The U.S. Food and Drug Administration (FDA) is alerting healthcare professionals that the agency has seen a sharp increase in hand sanitizers that are labeled to contain ethanol or isopropyl alcohol, but have tested positive for contamination with methanol or 1-propanol, toxic types of alcohol not acceptable in hand sanitizer marketed in the U.S. Poison control centers and state health departments have reported serious adverse events related to hand sanitizers contaminated with methanol. Ingesting hand sanitizer contaminated with methanol or 1-propanol can result in serious adverse events, including death.

Young children who accidentally swallow these contaminated products and adolescents and adults who drink these products as an alcohol (ethanol) substitute are most at risk for serious adverse events, including death. Health care professionals should be aware of the possibility of methanol or 1-propanol toxicity in patients with symptoms after ingesting a hand sanitizer product on the FDA’s do-not-use list at www.fda.gov/unsafehandsanitizers. This list is regularly updated and the agency urges health care professionals and consumers to check for new information.

Remind your patients that everyone in the patient’s household should wash their hands often with soap and water for at least 20 seconds especially after they have been in a public place, or after blowing their nose, coughing, or sneezing. If soap and water are not readily available, the Centers for Disease Control and Prevention (CDC) recommends consumers use an alcohol-based hand sanitizer that contains at least 60 percent alcohol.

**Methanol is Extremely Poisonous**

Methanol is commonly used to make products such as race car fuel and paint thinner. Methanol is not an acceptable ingredient in hand sanitizer. Methanol exposure can result in nausea, vomiting, headache, blurred vision, permanent blindness, seizures, coma, permanent damage to the nervous system or death.

After drinking hand sanitizer contaminated with methanol, a patient may have no symptoms at first. Symptoms may be delayed for several days, particularly if the person is also drinking alcohol (ethanol) in addition to the methanol-containing hand sanitizer. After use on the hands, symptoms of methanol poisoning are most likely to be observed within 8 hours.
1-Propanol is More Potent Than Ethanol
1-Propanol is commonly used to make products such as industrial solvents. 1-Propanol should not be confused with 2-propanol/isopropanol/isopropyl alcohol because isopropyl alcohol is an acceptable ingredient in hand sanitizer. 1-Propanol is not an acceptable ingredient in hand sanitizer in the United States. 1-Propanol exposure through hand sanitizer ingestion can result in drowsiness, confusion, decreased consciousness, and slowed pulse and breathing. Animal studies indicate that the central nervous system depressant effects of 1-propanol are two to four times as potent as ethanol.

Patients Should Check FDA’s Do-Not-Use List
Methanol or 1-propanol is usually not listed on the hand sanitizer label. All patients and health care professionals should confirm whether their hand sanitizer is on FDA’s do-not-use list. The list is updated regularly at www.fda.gov/unsafehandsanitizers and can be searched using information printed on the hand sanitizer label. Call 1-888-INFO-FDA (1-888-463-6332) for more information.

Drinking Hand Sanitizer Is Deadly
It is especially important to counsel patients on the dangers of drinking any hand sanitizer. Adolescents and adults that drink hand sanitizer as a substitute for alcohol (ethanol) are at risk of inadvertently ingesting methanol or 1-propanol if the hand sanitizer is contaminated. It is impossible to determine from sight or smell if a hand sanitizer product is contaminated, underscoring the potential danger in ingesting such products at any time.

For children under six years of age, hand sanitizer should be used with adult supervision. Drinking only a small amount of hand sanitizer can cause alcohol poisoning in children. Every month, there are hundreds of calls to poison control centers for unintentional ingestion of hand sanitizer. In March 2020 (during the COVID-19 pandemic), calls to poison control centers related to hand sanitizer increased by 79 percent compared to March of 2019. The majority of these calls were for unintentional exposures in children 5 years of age and younger. It is very important for health care professionals to remind caregivers to store hand sanitizer out of reach of children and monitor children when they are using hand sanitizer.

If you suspect a patient has alcohol poisoning from hand sanitizer, get expert advice on patient management by calling your local poison control center at 1-800-222-1222. Experts staff this network of poison centers 24 hours a day, 7 days a week, 365 days a year and provide interpretation services in 161 languages throughout the entire United States and many territories. Get more information and patient materials to print at https://poisonhelp.hrsa.gov/.

Report Adverse Events to Medwatch
FDA encourages health care professionals and consumers to report adverse events or quality problems experienced with the use of hand sanitizers to FDA’s MedWatch Adverse Event Reporting program (please provide the agency with as much information as possible to identify the product):

- Complete and submit the report online; or
- Download and complete the form, then submit it via fax at 1-800-FDA-0178.