

Drinking Water: Response Checklist for DNR Issued:

- Boil Water Notices
- Emergency Chlorination Notices
- High Nitrate Notices

This document organizes information from the “Amendment to the Memorandum of Understanding between the Department of Health Services and the Department of Natural Resources - 2010” into a checklist for the Division of Public Health (DPH) and Local Health Departments. Information related to Nitrate notices is in addition to the MOU.

A separate DPH fact sheet is attached for use with private well-owners who receive notification from the State Lab of Hygiene.

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DNR, “Nitrate in Drinking Water,” <http://dnr.wi.gov/org/water/dwg/Forms/nitrate.pdf>

DNR, “Public Water Supply Systems,” a source for municipal drinking water systems, contact information and Consumer Confidence Reports (CCR), [http://prodoasext.dnr.wi.gov/inter1/pws2\\$.startup](http://prodoasext.dnr.wi.gov/inter1/pws2$.startup) .

In case the database is moved, it can also be found from the DNR Website “dnr.wi.gov” home page. Use the search box “Go Directly to a Program,” select “Drinking Water and Groundwater”, then select “Water Quality Databases” and then select “Public Water Systems”. From that site select a county to locate information on specific systems.

Community - Municipal Water System: Boil Water Notice

(Public Water Systems)

A “**community** water system” is a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. Any public water system serving 7 or more homes, 10 or more mobile homes, 10 or more apartment units, or 10 or more condominium units is considered a community water system. A Boil Water Notice is issued when both the original and follow-up samples are total coliform positive and **either** the original or follow-up samples is also positive for **fecal coliform or E Coli**. Fecal coliform are bacteria contained in the digestive tract of warm-blooded animals.

DNR will:

1. Work with the water system on chlorination.
2. Inform the water operator that a Public Notice (Boil Water Notice) must be issued within 24 hours. Refer to the DPH fact sheet “Bacteria in Drinking Water” when providing guidance information.
3. Notify DPH and Dept. of Agriculture via 24-hour hotlines.
4. Notify DPH and Department of Ag of “All Clear” via FAX, email or call.

DPH Regional offices will.

- √ Inform the local health office immediately by phone per the emergency contact list. (If other notification process is currently working, for example email to multiple contacts, that is OK)
- √ Notify the assigned DCFS inspector and State sanitarian. If the jurisdiction is covered by an Agent department, the local health officer will notify the appropriate sanitarian. The assigned sanitarian (local or regional) will contact all licensed facilities operators to insure they understand what to do.
- √ Provide guidance to the local health officer on addressing “boil water” notification, per the DPH “Fact Sheet for Public and Licensed Facilities - Bacteria in Drinking Water” (Attachment B)
- √ Notify the local health department of the “All Clear” (by FAX and/or email) when it is issued.

DPH expects the Local Health Department to:

- √ Coordinate the public response with the municipal water operator to assure that non-licensed public facilities (schools, daycares, etc.) and the public, know what to do when a boil water notice is issued. This may be limited to assuring that a public notice was issued. At the discretion of the health officer, call churches, daycare centers or other large non-licensed public facilities to make sure they understand the advisory.
- √ Involve local sanitarian if this is an Agent Health Department. The assigned sanitarian will contact all licensed facilities operators to insure they understand what to do
- √ Refer to the DPH “Fact Sheet for Public and Licensed Facilities - Bacteria in Drinking Water” when responding to public inquiries.
- √ Consider information about water quality when responding to reports of communicable disease.
- √ Stay alert to issues related to drinking water until an all-clear is issued.

Community - Municipal Water System: Emergency Chlorination

(Public Water Systems)

A “**community** water system” is a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. Any public water system serving 7 or more homes, 10 or more mobile homes, 10 or more apartment units, or 10 or more condominium units is considered a community water system. Municipal systems may be treated by Emergency Chlorination when 5% or more of the samples collected in any month (for systems collecting at least 40 samples per month) or at least two samples collected in any month (for those systems collecting less than 40 samples per month) are coliform positive (either total or fecal). The system must be chlorinated to a level of 0.5 ppm of free chlorine within 4 hours. Coliform bacteria are common in the environmental and may or may not be harmful to human health. Their presence is considered a marker of general contamination.

DNR will:

1. Work with the water system operator to perform emergency chlorination.
2. Inform water system personnel that they must notify the public within 30 days.
3. Notify the DPH and Department of Agriculture via 24-hour hotline.
4. Inform the water system operator of DPH protocol, make them aware of the DPH press release (Attachment A) and advise their personnel to coordinate any additional public response with the public health department.
5. Notify DPH and Dept. of Ag of an “All Clear” via FAX, email or call.

DPH Regional Office will:

- √ Notify the local health department immediately by phone or email.
- √ Notify the assigned DCFS inspector. Notify the state sanitarian unless health agency is an Agent department in which case the health officer will involve the agency sanitarians. The assigned sanitarian (local or regional) will contact all licensed facilities operators to insure they understand what to do
- √ Assure the local health department has the “Bacteria in Drinking Water” fact sheet and a model press release.
- √ Encourage the local health department to communicate and coordinate with the municipal water operator.

DPH expects the local health department to:

- √ Coordinate with the municipal water operator to publish a public notice. See Attachment.
- √ Issue a press release to a local newspaper or radio station that communicates the precautions described in the DPH fact sheet “Bacteria in Drinking Water” (Attachment), unless the water system has issued a public notice.
- √ Involve local sanitarians if this is an Agent Health Department.
- √ Refer to “Bacteria in Drinking Water” when responding to public inquiries.
- √ Have increased awareness of water quality when responding to reports of communicable disease.

Community - Other than Municipal (OTM): Boil Water Notice

(Includes some rural mobile home parks, apartment buildings)

A “**community** water system” is a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. A community water system is considered “**other than municipal (OTM)**” when the water system is not owned by a municipality. Examples of this type include; mobile home parks, apartment buildings, and condominiums.

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DNR will:

1. Call the operator of the system and provide public health information, referring to the DPH “Fact Sheet for Public and Licensed Facilities - Bacteria in Drinking Water” (Attachment B).
2. Require disinfection of the well.
3. Stipulate follow-up sampling.
4. Require the operator to return a signed public notice to the DNR.
5. Notify DPH, Department of Commerce and Department of Agriculture (as applicable) by telephone during normal business hours.
6. Notify DPH, Agriculture and Commerce of “All Clear” by FAX, email or call.

DPH Regional Offices will:

- √ Notify the Local Health Department by FAX (and/or email) when the DNR notice is received.
- √ Provide guidance to the local health officer on the public health response according to the DPH “Fact Sheet for Public and Licensed Facilities - Bacteria in Drinking Water”
- √ Notify the Local Health Department by FAX (and/or email) when an “All Clear” is issued.

DPH expects the Local Health Department to:

- √ Refer to “Fact Sheet for Public and Licensed Facilities - Bacteria in Drinking Water” when responding to public inquiries.
- √ Have increased awareness of water quality when responding to reports of communicable diseases.
- √ At the discretion of the health officer, call the facility to be sure they understand the information provided on the Health Fact Sheets.
- √ Be aware of an all-clear when it is issued. No additional action is required.

Non-Transient Non-Community (NTNC) Water Supply:
Boil Water Notice

(Includes rural schools, daycare centers, and factories)

A **non-transient non-community** water system regularly serves at least 25 of the same persons over 6 months per year. Examples of this type are systems serving schools, daycare centers, and factories.

DNR will:

1. Call the operator of the system and provide public health information, referring to the DPH “Fact Sheet for Public and Licensed Facilities – Bacteria In Drinking Water” (Attachment B).
2. Require disinfection of the well.
3. Stipulate follow-up sampling.
4. Notify DPH, Department of Commerce and Department of Agriculture (as applicable) by telephone during normal business hours.
5. Require the operator to return a signed public notice to the DNR.
6. Notify DPH, Agriculture and Commerce of “All Clear” by FAX, email or call

DPH Regional Offices will:

- √ Notify the Local Health Department by FAX (and/or email) when the DNR notice is received.
- √ Notify the assigned sanitarian unless health agency is an Agent department. Notify the regional Division of Children and Family Services inspector in case a licensed daycare is involved.
- √ Provide guidance on the public health response according to the DPH “Fact Sheet for Public and Licensed Facilities – Bacteria In Drinking Water”
- √ Notify the Local Health Department by FAX (and/or email) when an “All Clear” is issued.

DPH expects the Local Health Department to:

- √ Refer to “Fact Sheet for Private Residences – Bacteria In Drinking Water” (Attachment C) when responding to public inquiries.
- √ Notify the local sanitarian if the agency is an Agent Health Department.
- √ Have increased awareness of water quality when responding to reports of communicable diseases.
- √ At the discretion of the health officer, call the facility to be sure they understand the information provided on the Health Fact Sheets.
- √ Be aware of an all-clear when it is issued. No additional action is required.

Transient Non-Community (TNC) Water Supply:
Boil Water Notice

(Includes rural taverns, motels, restaurants, churches, campgrounds, and parks)

A **transient non-community** water system serves at least 25 people at least 60 days a year. Examples of this type are systems serving taverns, motels, restaurants, churches, campgrounds, and parks.

DNR (or the Agency Health Department if it is an Agent for DNR) will:

1. Call the operator of the system and provide public health information, referring to the DPH “Fact Sheet for Public and Licensed Facilities – Bacteria In Drinking Water” (Attachment B).
2. Require disinfection of the well.
3. Stipulate follow-up sampling.
4. Notify DPH, Department of Commerce and Department of Agriculture (as applicable) by telephone during normal business hours.
5. Require the operator to return a signed public notice to the DNR.
6. Notify DPH, Agriculture and Commerce of “All Clear” by FAX, email or call.

DPH Regional Offices will:

- √ Notify the Local Health Department by FAX (or email) when the DNR notice is received.
- √ Notify the assigned State sanitarian unless health agency is an Agent department.
- √ Provide guidance on the public health response according to the DPH “Fact Sheet for Public and Licensed Facilities – Bacteria In Drinking Water” (Attachment B)
- √ Notify the Local Health Department by FAX (or email) when an “All Clear” is issued.

DPH expects the Local Health Department to:

- √ Refer to the DPH “Fact Sheet for Private Residences – Bacteria In Drinking Water” (Attachment C) when responding to public inquiries.
- √ Have increased awareness of water quality when responding to reports of communicable diseases.
- √ Be aware of an all-clear when it is issued.

High Nitrate in Public Water Supplies

DNR will:

1. Contact the water system operator by phone.
2. Follow up the phone contact with a letter giving specific recommendations including posting warning signs by potable water outlets.
3. Require specific follow-up testing.
4. Notify DPH, Department of Agriculture and Department of Commerce (as appropriate) by phone, FAX or email during regular business hours.

DPH Regional Offices will:

- √ Notify the Local Health Department and DCFS inspectors if a Daycare is involved.
- √ Provide updates on the status of the water supply as they are received.

DPH expects the Local Health Department to:

- √ Be aware when nitrate levels exceed standards.
- √ Refer to the DNR Brochures “Nitrate in Drinking Water”, when providing public health information. The brochure is found at the following Web address:
<http://dnr.wi.gov/org/water/dwg/Forms/nitrate.pdf>

11/12/2010

Attachment:

Emergency Chlorination, Model Press Release
For use by all Local Health Officers

Instructions: Before issuing a press release, the local health officer should coordinate with the municipal water utility operator. Since the operator also has an obligation to issue a press release within 30 days of test results that exceeded standards, he or she may prefer to issue a press release immediately. If not, this following model will assist the health officer in developing a press release. For questions or comments on this model, please contact DPH at 608-266-1120. Contact information for local municipal water operators can be found by searching the DNR Website or following this link: [http://prodoasext.dnr.wi.gov/inter1/pws2\\$.startup](http://prodoasext.dnr.wi.gov/inter1/pws2$.startup) . It links to the Drinking Water and Groundwater, Water Quality Databases.

Press Release:

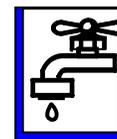
(Date)

For Immediate Release

(Name of Contact and Title), (Health Department Name), (Phone Number)

Emergency Chlorination Order Issued for (Place)

(HD City) – (Local Health Department) officials have received notice of an emergency chlorination of the (area) water supply. The chlorination began at (time, day, date). Your water is safe to drink at this time. As a precautionary measure, any ice cubes, beverages, baby formula, or other uncooked food items made with the water between (date of MCL violation – date chlorination began) should be discarded and their containers or icemakers cleaned. If you have any questions, please contact (local health department contact information).



Fact Sheet for Public and Licensed Facilities

Bacteria in Drinking Water: Public Health Advice

Facilities that serve water to the public sometimes have elevated chlorine and bacteria levels in their treated drinking water, and additional actions are needed. This fact sheet provides public facilities with information about how to protect their customers' health during an advisory situation.

EMERGENCY CHLORINATION NOTICE

An Emergency Chlorination Notice means that at this point your water is safe, *but* as a precautionary measure, any ice and premixed beverages (i.e. juice, lemonade, formula, etc.) made prior to the notice being issued should be discarded.

BOIL WATER ADVISORY

Health effects Associated with Bacteria in Water

Coliform bacteria act as a signal that other microbes which may cause illness are present in the water. Typical symptoms may include diarrhea, cramps, nausea, or yellowing of eyes and skin (jaundice) with headaches or fatigue. Note that these symptoms may be caused by factors other than unsafe water. If people develop symptoms during a boil water notice, they should contact their local health department or health care provider right away.

General Advice for All Public Facilities

- ✓ Inform the public (staff, students and patients) by posting the DNR notice (available from local DNR offices) at faucets and in other prominent locations instructing the public not to drink the water or use it for mixing baby formula.
- ✓ Turn off drinking fountains.
- ✓ Dump ice if it was made on-site, purchase ice from a safe source, clean and sanitize ice machines after "all clear" has been issued.
- ✓ Provide SAFE water for drinking and preparing food, juice, other beverages, and ice.

Examples of safe water include:

- Commercially bottled water.
- Packaged ice from an approved source.
- Water that has been at a rolling boil for 1 minute (*source - CDC – Centers for Disease Control*). Although boiling will make water safe, we recommend that public facilities use a commercial source of safe water.
- A public water supply system that is safe. Any transport container, whether it is a gallon jug or a tanker truck, must be washed and sanitized before filling with safe, clean water. *Sanitize by immersing for 1 minute in a solution of 1 teaspoon of chlorine bleach (5.25%, unscented) per gallon of clean water.*

Hospitals, Dental and other Health Care Facilities

- ✓ Follow the section on General Advice for all Public Facilities.
- ✓ All health care facilities should use sterile water for flushing wounds, bottled water for surgical scrub, tube feeding, washing newborns, etc.
- ✓ Dentists and dental hygienists should discontinue use of water cooled instruments such as high-speed handpieces, air/water syringes, and cavitrons; substitute bottled water applied with a bulb syringe for cooling and rinsing purposes; use rubber dams as appropriate; defer treatment for patients who may be at risk, such as small children, the elderly, and those with chronic diseases or suppressed immune systems.

Hotels/Motels

- ✓ Follow the section on General Advice for All Public Facilities.
- ✓ Post signs in guest rooms that instruct the public not to drink water or use it for brushing teeth, making baby formula, or bathing infants.

Food Service, Food Preparation Facilities

- ✓ Follow the section on General Advice for All Public Facilities.
- ✓ Use only commercially bottled water for ingestion; washing ready to eat foods such as fruit and vegetables; making coffee; cooking; and reconstituting juices, carbonated beverages or other drinks
- ✓ Turn off all post-mix beverage machines and dump premixed beverages on hand such as juice, lemonade, coffee, soda, ice tea, etc.
- ✓ Turn off beverage vending machines that use the contaminated water supply.
- ✓ Wash utensils either manually or with a dishwasher. Be sure the final rinse of the dishes is done with the proper strength of sanitizer, a bleach solution (one tablespoon of bleach in 2 gallons of cool water) or using 180-degree water.
- ✓ Thoroughly wash hands as usual. Wear gloves after hand washing and prior to handling ready to eat foods.

These procedures must remain in effect until the municipality issues the “all clear” or your private well tests safe. After you are notified that the water is safe and prior to use, clean and sanitize the ice machine, beverage machines and any other piece of equipment that uses tap water.

Follow-up Sampling and Cleaning of Wells (for facilities on a private well)

- ✓ Work with your well contractor to investigate and clean the water system.
- ✓ Work with your local DNR representative to collect necessary follow-up samples.

Municipal Water Users

- ✓ Resume normal use of the water when you are notified by your system official.

For More Information, Contact:

- ✓ Your local Public Health Department. <http://dhs.wisconsin.gov/localhealth>
- ✓ Your local water utility.

Wisconsin Department of Health Services
Division of Public Health
Bureau of Environmental and Occupational Health
PPH 45090 (11/10)



Bacteria in Drinking Water: Public Health Advice

Public water facilities sometimes have elevated bacteria or chlorine in their treated water systems and precautions need to be taken by customers served from these systems. This fact sheet provides information for residents on how to protect their health during a notice.

EMERGENCY CHLORINATION NOTICE

An Emergency Chlorination Notice means that at this point your water is safe, but as a precautionary measure, any ice and premixed beverages (i.e. juice, lemonade, formula, etc.) made prior to the notice being issued, should be discarded.

BOIL WATER NOTICE

Elderly people, small children (including infants), and individuals who have poor immune systems due to illness may be at highest risk during a boil water/bottled water notice. If you or anyone you care for has a poor immune system, consult with your health care provider for additional advice.

Health effects associated with bacteria in water

Bacteria in drinking water may cause illness. Typical symptoms may include diarrhea, cramps, nausea, or yellowing of eyes and skin (jaundice) with headaches or fatigue. Note that these symptoms may be caused by factors other than unsafe water. If you become ill with the above symptoms during a boil water notice, you should talk to your doctor or call your local health department.

Use only SAFE water until “All Clear” notice is given

Examples of safe water include:

- ◆ Commercially bottled water.
- ◆ Packaged ice from an approved source.
- ◆ Water that has been at a rolling boil for 1 minute (*source - CDC- Centers for Disease Control*).
- ◆ Another public water supply system that is safe. Any transport container, whether it is a bucket or gallon jug, must be washed and sanitized before filling with safe, clean water. *Sanitize by immersing for 1 minute in a solution of 1 teaspoon of chlorine bleach (5.25%, unscented) per gallon of clean water.*
- ◆ Clear water to which 1/8 teaspoon (or cloudy water to which ¼ teaspoon) of bleach has been added to a gallon of water and the water has been allowed to sit for 30 minutes (*source - CDC*).

Use only SAFE water for the following purposes:

- ✓ Drinking, cooking, making baby formula, coffee, juices, other beverages or ice.
- ✓ Washing ready to eat fruits and vegetables
- ✓ Bathing infants, washing open wounds, brushing teeth, or watering pets.
- ✓ Rinsing dishes; see sanitizing instructions above, and allow dishes to air dry.
- ✓ DO NOT use ice cubes from your freezer or any beverages made with unsafe water.

While under the advisory, you may use your current water for the following:

- ✓ Bathing (except infants), showering, washing hands, and washing dishes. Rinse dishes as instructed above.
- ✓ Washing dishes in automatic dishwashers that use a heating element to dry dishes.
- ✓ Washing cars and watering lawns.

For more information about safe drinking water, contact

Wisconsin DNR, Regional Drinking Water Office or <http://www.dnr.state.wi.us/org/water/dwg/>

Your local Public Health Department <http://dhs.wisconsin.gov/localhealth>

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