## Is Rinsing Your Sinuses Safe?

ittle teapots with long spouts have become a fixture in many homes for reasons that have nothing to do with tea.



Called neti pots, they are used to rinse the nasal passages with a saline (salt-based) solution, and have become popular as a treatment for congested sinuses, colds and allergies, and for moistening nasal passages exposed to dry indoor air.

However, the Food and Drug Administration (FDA) has concerns about the risk of infection tied to the improper use of neti pots and other nasal rinsing devices. The agency is informing consumers, manufacturers and health care professionals about safe practices for using all nasal rinsing devices, which include bulb syringes, squeeze bottles, and battery-operated pulsed water devices.

These devices are generally safe and useful products, says Steven Osborne, M.D., a medical officer in FDA's Center for Devices and Radiological Health (CDRH). But they must be used and cleaned properly.

Most important is the source of water that is used with nasal rinsing devices. Tap water that is not filtered, treated, or processed in specific ways is not safe for use as a nasal rinse.

Some tap water contains low levels of organisms, such as bacteria and protozoa, including amoebas, which may be safe to swallow because stomach acid kills them. But these "bugs" can stay alive in nasal passages and cause potentially serious infections, according to the Centers for Disease Control and Prevention (CDC).

Improper use of neti pots may have caused two deaths in 2011 in Louisiana from a rare brain infection that the state health department linked to tap water contaminated with an amoeba called Naegleria fowleri.

## Misleading, Missing Information

Information included with the device might give more specific instructions about its use and care. However, FDA staff has found that some manufacturers' instructions provide misleading or contradictory information, or lack any guidelines.

For example, some manufacturers have recommended using plain tap water; others warn against using it in printed directions, but show its use in pictures or videos.

The device might also come without instructions. If you order a custom neti pot made by an artist, for example, that person might assume you know how to use it.

The procedure for nasal rinsing may vary slightly by device, but generally involves these steps:

- Leaning over a sink, tilt your head sideways with your forehead and chin roughly level to avoid liquid flowing into your mouth.
- Breathing through your open mouth, insert the spout of the saline-filled container into your upper nostril so that the liquid drains through the lower nostril.
- Clear your nostrils, then repeat the procedure, tilting your head sideways, on the other side.

Nasal rinsing can remove dirt, dust, pollen and other debris, as well as help to loosen thick mucus. It can also help relieve nasal symptoms of allergies, colds and flu.

"The nose is like a car filter or home air filter that traps debris. Rinsing the nose with saline solution is similar to using saline eye drops to rinse out pollen," Osborne says. The saline, he adds, enables the water to pass through delicate nasal membranes with little or no burning or irritation.

FDA staff recommends that you consult a health care provider or pharmacist if the instructions do not clearly state how to use the device or the types of water to use, if instructions are missing, or if you have any questions.

## **Questions and Answers**

What types of water are safe to use in nasal rinsing devices?

- Distilled or sterile water, which you can buy in stores. The label will state "distilled" or "sterile."
- Boiled and cooled tap water boiled for 3-5 minutes, then cooled until it is lukewarm.
  Previously boiled water can be stored in a clean, closed container for use within 24 hours.
- Water passed through a filter with an absolute pore size of 1 micron or smaller, which traps potentially infectious organisms. CDC has information on selecting these filters, which you can buy from some hardware and discount stores, or online.

## How do I use and care for my device?

- Wash and dry hands.
- Check that the device is clean and completely dry.
- Use the appropriate water as recommended above to prepare the saline rinse, either with the prepared mixture supplied with the device, or one you make yourself.
- Follow the manufacturer's directions for use.
- Wash the device with distilled, sterile, or boiled and cooled tap water, and then dry the inside with a paper towel or let it air dry between uses.

Are nasal rinsing devices safe for children?

Some children are diagnosed with

nasal allergies as early as age 2, Osborne says, and could use nasal rinsing devices at that time, if a pediatrician recommends it. However, he adds that very young children might not tolerate the procedure as easily as would older children or adults.

What are some negative effects to watch out for when using nasal rinsing devices?

Talk to your health care provider to determine if nasal rinsing will be safe or effective for your condition. If symptoms are not relieved or worsen after nasal rinsing, then return to your health care provider, especially if you had any of these symptoms while using the nasal rinse:

- fever
- nosebleed
- headaches

FDA asks health care professionals and patients to report complaints about nasal rinsing devices to the FDA's MedWatch (www.fda.gov/Safety/MedWatch) Safety Information and Adverse Event Reporting Program.

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