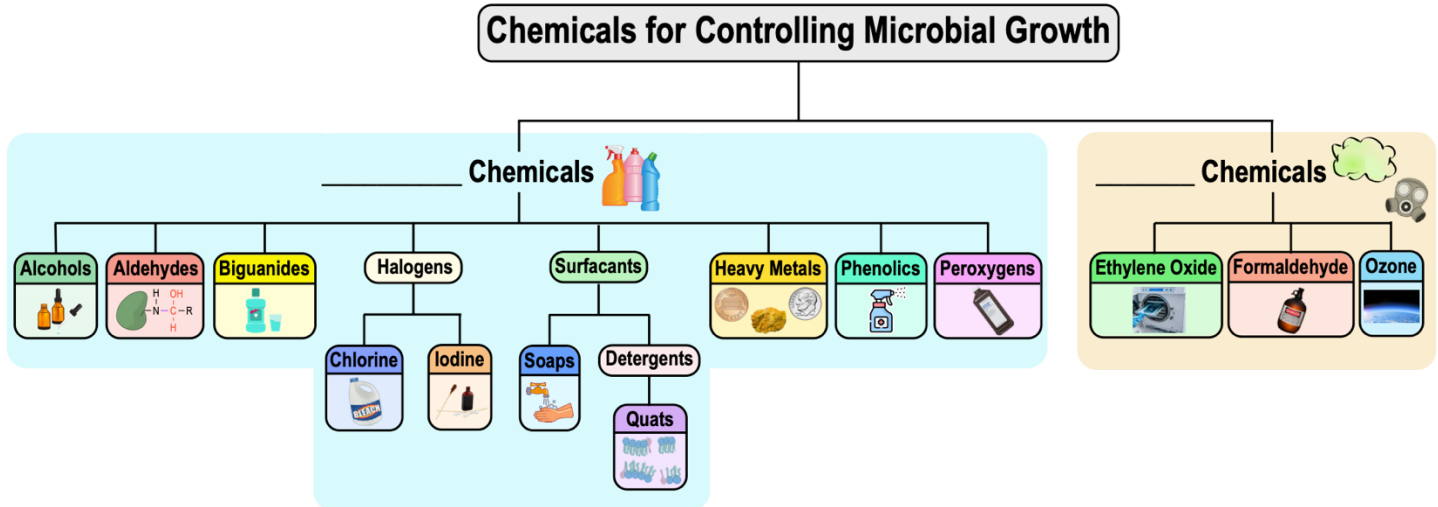


CONCEPT: CHEMICALS USED TO CONTROL MICROBIAL GROWTH

- There are many chemical agents that can be used for controlling microbial growth (liquid and gas chemicals).
 - Most chemicals *irreversibly* react with proteins, DNA, and/or plasma membranes to kill microbes.



PRACTICE: Which of the following chemical agents is a gas?

- a) Quats.
- b) Alcohols.
- c) Ozone.
- d) Chlorine.

Factors Affecting Chemical Agents

- The *effectiveness* of chemical agents depends on *multiple* factors:

Factors Affecting Chemical Agents	
1	Concentration: Some are effective when diluted & can be toxic at <i>high</i> concentrations.
2	Time: Some require <i>long</i> exposure times & are less (but still) effective at <i>short</i> times.
3	Temperature: Some chemicals have an _____ temperature.
4	Interfering _____: Some chemicals are not compatible & may <i>inactivate</i> one another.