



Washington State Department of
Labor & Industries

Respiratory Protection – filtering facepieces (dust masks)

Training on the use of respirators in
the workplace



Developed by the Division of Occupational Safety & Health (DOSH)
for employee training
May, 2009

Respirator Training–Module 1

Filtering Facepiece Respirators (Dust Masks)



Respirator Training

Why Is This Training Required?

Training is required by DOSH for anyone who wears a respirator.

We also are providing this training so you will know how to protect your health.

If you don't know how to use a respirator properly, you can get a false sense of protection.



Respirator Training

Respirator Program Administrator

Our respirator administrator is [name]

This person is responsible for overseeing our respirator program.

This person has training on respirators.

Respirator Use

Where We Require Filtering Facepieces

Filtering facepieces (dust masks) are required in the following locations or for the following job tasks:

[List here]

Respirator Use

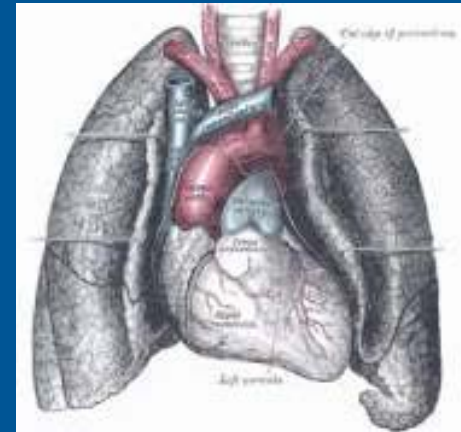
We provide filtering facepieces (dust masks) for protection against the following kinds of dust and particles:

[List here]

How Filtering Facepieces Work

How Do Dust Masks Protect You?

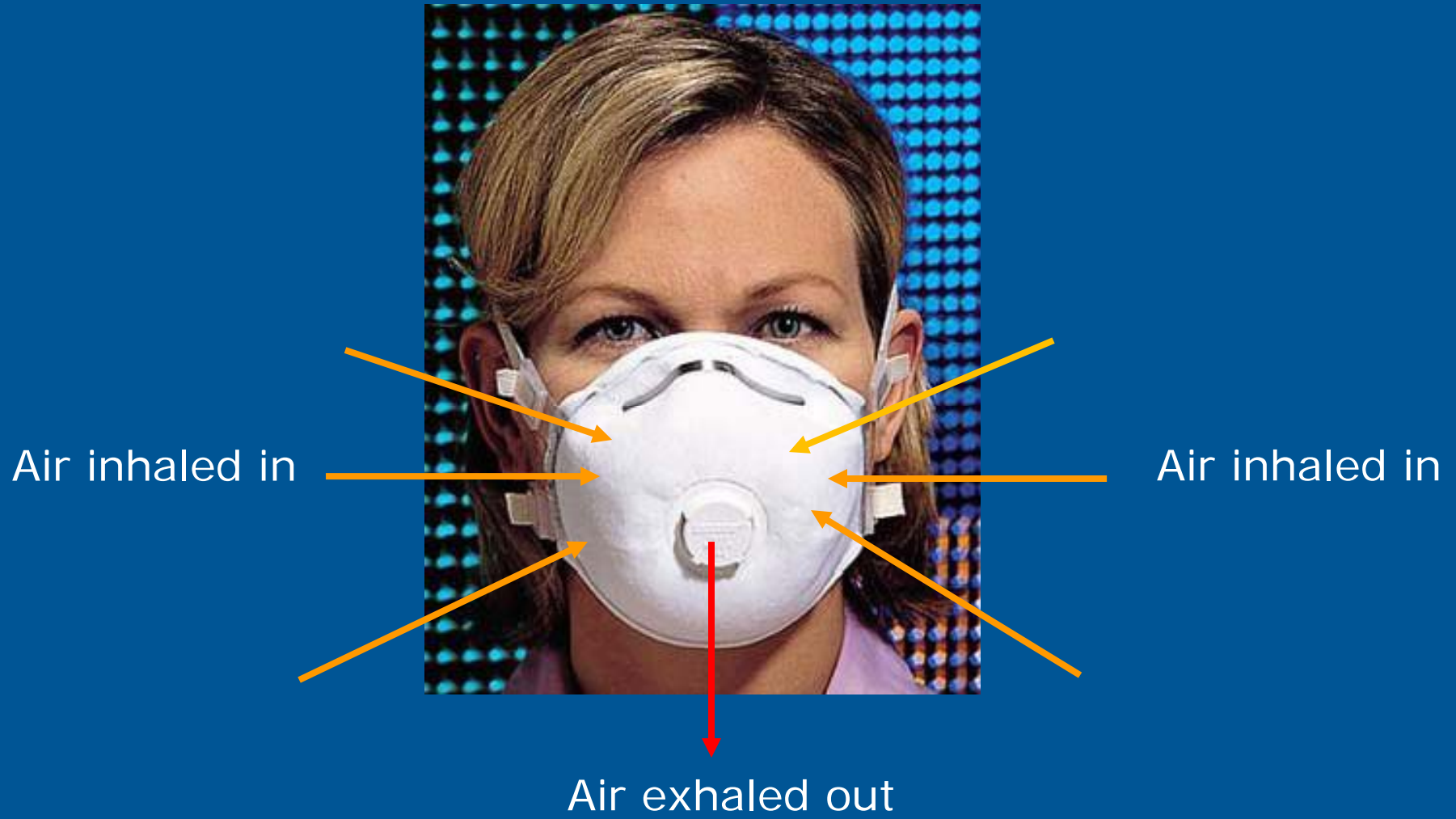
When used properly, dust masks prevent the inhalation of dust in the air and protect the lungs.



When you inhale, air is pulled through the dust mask and dust is captured on the outside of the mask.



How Filtering Facepieces Work



Using Filtering Facepieces

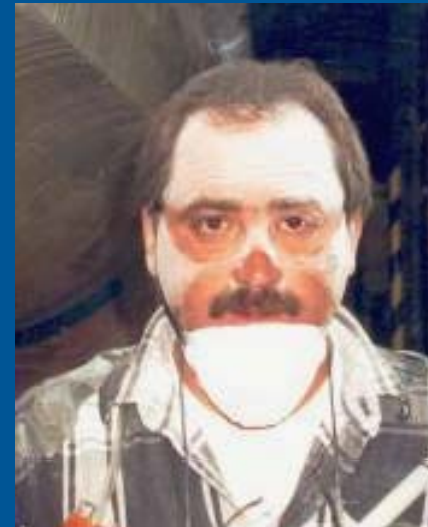
Limits of dust masks

Dust masks will leak if they don't fit your face properly.

Dust masks don't filter out chemical vapors.

Dust masks are not adequate for heavy amounts of dust.

Dust masks may not be suitable for highly toxic dusts.



Dust Mask Protection Factor

How much protection does a dust mask give?

Dust masks only provide protection to levels **10 times** above the dust permissible exposure limit (PEL).



Example

Wood dust permissible limit – 5 mg/cu. meter



Dust mask protects up to 50 mg/cu. meter

mg/cu. meter = milligrams per cubic meter

NIOSH–Approved Dust Masks

Dust masks come in variety of styles and brands.



Not NIOSH-approved

Not all dust masks provide adequate protection for workplace dust.



NIOSH-approved

Only NIOSH-approved dust masks can be used for protection against dust levels that exceed the PEL.

Types of Dust Masks

Some masks are more protective than others

N95/R95/P95 masks filter out 95% of dust particles

N99/R95/P99 masks filter out 99% of dust particles

N100/R100/P100 masks filter out 99.7% of dust particles

N99 or **N100** masks are recommended for very fine dust or dangerous dusts such as asbestos or silica.

We use [list type] masks

Where Dust Masks Can't Be Used

Dust masks will not provide adequate protection in the following situations:

- ✓ Exposure to chemical gases or vapors
- ✓ Dust levels more than 10 times the permissible exposure limit (PEL)
- ✓ Oxygen deficiency



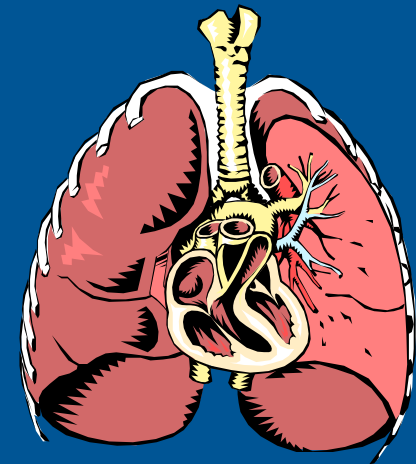
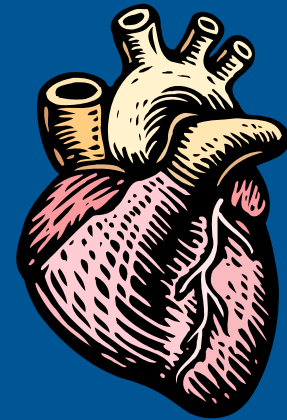
Respirators and Physical Fitness

Medical Evaluations

Medical evaluations are required for anyone required to wear respirators.

Breathing through a respirator is work for the body.

Respirators can be hazardous to people with heart or lung problems.



Respirator and Physical Fitness

Medical Questionnaire

The first step of a medical evaluation is a confidential medical questionnaire.



A healthcare provider decides if you need a medical exam.

Results are only used to determine if you are fit to wear a respirator.



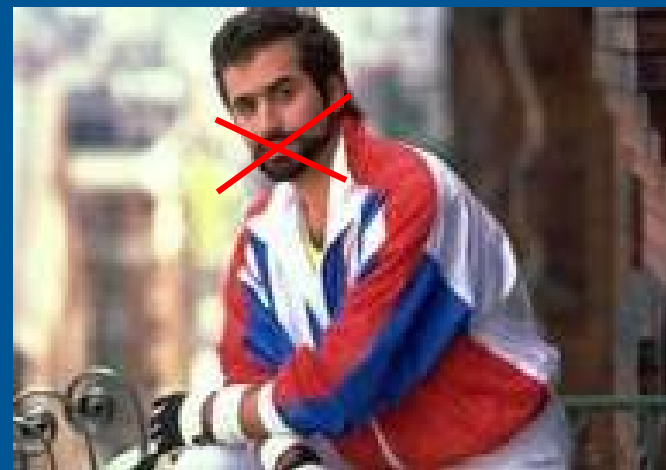
Respirator Fit

Dust Masks Must Fit Properly

Dust masks must fit properly to prevent leaks around the edges.

Fit-testing must be done before first wearing a dust mask.

Beards are **not allowed** when wearing a dust mask.



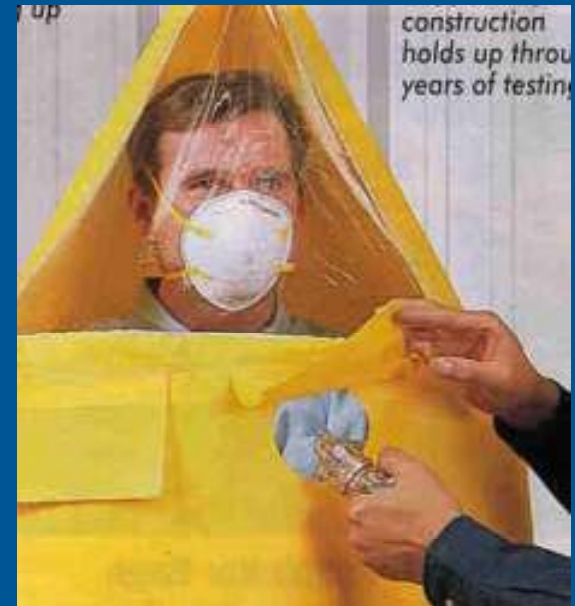
Respirator Fit

Fit-testing

In fit-testing, you first try on a dust mask for general comfort and fit.

After a comfortable respirator is selected, we conduct the actual fit-test.

The method we use for fit-testing is as follows: [describe]



Replacing Dust Masks

Replace dust masks at least daily

Dust masks cannot be cleaned or repaired if soiled or damaged.

Replace dust masks if breathing becomes difficult, if they are damaged, or if they are dirty or dusty on the inside.

Dispose of dust masks at the end of the day or shift.



Torn mask

Respirator Problems

When it Smells Bad or You Feel Sick

If you notice an odor, find dust inside the mask, feel ill, or you think your respirator leaks, notify your supervisor.

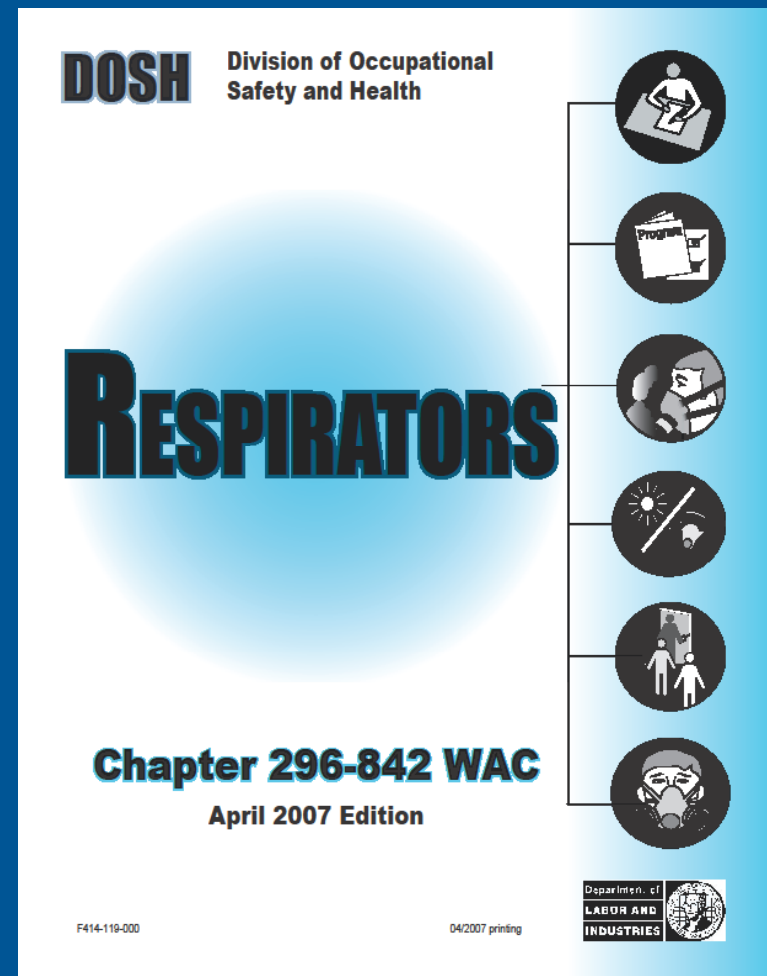
Leave the area if you know your mask is leaking.



Respirator Regulations

L & I – DOSH has regulations on respirator use.

Everything covered in this training is required in these regulations.



Optional Quiz

The following questions are optional. They can be used to check employees' understanding of this training and promote discussion. You can add more questions for a short written or verbal quiz.

Quiz

Question 1

1. What do filtering facepieces protect you from?

- a) solvents and dust
- b) only dust and particles
- c) nothing much
- d) only pollen

Quiz

Question 2

Why can't you wear a dust mask over a beard?

- a) The beard will interfere with your breathing
- b) It will cause the respirator to leak
- c) It will cause skin irritation
- d) It will look stupid

Quiz

Question 3

What does it mean if you smell a chemical while wearing your dust mask?

- a) You may need a different kind of respirator
- b) The dust mask doesn't fit properly
- c) You have a very sensitive nose