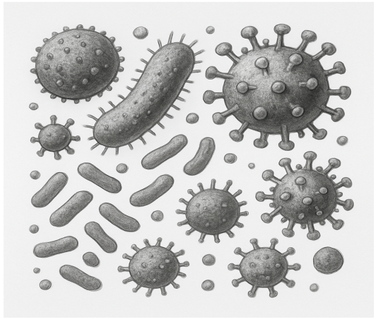


Overview:

- 10% Bleach (~5000 ppm sodium hypochlorite) is bactericidal, fungicidal, virucidal, and sporocidal
- Kills by protein denaturation and oxidation within 30 sec to 10 min
- May require pathogen-specific/ spill response extended contact time of 20-30 min.

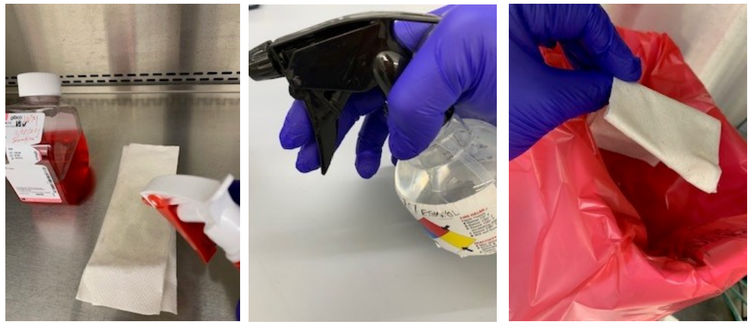


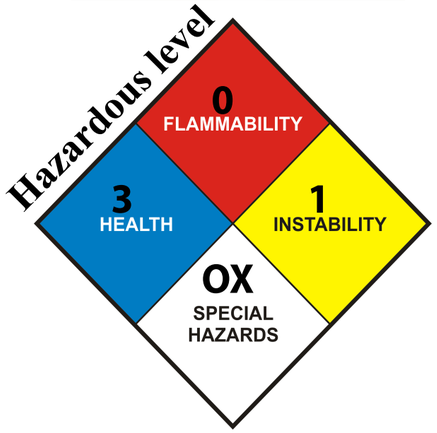




Safety Notes:

- Causes skin irritation, and serious eye damage. Rinse exposed area with water for 15-20 minutes
- Wear protective gloves/ eye protection/ face protection.
- Do not autoclave Bleach solution





Procedure:

1. Verify manufacturer expiry date (1 year)/ six months after opening.
2. Prepare 10% solution fresh daily as needed.
3. Wipe surfaces with 10% bleach–soaked towels; allow to air dry.
4. Rinse with sterile water or 70% ethanol after contact to prevent corrosion.
5. Dispose of used towels in biohazard bags.
6. For liquid waste, dilute 1:10 in 100% bleach, wait 10 -30 min, then flush with plenty of water (>30 sec).

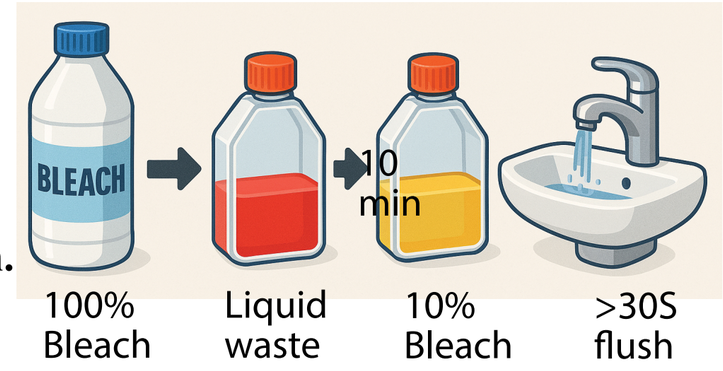
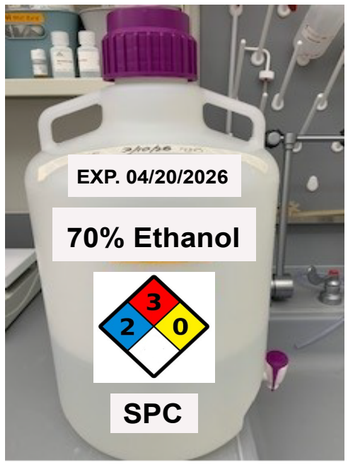
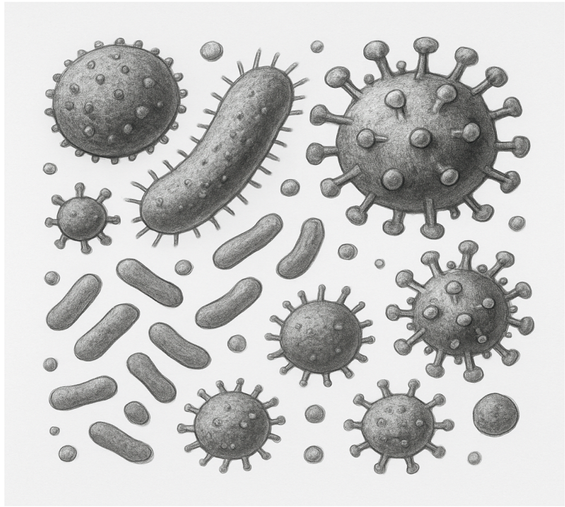


Figure S1. Overview, safety, and use of 10% bleach.



Overview:

- 70% ethanol or isopropanol is bactericidal, fungicidal, and virucidal but not sporocidal
- Kills by protein denaturation within 10 sec- 1 min
- 100% alcohol is less effective because water enhances denaturation
- Antimicrobial activity decreases sharply below 50% concentration
- 70% alcohol provides the best balance of activity and evaporation rate.





Safety Notes:

- Highly flammable – keep away from heat and ignition sources
- Use PPE including eye protection
- Avoid skin and eye contact; rinse eyes with water for 15 min if exposed
- Do not autoclave (Boiling point <100F)
- Do not mix with bleach, it can produce toxic gas like chloroform

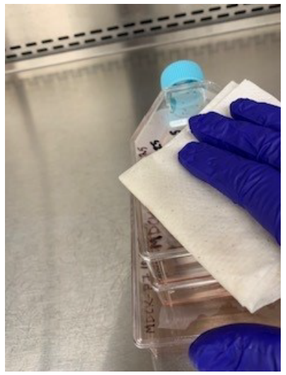






Procedure:

1. Check concentration, expiry date, and hazardous level.
2. Diluted ethanol expire in six months
2. Spray or wipe with alcohol-soaked towels
3. Let surfaces air-dry completely
4. Discard used towels in biohazard bags for autoclaving



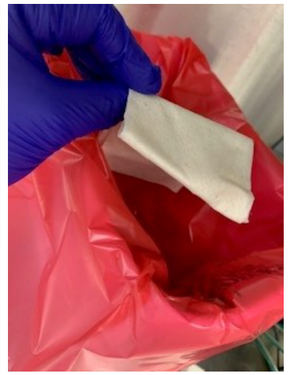


Figure S2. Overview, safety, and use of 70% ethanol.