

Hand Sanitizers: Keep Children Safe from Poisoning Risk

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Washing hands (/English/health-issues/conditions/prevention/Pages/Hand-Washing-A-Powerful-Antidote-to-Illness.aspx) with soap and clean water for at least 20 seconds is the best way for children to get rid of germs, including the virus that causes COVID-19 (/English/health-issues/conditions/chest-lungs/Pages/2019-Novel-Coronavirus.aspx). If soap and water are not available, you can use hand sanitizer with at least 60% alcohol. However, use it with care around children, since swallowing hand sanitizer can cause poisoning.



Remember to keep hand sanitizers out of children's reach. Don't forget about travel-size bottles of sanitizer in purses, diaper bags, backpacks and cars. Supervise children ages 5 and younger when they use hand sanitizer. And when using hand sanitizer dispensers, it is important to position them in a way that won't squirt into your child's eyes.

Types of alcohol in hand sanitizers

Many hand sanitizers are made with alcohol or rubbing alcohol (ethanol, ethyl alcohol, or isopropanol, isopropyl alcohol). Alcohol poisoning symptoms include loss of balance, sleepiness, low blood sugar, seizures and coma, and it can be fatal.

Children and adults also have been poisoned after using hand sanitizer that contained methanol (also called wood alcohol, methyl alcohol, or methylated spirits). The U.S. Food and Drug Administration (FDA) has issued recalls (https://www.fda.gov/consumers/consumer-updates/your-hand-sanitizer-fdas-list-products-you-should-not-use) for products containing methanol, which is toxic if swallowed or after repeated use on skin. It can cause problems ranging from nausea and headaches to blindness, nervous system damage or death. An FDA import alert (https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-takes-action-place-all-alcohol-based-hand-sanitizers-mexico-import) also warns about products found to contain methanol and/or 1-propanol, another form of alcohol that should not be used in hand sanitizers.

Hand sanitizer poisonings during the COVID-19 pandemic

Since families began buying more hand sanitizer during the COVID-19 pandemic, the National Poison Data System has been getting many more reports of unintentional exposures in children. Many are for children ages 5 years and younger.

Health experts recommend using hand sanitizer that is 60% to 95% alcohol to kill the virus that causes COVID-19. Drinking alcohol typically has 5% to 40% alcohol.

Check the label

Before buying or using hand sanitizer, make sure it has a label that lists the ingredients, warnings and precautions. In addition, it's a good idea to check the do-not-use list at www.fda.gov/handsanitizerlist (https://www.fda.gov/drugs/drug-safety-and-availability/fda-updates-hand-sanitizers-consumers-should-not-use).

To reduce the risk of injury from children drinking hand sanitizers, producers should add ingredients to make them taste bitter. This important step helps prevent children from eating the product.

start of the pandemic, the FDA began letting distilleries and other companies that do not normally produce initizer make and sell it to help meet demand. At the same time, the FDA received alerts that some young place have tried drinking hand sanitizers from distilleries that have not taken the step to make them taste bad. It has since ended this temporary policy and now expects careful production standards.

You can check for bitter ingredients such as denatonium benzoate (Bitrex); sucrose octaacetate; or butanol (also called tert-butyl alcohol). Current denatured hand sanitizers are made to taste bitter, but you should dispose of any old bottles of "denatured alcohol," which may have toxic methanol added.

Be especially careful with hand sanitizers made with isopropyl alcohol (isopropanol) around children. These can be more toxic than those made with ethanol or ethyl alcohol.

Is homemade hand sanitizer a good idea?

Make-your-own hand sanitizer recipes, widely available on the internet, may not be the best option for families. The FDA warns that if made incorrectly, hand sanitizer may not work. There have also been reports of skin burns from homemade hand sanitizer.

How to dispose of recalled hand sanitizers

Do not flush or pour recalled hand sanitizers down the drain. These products should be disposed of in hazardous waste containers, if possible. If unsure, check with your local waste management and recycling center.

When to call 911

Call 911 (/English/health-issues/injuries-emergencies/Pages/Calling-911-How-and-When-to-Call-for-Help.aspx) **right away** if your child has collapsed, is having a seizure, is having a hard time breathing, or if they can't wake up after using or swallowing hand sanitizer products. Otherwise, you can reach your regional poison control center by calling 1-800-222-1222.

Talk with your pediatrician

If you have questions about hand sanitizers, talk with your pediatrician. Your regional Pediatric Environmental Health Specialty Unit (PEHSU (https://www.pehsu.net/)) have staff who can also talk with parents about concerns over environmental toxins.

More information

- Childproofing Your Home for Poisons (/English/safety-prevention/at-home/Pages/Childproofing-Your-Home.aspx)
- Hand Sanitizers (https://www.pehsu.net/hand_sanitizer.html) (PEHSU)
- American Association of Poison Control Centers (http://https//www.aapcc.org) interactive website: **www.poisonhelp.org** (https://www.poisonhelp.org/help)
- Q & A for Consumers: Hand Sanitizers and COVID-19 (https://www.fda.gov/drugs/information-drug-class/qa-consumers-hand-sanitizers-and-covid-19) (FDA)

About Dr. Osterhoudt



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