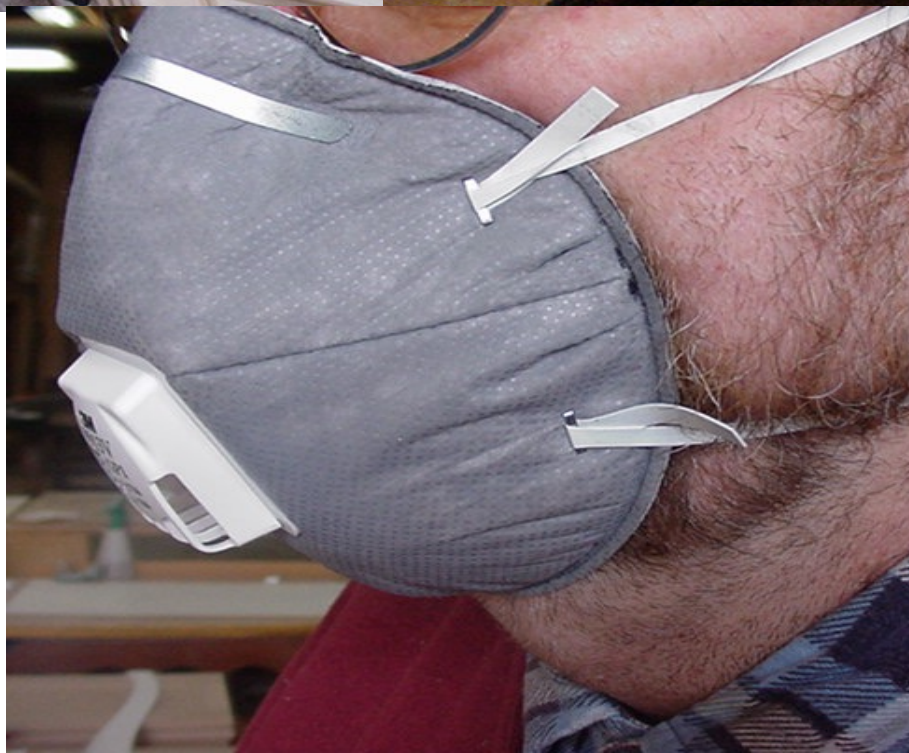
E-A-Rfit™ System Components



Qualitative or Quantitative Fit Testing

Methods to determine that an individual can/cannot get an effective face fit when using a specific respirator





PPE Programs – what is needed

- Using PPE and achieving the required level of protection requires attention to a number of areas
- These elements cover various aspects and are needed to give confidence in the ongoing performance of the PPE
- PPE programs will vary in complexity and resources needed.



THANK YOU – Questions?

