

	<b>Guidelines for the Safe Use of Formaldehyde</b>	Effective	January 25, 2006
		Originator	Originator
		Last Updated	January 25, 2006
		Updated By:	D. Taddeo

**1. PURPOSE:**

1.1. The purpose of this policy is to acquaint users to the proper use of formaldehyde.

**2. SCOPE:**

2.1 This policy applies to all faculty, staff and students of Ross University School of Veterinary Medicine who are involved in the use of formaldehyde.

**3. PROCEDURE:**

Formaldehyde is a colorless, flammable gas with a strong pungent odor that can be detected at less than 0.5 parts per million (ppm). The stock solution contains 37-40 percent formaldehyde. Common uses of formalin and formaldehyde include tissue fixing and preservation, disinfection and fumigation. Exposure to formaldehyde vapors can be irritating to the eyes, nose and upper respiratory tract. In certain individuals, repeated skin exposure to the liquid can cause sensitization that may result in allergic dermatitis. Formaldehyde is a suspected human carcinogen.

Cal/OSHA has identified formaldehyde as a carcinogen and has adopted an airborne formaldehyde permissible exposure limit (PEL) of 0.75 ppm averaged over an 8-hour work shift. The agency has also established a short-term exposure limit (STEL) of 2 ppm over a 15-minute period. The American Conference of Governmental Industrial Hygienists (ACGIH) has established a more restrictive Threshold Limit Value-Ceiling (TLV-C) for formaldehyde of 0.3 ppm based on its sensory irritation properties.

If you use or store any form of formaldehyde (e.g. formalin, paraformaldehyde) you must let administration know, the location and amounts stored.

**Minimizing Exposure To Formaldehyde For Health Protection**

- **All** work with any forms of formaldehyde should be performed in a chemical fume hood. If work cannot be done in a hood, take precautions assuring that exposures are controlled and limited as much as possible.
- **Wear protective clothing.** Gloves must be worn whenever any forms of formaldehyde, or samples preserved with and/or fixed with formalin, are handled.

Wearing two layers of gloves is advised. Safety goggles or a face shield must be worn whenever work activities create a potential for splashing.

### Special Safety Precautions

- If formalin or other forms of formaldehyde contact the body, especially the eyes, flush the affected area with water for at least 15 minutes and report to the Clinic. Contact lenses must not be worn in areas where formalin is used because trapped vapors can cause irritation to the eyes.
- **All** solutions of formalin and tissues preserved in formalin must be stored in tightly sealed containers to prevent leaks, spills, and airborne exposure.
- Do not pour formalin waste down the drain. Formalin and other formaldehyde waste solutions must be placed in tightly sealed, labeled waste containers. All formaldehyde wastes must be managed and disposed as hazardous waste. See Safety Web, “Guidelines for Disposal of Chemical Waste” for more information.
- Small spills of dilute formalin solutions must be cleaned up immediately. Cover the spill with paper towels or other absorbent material. **Do not** mop up a spill. Using a dustpan, scoop the absorbed formalin into a plastic bag. Be sure to wear gloves and eye protection. Double bag, seal, and label the waste. Dispose as hazardous waste. Decontaminate the spill area with wipes of 10% bleach solution, and then rinse the area with water.

**Caution:** If spilled formalin causes eye, nose, or throat irritation, immediately evacuate the area, close all doors to contain vapors, and call the campus security.