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Sulfate in Drinking Water

How does sulfate get in the drinking water?

- It usually occurs naturally in the groundwater in New Mexico because the water dissolves it out of rocks, such as gypsum.
- Natural levels can be increased by contamination from mines, mills, landfills, sewage and other manmade sources.

What to do if your drinking water has high levels of sulfate?

If you or a family member notices symptoms such as diarrhea, replace your drinking water with bottled water or treat the water to remove sulfate, for all water you ingest, including water in:

- Beverages- baby formula, coffee, tea, flavored drinks, frozen juices, etc.,
- Food – soup, stew, cereals (especially infant cereals).

What level of sulfate is recommended for drinking water?

New Mexico Environment Department (NMED) and the Environmental Protection Agency (EPA) recommend that public water systems not have sulfate above 250 milligrams per liter (mg/L) to avoid undesirable taste and odor. The EPA has also established a drinking water health advisory of 500 mg/L to prevent loose stool and diarrhea in persons not used to high levels of sulfate.

What are the health effects of sulfate in drinking water?

Drinking water with sulfate at levels exceeding 600 mg/L can cause strong laxative effects, such as diarrhea. However, some people can get used to higher sulfates concentrations in as little as one week. Dehydration can be a serious result of diarrhea following ingestion of large amounts or high concentrations of sulfate.



Where do I go to find out about my drinking water? Contact:

- Your community water system
- The NMED Drinking Water Bureau at TOLL FREE 1-877-654-8720 or go to www.safewater.state.nm.us
- For health questions call, Department of Health's Environmental Health Epidemiology Bureau at TOLL FREE 888-878-8992

Where can I get my drinking water tested?

If you are using private well water, the NMED will test your water for free during Water Fairs that are scheduled around the state. Additionally, you can hire a private laboratory to do the test (look under "laboratories-testing" in the Yellow Pages).

Question – How likely is sulfate to cause health problems?

Answer – Diarrhea is most likely to occur after drinking water that has over 500 mg/L of sulfate, especially if a person is not accustomed to it.

Question – Who is at risk for health problems?

Answer –

- Infants – sulfate can have a laxative effect on babies resulting in diarrhea and dehydration.
- People new to the area including tourists, hunters, students, and other temporary visitors.
- Elderly and those with illnesses, who are also more sensitive to dehydration that can result from persistent diarrhea.



Question -What if my family or I get sick because of sulfate in my drinking water?

Answer – Use an alternate source of drinking water. Consult your medical provider if diarrhea persists.

Question - Can I use water with high sulfate to take a shower or bath?

Answer – Yes, there is not a significant health risk from bathing or showering in water with high levels of sulfate.



Question – What about my pets and livestock?

Answer – Because animals are also sensitive to high levels of sulfate, you may want to give them bottled or treated water. In young animals, high levels may be associated with severe, chronic diarrhea. Recommended levels of sulfate for livestock are less than 500 mg/L for calves and 1,000 mg/L for cattle. As with humans, animals tend to get used to sulfates over time. Contact your veterinarian for specific information regarding the health of your animals.



Question – Is it ok to water my plants with this water?

Answer – Yes, it is ok to water your houseplants with tap water.

Question – How can sulfate be removed from the drinking water?

Answer –Sulfate can be removed by treating the water with reverse osmosis or distillation. These treatment methods require careful maintenance. Carbon or other mechanical filters, standard water softeners or boiling do **NOT** remove sulfate, so you may want to consult with National Sanitation Foundation at <http://www.nsf.org/> or at toll-free at 1-877-8-NSF-HELP (1-877-867-3435).