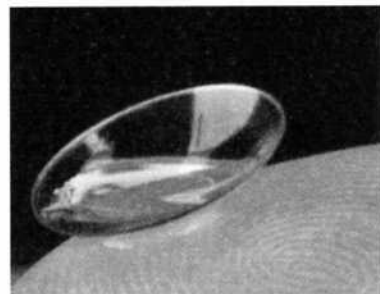


Special Precautions Required For Contact Lens or Neti Pot Use

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Public water supplies are **disinfected** for the purpose of providing communities with public **drinking** water supplies. Public water supplies are **not sterilized** for other uses that may require the use of purified water. As public health officials and as water system managers and operators, we may occasionally be thrust into the role of having to educate the community regarding the differences between disinfected water and sterilized water. "Safe drinking water" means safe to drink—not necessarily safe to use for other purposes that might have greater personal health risks associated with them. A couple of examples of activities that may require the use of sterilized water or specially prepared solutions include contact lens maintenance and sinus irrigation. Recent events reflect an apparent lack of awareness among the general population concerning the distinction between disinfection and sterilization. For instance, two relatively routine activities necessitate use of sterilized water rather than merely disinfected water.

CONTACT LENSES: Contact lens care requires the use of sterile conditioning and disinfecting solutions and most contact lens users are aware of this requirement. The eye care profession is good at educating contact lens users of the need for proper contact lens care and disinfection practices. Nevertheless, eye infections resulting from the use either of non-sterilized or of improperly prepared homemade solutions continue to occur. An eye infection—one that can be contracted via use of non-sterilized water for contact lens maintenance—is called *Acanthamoeba keratitis*. This infection is caused by the organism *Acanthamoeba* and the resulting infection is nearly always associated with contact lens use. Swimming while wearing contact lenses can also increase the risk of contracting this disease. The U.S. Environmental Protection Agency maintains a web page to help educate the public concerning contact lens use and *Acanthamoeba keratitis*. This web page can be found at: <http://water.epa.gov/action/advisories/acanthamoeb>



However, not everyone understands that this practice requires the use of specially prepared solutions. Sinus irrigation should never be done using untreated tap water; rather, follow manufacturers' orders and use only lukewarm distilled, filtered, or boiled water. As an alternative, pre-prepared solutions can be purchased in groceries, in pharmacies, or at discount stores. Some common names for these products include "Saline Nasal Spray", "Saline Nasal Rinse" or similar product names. Improper use of other water sources put one at risk of diseases that can be contracted via the nasal and sinus cavities. One example is the fatal infection associated with the organism *Naegleria fowleri*. This very rare, but nearly always fatal, infection can occur when this organism is introduced into the sinus cavities via a variety of activities that include swimming in warm water lakes or streams or via sinus irrigation if non-appropriate sources of rinse water are used. In two separate cases in Louisiana during 2011, the victims of this disease were apparently using "Neti pots" to irrigate their sinuses with water obtained from their home plumbing system. In these two recent cases in Louisiana, the home plumbing systems were apparently harboring *Naegleria fowleri* organisms and the two individuals contracted this fatal disease. The Centers for Disease Control maintains a web page concerning *Naegleria fowleri* and this web page specifically provides guidance for the proper use of Neti pots and other nasal irrigation devices. The CDC web page can be found at: <http://www.cdc.gov/parasites/naegleria/faqs.html>

[a/index.cfm](#) The Centers for Disease Control also provides information concerning *Acanthamoeba keratitis* at: <http://www.cdc.gov/parasites/acanthamoeba/prevention.html>

SINUS IRRIGATION: Some individuals in the community practice daily sinus irrigation in an effort to improve health and minimize sinus infections. The Neti pot is a specially shaped container sold for this purpose.



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The ADH Conducts Fluoridation Training

On March 14, and March 15, the Arkansas Department of Health conducted a Fluoridation Short School. This training was conducted at the Arkansas Rural Water training facility located at Lonoke. The training consisted of six sections including overview of regulations, fluoride chemicals, feed rate calculations, record keeping, chemical safety, and concentration analysis.

The training was attended by 24 water operators

See Training page 4

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