Manual Instrument Reprocessing

Workplace and Access
- Ensure that only trained workers have access to glutaraldehyde solutions. Training should include information about hazards, methods to control these hazards, and proper handling procedures.
- Do not place the washing trays in the procedure room.
- Establish a process flow. Use a physical barrier to separate storage and handling areas of clean and dirty instruments (e.g., endoscopes).

Design and Equipment
- Keep the area well ventilated: 12 air changes per hour with a through draft and negative pressure relative to adjacent areas.
- Use ventilation cabinets or fume hood exhaust to control exposures.
- Use a pump to transfer new and used disinfectant to and from appropriate containers. (See Control Guidance Sheet 405.)
- Keep washing trays covered to avoid excess vapor generation and release.
- Do not pour disinfectant from a container into a basin.
- Keep a spill clean-up kit nearby. Contain spills with spill pillows, pigs, socks, and/or absorbent. (See Control Guidance Sheet 404.)
- Locate the washing tray near a sink.
- Never decant disinfectant into an unlabeled container.
- Never re-use an empty disinfectant container. Dispose of it safely in the solid waste trash or return it to the supplier.
- Keep only limited amounts of disinfectant available for immediate use.
- Have hand-washing facilities readily available for decontamination after handling products, preferably near the exit.
- Establish an emergency eye washing and deluge shower station in close vicinity to the soaking trays and bins, preferably nearby the clean handwash sink and not the dirty equipment sink.
- Use sheet flooring with welded seams and 6-inch coving to contain spills.
- Do not use floor drains for water discharge. Use standpipe drains with air gaps to prevent back flow.

Procedures
- Make certain the cleaning and disinfection process flows from dirty to clean, i.e., landing area, leak test, pre-processing sink, AER washer, scope storage.
- Use a paddle-activated switch or latch, or swinging door with a view panel on the entrance door to the dirty side of the process so that workers can avoid using dirty hands to open door.

Ventilation cabinet to contain and capture vapors during endoscope reprocessing.
Always check the air extraction exhaust with flutter strips or tell tails to assure proper operation.

Buy liquid chemicals in containers that are labeled and that pour easily without dribbling or trapping liquid in the rim.

Store containers so their labels face forward. Store heavier items on lower shelves. Store disinfectants and other eye irritants below eye level to avoid splashing in eyes.

Store products containing chemicals securely in a cool, dry, dark place capable of containing spills. Don't store excessive quantities of cleaning and disinfectant products.

Clean up spills immediately. Absorb liquids with the materials provided in the appropriate spill kits and keep these spill kits close to where glutaraldehyde is used or stored. Dispose in a marked secure container.

Never mix different waste products (e.g., acid, alkali, flammable solvent, chlorinated solvents, etc.). Keep products with different chemical classifications separate.

Never enter an area where a spill has occurred without the proper personal protective equipment (PPE) and training.

Safely dispose of all products you no longer need.

**Special Care**

Contact with glutaraldehyde solutions can lead to skin soreness and itching, rashes, blistering (dermatitis), damage to the eyes, and difficulty in breathing.

**Cleaning and Housekeeping**

- Keep the work area clean and well organized.
- Clean up spills promptly: practice this at least twice per year. (See Control Guidance Sheet 404.)
- Dispose of empty containers and wastes safely.
- Wear appropriate PPE when cleaning up spills.

**Personal Protective Equipment (PPE)**

- Follow the instructions on product labels or safety data sheets.
- Ask your safety-clothing supplier to help you purchase the appropriate PPE.
- You may need respiratory protective equipment (RPE) in case of a spill. Consult your safety manager or PPE supplier.
- Make sure you know how to check that PPE fits correctly. Seek advice from your safety manager or supplier.
- Wear protective gloves: single-use nitrile gloves are acceptable. Latex gloves are not recommended for protection against exposure to glutaraldehyde.
- Dispose of single-use gloves every time you take them off.
- Use skin creams for skin protection and help in washing contamination from the skin. These are not 'barrier creams' and do not protect the skin from glutaraldehyde exposure. After work, use creams to help replace skin oils.

**Health Surveillance**—(See Control Guidance Sheet 402.)

**Training**

- Show your workers this sheet and make certain that they understand it.
- Instruct workers about the risks of using the product: see product labels or the (material) safety data sheet from your product supplier.
- Make certain everyone knows how to clean up spills promptly and safely.

**Supervision**

- Check that ventilation is working properly and that workers use PPE correctly.
- Ensure that the health surveillance system is being carried out for those who need it.

**Further information**

Consult the supplier's (material) safety data sheet for further information or contact phone numbers for emergency information. Obtain additional information from the NIOSH toll-free number 1-800-CDC-INFO (1-800-232-4636) within the United States or 513-533-8328 outside the United States, or access the Web site at www.cdc.gov/niosh/cntc_nit.html.