UNM Personal Protective Equipment (PPE)
Protective Clothing & Shoes
OSHA

• Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.
Employer Responsibility

• The employer shall assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE).
• Select, and have each affected employee use, the types of PPE that will protect the affected employee
• Communicate selection decisions
• Select PPE that properly fits each affected employee
Employer Responsibility

• Verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace is evaluated

• Defective or damaged personal protective equipment shall not be used

• The employer shall provide training to each employee who is required by this section to use PPE
Training

• When
• What
• How
• Limitations
• Proper care & maintenance
• Changes in the workplace or PPE
Employee Responsibility

• Use the PPE correctly
• Maintain properly
• Do not use defective or broken PPE
Hearing Protection

• When sound waves enter the outer ear, the vibrations impact the ear drum and are transmitted to the middle and inner ear. In the middle ear three small bones amplify and transmit the vibrations generated by the sound to the inner ear. The inner ear contains a snail-like structure filled with fluid and lined with cells with very fine hairs. These microscopic hairs move with the vibrations and convert the sound waves into nerve impulses—the result is the sounds we hear.

• Exposure to loud noise can destroy these hair cells and cause hearing loss!
Hearing Protection Monitoring

• When information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 decibels, the employer shall develop and implement a monitoring program.

• Instruments used to measure employee noise exposure shall be calibrated to ensure measurement accuracy.

<table>
<thead>
<tr>
<th>Duration per day, hours</th>
<th>Sound level dBA slow response</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.........................</td>
<td>90</td>
</tr>
<tr>
<td>6.........................</td>
<td>92</td>
</tr>
<tr>
<td>4.........................</td>
<td>95</td>
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<tr>
<td>3.........................</td>
<td>97</td>
</tr>
<tr>
<td>2.........................</td>
<td>100</td>
</tr>
<tr>
<td>1 1/2....................</td>
<td>102</td>
</tr>
<tr>
<td>1.........................</td>
<td>105</td>
</tr>
<tr>
<td>1/2......................</td>
<td>110</td>
</tr>
<tr>
<td>1/4 or less............</td>
<td>115</td>
</tr>
</tbody>
</table>
Hearing Protection

• Employers shall make hearing protectors available to all employees exposed to an 8-hour time-weighted average of 85 decibels or greater at no cost to the employees. Hearing protectors shall be replaced as necessary.
Hearing Protection - Ear Plugs

• With or Without Cord
• Noise Reduction Rating (NRR) 12dB - 33dB
• Due to user attenuation the NRR is 50%
Hearing Protection

• Noise Reduction Rating (NRR) 12dB - 33dB
• Due to user attenuation the NRR is 50%
Hearing Protection Combo

• Noise Reduction Rating (NRR) 12dB - 33dB
• Due to user attenuation the NRR is 50%
• Only adds approx. 5dB to its effectiveness (per 3M)
Hearing Protection How to Wear it

• Plugs
  • Roll earplug between fingers
  • With your opposite hand, grab the top of the ear
  • Pull outward & up
  • Insert in ear

• Earmuffs
  • Place over ears, covering the entire ear
Foot Protection

• Foot protection must comply with:
  • ANSI Z41 standard or
  • ASTM F2413-05
ASTM F2413 05 Marking on Shoes
ASTM F2413 05 Marking on Shoes

• Line #1: ASTM F2413-05:
  • This line identifies the ASTM standard it indicates that the protective footwear meets the performance requirements of ASTM F2413 issued in 2005.

• Line #2: M I/75 C/75 Mt75:
  • This line identifies the gender M or F of the user. It also identifies the existence of impact resistance (I) (75 or 50 foot-pounds), compression resistance (C) (75 or 50 which correlates to 2500 pounds and 1750 pounds of compression respectively). The metatarsal designation (Mt) (75 or 50 foot-pounds) is also identified.

• Lines 3 & 4: PR CS
  • Lines 3 and 4 are used to identify footwear made to offer protection. They are used to designate conductive (Cd) properties, electrical insulation properties (EH), footwear designed to reduce the accumulation of excess static electricity (SD), puncture resistance (PR), chain saw cut resistance (CS) and dielectric insulation (DI), if applicable. Line 4 is only used when more than three sections of the ASTM standard apply.
Hand Protection

• Assess the situation and select the proper gloves for the task.
Hand Protection – Disposable Gloves

• Latex
• Nitrile
• PVC
Hand Protection – Heat Resistant Gloves
Hand Protection – Electrical Gloves

- Class 00 - Maximum use voltage of 500 volts AC/proof tested to 2500 volts AC
- Class 0 - Maximum use voltage of 1,000 volts AC/proof tested to 5,000 volts AC
- Class 1 - Maximum use voltage of 7,500 volts AC/proof tested to 10,000 volts AC
- Class 2 - Maximum use voltage of 17,000 volts AC/proof tested to 20,000 volts AC
- Class 3 - Maximum use voltage of 26,500 volts AC/proof tested to 30,000 volts AC
- Class 4 - Maximum use voltage of 36,000 volts AC/proof tested to 40,000 volts AC
Hand Protection – Cut Resistant Gloves

• Designed to protect hands from direct contact with sharp edges such as glass, metal, ceramics and other materials.
Head Protection

• Most manufactures recommend changing out the hard cap every 5 yrs. or when it has been involved in an impact, whichever comes first.
• Most manufactures recommend changing the webbing inside the hard cap every 12 months
Be Safe
I ______________________, have completed the PPE Clothing and Shoes training.

(Print Name)

Date: ________________

Please print the acknowledgement sheet, fill in requested information and email to srsweb@unm.edu to complete training.