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UPDATE: Feb. 22, 2013

Note: This is an update to a previous issue brief sent to members on Feb. 20, 2013

## ISSUE BRIEF

### UPDATE: Fire caused by hand sanitizer, olive oil, and static electricity

#### Key Points

- The Oregon state fire marshal has determined that alcohol-based hand rub (ABHR), olive oil, and static electricity caused a fire that injured a patient in an Oregon hospital.
- The fire marshal pointed out that ABHRs are safe when used as directed, and that there is no reason to believe people in health care facilities are in danger based on this highly unusual event.
- Many studies have been conducted about the safety of ABHRs and have found no issues with the sanitizers and static electricity.
- ASHE recommends that members review policies on the use of ABHRs to ensure the proper precautions are being taken.
- ASHE also suggests informing staff of potential ABHR hazards so they can ensure they are being used properly.

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The Oregon state fire marshal has determined that an unusual combination of alcohol-based hand rub (ABHR), olive oil, and static electricity likely caused an accidental fire that injured a patient at a Portland children's hospital.

Fire Marshal Mark Wallace said the patient, a girl who just turned 12 years old, was wearing a shirt saturated with olive oil and ABHR at the time of the fire. Olive oil is sometimes used to remove the glue that holds electrodes to the scalp for an EEG exam when patients are allergic to EEG gel remover. The patient's father said she had likely put ABHR on her shirt in an attempt to remove the olive oil dripping down her hair onto her shirt. The girl had just learned about static electricity and was trying to create static electricity in her bed sheets when the fire ignited.

The hospital is making some changes based on this incident. It is no longer suggesting the use of olive oil as a substitute for EEG gel remover. The hospital said its placement and use of hand sanitizer meets industry standards, but it is reviewing procedures to see if any additional adjustments can be made to promote safety.

The fire marshal pointed out that ABHRs are safe when used according to instructions. Wallace said there is no reason to believe that people in health care facilities are in danger based on this highly unusual event.

ABHRs are widely used in hospitals and are credited with saving lives by improving hand hygiene. Studies have underscored the safety of using ABHRs in hospitals.

A [study](#) published by *Infection Control and Hospital Epidemiology* in 2003 found that none of the 798 responding facilities using ABHRs reported a dispenser-related fire. Another *Infection Control and Hospital Epidemiology* [study](#) published in 2007 found only seven fire incidents occurring during 25,038 hospital-years—and none of the fires were caused by static electricity.

ASHE recommends that members review their facility's policies on the use of ABHRs to ensure that appropriate precautions (proper ventilation, locating hand rubs away from ignition sources, etc.) are being taken. Facility managers should also review patient access to ABHRs and inform staff of potential hazards associated with ABHRs. ASHE recommends that staff members should keep an eye on patients and visits to make sure ABHRs are being used only as intended.