

Using a Hand Sanitizer Shouldn't Put You in a Sticky Situation

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Proper hand hygiene is one of the most effective methods of reducing disease transmission. It is also considered to be the foundation of every infection prevention program. Public health organizations such as The Centers for Disease Control and Prevention (CDC) recommend alcohol-based hand sanitizers as the first choice for hand hygiene practice in clinical settings when hands are not visibly soiled.

The surge for hand sanitizers because of the COVID-19 pandemic, along with supply chain issues, resulted in many people using products that were less than desirable. Some had a strong foul odor and others left the hands sticky and gooey feeling. Even worse, some contained products that were toxic. Not all hand sanitizers are created equal, so it's important to understand what makes them effective, the different ingredients that are used, and what qualities to evaluate before purchase.

According to a 2019 ruling by the FDA, a product can be marketed as a hand sanitizer if it contains ethyl alcohol (also called ethanol), isopropyl alcohol (isopropanol), or benzalkonium chloride as the active ingredient. Hand sanitizers provide several advantages over handwashing with soap and water.

A few of the benefits are:



They require less time



Are fast-acting



**Are more accessible
than sinks with running
water and soap**



**Cause less irritation to
the skin than soap
and water**

Hand sanitizers basically inactivate the virus or the bacteria. For a virus, hand sanitizers work by disrupting the virus's outer lipid envelope, if it has one, or the protein capsid which protects the genetic material. For bacteria, they work by disrupting the cell membrane.



Considerations for selecting a hand sanitizer:



Percentage of Alcohol

The most effective hand sanitizers contain 60-85% alcohol by volume. The CDC recommends using alcohol-based hand sanitizers with greater than 60% ethanol or 70% isopropanol in healthcare settings. Hand sanitizers are preferred over soap and water in most clinical settings because of evidence of better hand hygiene compliance over hand washing. If hands are visibly soiled, they should be washed with soap and water for at least 20 seconds.



Types of Alcohol

Hand sanitizers containing isopropanol are effective and work in a similar way to ethanol to kill bacteria and viruses. However, ethanol is more effective, less toxic and has less odor than isopropanol. Research has shown concentrations of ethanol between 60-80% to have antimicrobial effects against bacteria such as E. coli, and Staphylococcus aureus, and viruses including herpes, influenza, and rhinovirus.

The U.S. Food and Drug Administration (FDA) recommends that people choose a hand sanitizer containing ethyl alcohol or isopropyl alcohol and do not use hand sanitizers containing methanol or 1-propanol because they can be toxic to humans when absorbed through the skin or ingested.



Other Active Ingredients

Benzalkonium chloride is deemed eligible by the FDA for use in hand sanitizers for healthcare. Evidence does indicate benzalkonium chloride has less reliable activity against certain bacteria and viruses than either ethanol or isopropanol. The CDC states that hand sanitizers without alcohol may not kill as many germs and may only reduce the growth of germs rather than killing them outright.



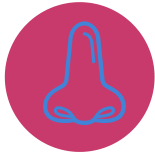
Extra Ingredients

Some hand sanitizers will contain moisturizing products such as aloe to preserve the integrity of the intact skin. Aloe moisturizes and nurtures the skin with essential vitamins and nutrients. This helps to prevent the skin from drying out and cracking. Intact skin is our natural protectant and barrier to disease.



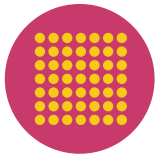
Where is the Hand Sanitizer Made?

Look for a hand sanitizer that is manufactured by a company that has been in the infection prevention space for a few years and has a reputation for selling quality products. Infection control products such as hand sanitizers should be made in a facility that can safely produce a quality hand sanitizer without contamination from other chemicals or microorganisms. The FDA has created a list of do not use products for consumers that may be comprised of products with unapproved ingredients or have been contaminated.



Smell

Select a hand sanitizer that has been filtered properly and has an added formulation of pleasant smell to counteract the alcohol smell. If the filtration process has been skipped or shortened the smell of the product can become extremely offensive.



Consistency

The hand sanitizer should be a consistency that will leave the hands wet for the appropriate amount of time for it to be effective on the germs. If the hand sanitizer dries out too soon or feels gooey it can be tempting for the user to use an insufficient quantity to be effective, wipe it off before it dries or not rub for an appropriate amount of time.



Packaging

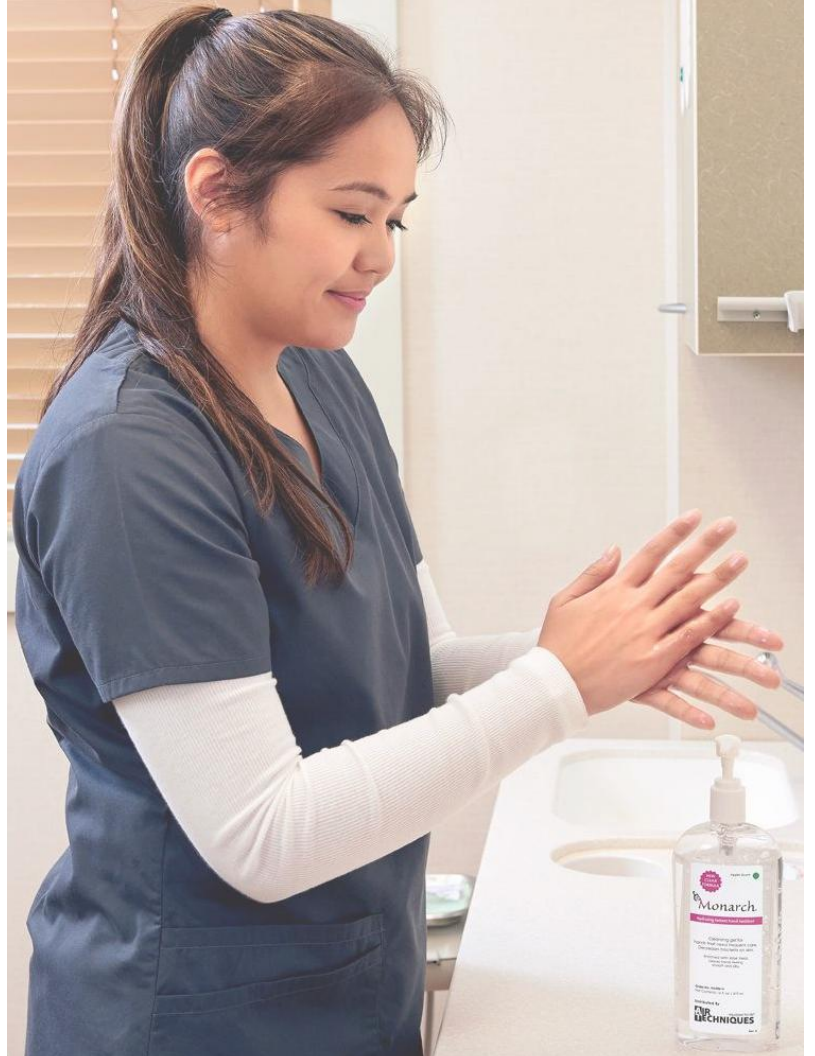
The FDA warns consumers that hand sanitizer packaging should look like hand sanitizer. Some packaging can look like water bottles, juice bottles or children's food pouches and consuming hand sanitizer is something that shouldn't be done. Pick a dispenser that easily identifies the product as a hand sanitizer and can be placed in a location where it can be used frequently. Pump bottles are a good dispensing system because they meter enough hand sanitizer sufficient to completely wet both the palms and back of the hands for proper application and coverage.



Feel

After you have completely rubbed the hand sanitizer all over your hands there shouldn't be a sticky residue. A leading cause of a sticky feel is a poor formulation. Carbomer is one of the main ingredients in hand sanitizer that turns the product into a gel. Sometimes, manufacturers substitute carbomer for other ingredients like Hydroxypropyl cellulose. The replacement ingredient gives the product a gel consistency but can cause hands to feel sticky once dried. This is problematic when you are a health care worker and need to put on treatment gloves after hand sanitizing.

How to properly use hand sanitizer



- Use enough hand sanitizer to cover the entirety of both hands and rub it thoroughly over the fingers, palms and backs of the hands.
- Continue rubbing it into the hands until the sanitizer dries, avoiding contact with the eyes and mouth. Most hand sanitizers will require around 15 seconds for effectivity.
- Avoid wiping hand sanitizer from the hands before it dries completely, as removing the hand sanitizer before it dries means it may not work as effectively.
- If a young child is using hand sanitizer, an adult should supervise them while they apply it.

In addition:

- Avoid using hand sanitizer for anything other than the hands, such as cleaning surfaces, as hand sanitizer is not suitable for any other use.
- Store hand sanitizer below temperatures of 105°, and avoid keeping it in places hotter than this, for example in a car during warm weather.
- Always avoid putting hand sanitizer in the mouth or swallowing it to avoid possible alcohol poisoning.

Everyone has their own unique likes and dislikes when it comes to the products they use daily and frequently. For health care workers hand sanitizing is necessary, so having one available that is effective and won't leave a sticky mess behind is important. Once you find a hand sanitizer that's effective, smells good, doesn't leave a sticky feeling, dispenses easily and comes from a trusted source you'll become a hand sanitizer snob!

Fom Monarch by Air Techniques Literature



1 Rub hands palm to palm, including wrists.



2 Rub back of hands with interlaced fingers.



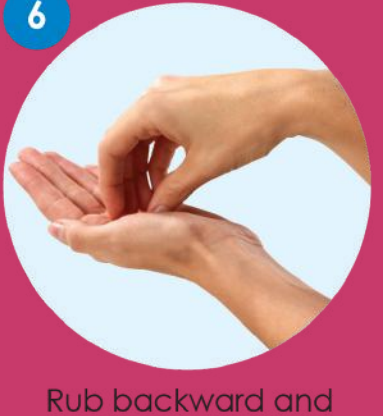
3 Palm to palm with fingers interlaced.



4 Interlock fingers to opposing palms.



5 Rotate left thumb clasped in right hand and reverse.



6 Rub backward and forward with clasped fingers into both palms.

Contact Us



Monarch's complete, color-coded line of products helps make it easy to use the right product for each job. **Green** for **Surface Disinfection**, **Blue** for **Instrument Cleaning**, **Pink** for **Hands Protection**, and **Yellow** for **Equipment Maintenance**. Effective formulas with your patients and your team in mind.

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- Discuss Infection Prevention Procedures for your practice
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References:

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