Personal Protective Equipment
Disclaimer

The following material has been prepared for the information of members of the Ontario Veterinary Medical Association as a guideline only relating to various safety issues encountered at a veterinary practice. In all cases, it is the responsibility of individual veterinarians to ensure that their practices and standards comply with all applicable federal, provincial, and municipal by-laws, regulations, and legislation. Nothing contained in this guide suggests or implies complete or proper training or certification of veterinarians or their staff as might be required by legislation.

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Personal Protective Equipment
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What is it?
Personal protective equipment (PPE) includes devices such as safety glasses, gloves, protective clothing, hearing protection, respiratory protection and safety shoes. PPE is typically worn to establish a protective barrier between the wearer and a potentially injurious hazard in the workplace.

PPE is generally considered to be the last line of defense for the mitigation of risk and the protection of workers from potential and actual hazards. Where feasible, the following hierarchy should be used when implementing workplace controls:

1. **Elimination** (e.g., do not perform an unsafe or very high risk task);
2. **Substitution** with less hazardous equipment, agent or task (e.g., use less hazardous chemical);
3. **Engineered Solution** (e.g., use scavenging system to reduce waste anesthetic gas exposure);
4. **Administrative Control** (e.g., use safe work practices, written procedures, training, job rotation); and/or
5. **Personal Protective Equipment** (e.g., use respirators, gloves, safety glasses, etc.)

PPE can be used as a temporary control until other solutions are implemented or as a supplement when existing controls are insufficient. PPE that is selected and used for the control of potentially injurious exposure should bear a marking indicating it has been manufactured to an established standard such as those from the Canadian Standards Association (CSA), American National Standards Institute (ANSI), National Institute for Occupational Safety and Health (NIOSH), etc.

What are the legal requirements around PPE?
Under the Ontario Occupational Health and Safety Act (OHSA), all employers, including veterinary health professionals are required to provide appropriate PPE and train staff on their use, care and disposal (OHSA s. 25 (1)).

How to select PPE?
The PPE required in a workplace is determined based on a risk assessment of the workplace hazards. Employers are responsible for identifying, assessing and controlling workplace hazards. In veterinary facilities, hazards may be categorized as chemical (e.g., anesthetics, chemotherapy drugs, disinfectants, formalin), biological (e.g., zoonotic agents), physical (e.g., radiation, noise) or safety (e.g., bite, cut, scratch, kick or trampling). The selection of PPE must account for the type of hazards present. Consider the following factors when assessing hazards that may be present in veterinary settings:

- Temperament and health status of patient
- Suspected infectious disease in patient and route(s) of transmission
- Hazards in the facility, task or work area
- Chemical properties of products or agents in use
- Risk of splash with bodily fluids to face or body
- Risk of cuts, bites, scratches, kicks, or trampling
- Presence of airborne chemicals, pathogens or allergens
- Persistent noise due to barking, squealing, etc.

For many veterinary practitioners, PPE worn daily may include cotton/polyester lab coats, coveralls or scrubs, closed-toe footwear or rubber boots, impervious disposable gloves and safety glasses. Specific situations and the presence of new hazards may however necessitate the use of additional PPE. The following table identifies PPE categories, types and potential applications in veterinary medicine.

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<th>Category</th>
<th>Types</th>
<th>Application</th>
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| **Body Protection** | ▪ Coveralls  
▪ Scrubs  
▪ Lab coats  
▪ Gowns | ▪ To protect from skin contact with blood, body fluids, chemicals, sun exposure or vectors (e.g., ticks or mosquitoes) and reduce the risk of disease transmission  
▪ To prevent contamination of street clothing |
| **Hand Protection** | ▪ Examination gloves (nitrile, vinyl)  
▪ Palpation sleeves  
▪ Chemical-resistant  
▪ Work gloves  
▪ Cut-resistant gloves | ▪ To reduce risk of disease transmission  
▪ To prevent exposure to body fluids during examinations  
▪ To protect from cuts, punctures, bites, scratches, abrasion  
▪ To provide protection from skin contact when handling chemicals (e.g., formalin) |
| **Eye and Face Protection** | ▪ Safety glasses  
▪ Safety goggles  
▪ Face shield | ▪ To protect the face and eyes from exposure to blood, body fluids, chemical splashes |
| **Foot Protection** | ▪ Closed-toe  
▪ Slip resistant  
▪ Protective toe-cap and sole  
▪ Rubber boots  
▪ Overshoes  
▪ Shoe covers | ▪ To protect the foot from punctures, cuts, bites, crushing, exposure to infectious materials or chemicals  
▪ To reduce the risk of slips and falls when working in wet environments  
▪ To reduce the transmission of pathogens |
| **Respiratory Protection** | ▪ Air purifying respirator | ▪ To reduce inhalation exposures to airborne agents (e.g., allergens, gases, vapours, pathogens, bedding and feather dusts) |
Hearing Protection
- Earplugs
- Earmuffs
- To reduce exposure to high noise levels due to sources such as, barking dogs, squealing pigs, roosters/chickens, cattle chutes

Resources

American Veterinary Medical Association. Personal Protective Equipment. 
https://www.avma.org/KB/Resources/Reference/Pages/personal-protective-equipment.aspx

Canadian Centre for Occupational Health and Safety. Personal Protective Equipment. 
https://www.ccohs.ca/teach_tools/phys_hazards/ppe.html

http://www.cfsph.iastate.edu/pdf/fad-prep-nahems-guidelines-ppe-personal-protective-equipment

United State Centers for Disease Control and Prevention. Personal Protective Equipment. 
https://www.cdc.gov/niosh/ppe/

Workplace Safety & Prevention Services. Personal Protective Equipment. 
http://www.wsps.ca/Information-Resources/Topics/PPE.aspx

Disclaimer
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