

# Biohazard Decontamination: Work Surfaces and Reusable Materials

At SJSU, the **decontamination** of work surfaces and reusable materials means:

- **disinfection**, which is the elimination of pathogens except bacterial spores
- **sterilization**, which is the destruction of all forms of microbial life

## 10% bleach (v/v in water)

### 20 minute contact time



- Prepare fresh solution **weekly**.
- Keep track of bleach expiration dates and **replace stocks at least every 6 months** to avoid expiration.
  - Opened and unopened bleach stocks expire **within 1 year**.



## 70% ethanol (v/v in water)

### 30 second contact time



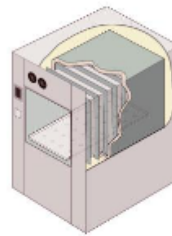
- Prepare weekly if the **container is open** -- squirt bottles or spray bottles.
- Closed bottles or carboys can be prepared **less often**.
- Ventilation in hoods and biosafety cabinets **compromises contact time**. Turn off before decontamination.



## EPA-Registered Disinfectants

- Prepare disinfectants according to manufacturer instructions.
- Use the contact time recommended by the manufacturer. Approved disinfectants are registered by the EPA:
  - <https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants>
- Example:
  - 3% DC Gold (v/v in water)  
10 minute contact time

## Medical Waste Autoclave



- The Microbiology Service Center Autoclave is the **ONLY** system permitted by the county.
- Other SJSU autoclaves are **NOT** permitted for decontamination, but can be used for experimental preparations. Use chemical disinfectants to decontaminate before using lab autoclaves.

## Need Help?

- Ask the principal investigator or instructor
- Ask the department/college safety staff
- Ask SJSU Environmental Health & Safety
  - Biosafety Officer: biosafety@sjsu.edu; 408-924-1978
  - Director: ehs@sjsu.edu; 408-924-1969



## **Relevant EHS Guidelines/Programs**

- Bloodborne Pathogens Program
- SJSU EHS biohazard decontamination & waste guidance

**Special note: When posting this sign, make sure to note any exceptions and clearly train your lab personnel about these exceptions:**

### **Exceptions:**

These minimum requirements may not be sufficient for the following situations:

1. Biohazardous materials that are not known to be inactivated by the disinfectants below. Examples of materials that are not decontaminated by some common disinfectants include prions, bacterial spores, M. tuberculosis, nonlipid enteroviruses, or hydrophilic viruses.
2. Medical equipment and clinical settings
3. Equipment with other manufacturer recommended disinfectant protocols– be sure to review your user manuals and consult with EHS if you have specialty equipment.
4. Outdoor biohazard spill responses– primarily a concern for our custodial and groundskeeper staff.

**For help with questions or special circumstances, please contact [biosafety@sjsu.edu](mailto:biosafety@sjsu.edu).**