

Personal Protective Equipment

Safety Presentation

Rubin Lab

1/24/2011

How to Select Proper PPE

Assess:

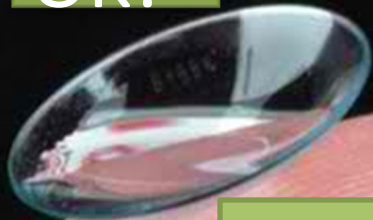
- Nature of hazardous material
- Possible exposure routes

Relevant body parts:

- Eyes and face
- Hands
- Feet
- Torso
- Hair

Eyes and Face

OK!



(+ goggles)

OK!



BAD!!!



OK!



Must be worn at
all times and by
everyone!

Special Eye Protection Times

- Concentrated acids
- Concentrated bases
- Lachrymators



- Explosive/pressurized reactions



Hands and Skin



Intermittent or splash protection

Nitrile chemical resistant gloves



chlorinated solvents, acids, alkalis

NOT ketones, [O] agents, N-containing organics

Neoprene



Acids, caustics, solvents (DMSO)

Change gloves after using carcinogens.

Consult Lab Safety Manual if unsure which kind of gloves to use

Torso



“Synthetics may catch fire quickly or shrink from the flame initially, but ultimately, they will sputter, flame, and melt to the skin or the flaming melt will drop to the floor.”

Denser fabrics catch fire less easily than lighter fabrics.

“Fact 7: Close-fitting clothes are less likely to catch fire than loose-fitting ones.”

Avoid furs because they have large surface areas.



<http://www.extension.iastate.edu/publications/ncr174.pdf>

Feet and Hair

GOOD!



BAD!!!



BAD!!!



Beware of “mechanical entanglement”!

BAD!!!



BAD!!!



What do if your PPE fails?

