

SUMMARY OF COVID DISINFECTING AGENTS

1 Chlorine Bleach Products:

A. Liquid bleach solutions (i.e., standard Chlorox bleach)

1. Pros:

- a. The most available of all the products

2. Cons:

- a. Fumes noxious or even toxic to many life forms [including humans, domestic animals and aquatic life (fish)]. Care needs to be taken to ensure containers of concentrated or disinfecting strength chlorine solutions are stored in airtight containers and in well ventilated areas. (Not in the passenger compartments of cars, trucks, airplanes, etc.)
- b. Even more dangerous gases can be created if mixed with other cleaners or agents so only mix with water.
- c. Should be mixed fresh every day – loses strength over time. (Should be mixed at least 50 feet from natural bodies of water such as streams, rivers and lakes and kept away from food sources).
- d. Varying concentrations so be sure you are mixing to the correct dilution for the product you are using. (i.e., whether to use 1/3 or 1/2 cup of liquid bleach per gallon of water).
- e. Can cause irreversible injury to eyes and scarring of skin.
- f. Often will discolor, oxidize or “bleach”, many materials so needs to be tested to see its effect before use

B. Chlorine bleach tablets.

1. Pros

- a. As effective as liquid solutions when mixed correctly.
- b. Dry tablets are easy to store
- c. Easily mixed to correct disinfecting concentration

3. Cons

- a. Many of these products are on back order and availability may be limited
- b. Many of the limitations/precautions for use are the same as for the liquid chlorine solutions.

2. Alcohol products

A. Rubbing alcohol—typically denatured ethanol or isopropyl alcohol. (both of which are nonconsumable)

1. Pros

- a. effective against the Covid 19 virus at concentrations greater than 70%
- b. does not discolor many of the materials that bleach will effect—often used to clean computers and other electronic equipment.
- c. Fumes not as toxic or noxious as chlorine

2. Cons

- a. Many products have become difficult to obtain and are on back order at this time.
- b. toxic if consumed; must be kept out of the reach of children. Can cause blindness if consumed.

B. Hand sanitizers.

1. Purell- 70% ethanol mixed with other agents including isopropyl alcohol. Also nonconsumable. Easily transported.
2. While used widely as an antibacterial agent its effectiveness against Covid 19 is presumed and not proven by any cinically controlled trials.

C. Ethanol – standard drinking alcohol Effective against the Covid 19 virus at 70% or greater concentrations (greater than 127 proof)

1.
 - a. not practical for use since only some products such as some Everclear solutions would be concentrated enough to be effective. Also not accepted in some “dry” communities in Alaska.
2.
 - b. unwise to have open bottles of drinking alcohol in transportation vehicles or when driving boats.

Hydrogen Peroxide

1. Pros – effective against the Covid 19 virus at concentrations of 0.5% or greater
2. Cons –
 - a. Availability may be limited
 - b. Varying concentrations
 1. Standard household or drug store hydrogen peroxide is 3 or 6%. A 3% solution would need to be mixed 1 cup of hydrogen peroxide with 5 parts of clean water to obtain a Covid disinfecting solution.
 - c. Can discolor skin, fabrics or other materials and should be tested for suitability for use. Protective gloves need to be worn during use.
 - d. Easily mistaken for water if in an unmarked container and is destructive to the gastrointestinal tract if consumed.
 - e. Can inhibit healing if cuts or wounds are exposed to the solution.
 - f. Sunlight causes breakdown and solutions need to be stored in dark containers.

*---Please read and follow all instructions for safe use of these products.