



## MassDEP DWP Tier 1 Public Notice (PN) for Lead Action Level Exceedance (ALE) Consumers Questions and Answers (Q&A)

There is no safe level of lead exposure. If a public water system (PWS) has a lead action level exceedance (ALE), the PWS must take actions to address it. This includes issuing a Tier 1 Public Notice (required as of October 16, 2024, under the Lead and Copper Rule Revisions (LCRR)) when your PWS exceeds the lead 90<sup>th</sup> percentile action level and providing Public Education (required under the Lead and Copper Rule (LCR)).

Below are frequently asked questions regarding the Tier 1 24 Hour Public Notice for Lead ALEs, which may assist consumers with understanding why this is required, and why they may see a notice distributed by their PWS about some homes having high levels of lead.

### 1. Who is required to issue a Tier 1 24 Hour Public Notice (PN) for a lead Action Level Exceedance (ALE)?

Community PWS and Non-Transient Non-Community PWS are required to issue a Tier 1 24 Hour PN if they exceed the lead 90<sup>th</sup> percentile action level of 15 parts per billion (ppb).

**A Community (COM) Water System** is a PWS that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. Examples of a community water system include a municipality or town water system, such as a Town Public Works, Town Water Department or Division, and so on.

**A Non-transient Non-community (NTNC) Water System** is a PWS that is not a community water system and that has at least 15 service connections or regularly serves at least 25 of the same persons or more approximately four or more hours per day, four or more days per week, more than six months or 180 days per year, such as a workplace providing water to its employees. Examples of a NTNC system may include a school or business which have their own water source.

For the current list of all PWS including COM and NTNC systems see the [MassDEP Water Supplier Operations](https://www.mass.gov/water-supplier-operations) webpage, under the “Reporting and Public Notification” section, for the “PWS, Active Sources, and Contacts” spreadsheet. This spreadsheet is updated often to make sure the most accurate contact information is provided: <https://www.mass.gov/water-supplier-operations>.

### 2. Do PWS issue a Tier 1 (24-hour) Public Notice for a Copper ALE?

No, PWS are not required to distribute a 24-hour Public Notice if they exceed the Copper Action Level.

### 3. How does a PWS determine whether there is a lead ALE?

A PWS has a lead ALE if the 90<sup>th</sup> percentile calculation of lead, based on the total number of water samples collected during a monitoring period, is greater than 15 parts per billion (ppb) or 0.015 milligrams per liter (mg/L). The monitoring periods include:

- January 1 to June 30

- July 1 to December 31
- June 1 to September 30 (unless MassDEP has approved a different reduced four-month period).

#### **4. How does a PWS calculate the 90<sup>th</sup> percentile?**

- The PWS will take the drinking water samples they collected according to their MassDEP approved sampling plan and send them to a certified lab for analysis.
- After the system receive the sample results, they will organize the results from lowest to highest detection of lead and number the results accordingly, with the lowest lead sample value as #1.
- The system will then multiply the number of samples collected by 0.9, which will give them the number of the sample that represents the 90<sup>th</sup> percentile.
  - For example, if the system collects 30 samples,  $30 * 0.9 = 27$ , so the 27<sup>th</sup> highest sample result would represent the 90<sup>th</sup> percentile.
    - If that sample result is above the action level (0.015 milligrams per liter or 15 parts per billion) the system has exceeded the action level.
    - If that number is at or below the action level, the system has not exceeded the action level.
    - If a system is only required to collect 5 samples, such as for very small systems, they will calculate the 90<sup>th</sup> percentile value by taking the average of the highest and second highest lead sample results and will use that average to determine if there is a lead action level exceedance.

See the [Results of Lead Sampling For Public Water Systems](#) webpage for more information, and to see the latest 90<sup>th</sup> percentile result for your COM or NTNC PWS.

#### **5. If my PWS has issued a Tier 1 Public Notice for a lead ALE, does that mean my home has a lead service line or my drinking water has lead levels exceeding the action level?**

No, a Tier 1 Public Notice for a 90<sup>th</sup> percentile lead exceedance does not necessarily mean that your home has a lead service line, or high levels of lead in your drinking water.

COM and NTNC water systems are required to sample lead and copper at locations that may be particularly susceptible to high lead or copper concentrations. The Lead and Copper Rule (LCR) establishes a tiering system for prioritizing sampling sites, including sites served by service lines that are completely lead, or those with lead components.

A system wide 90<sup>th</sup> percentile lead level exceedance does not necessarily mean that your home will experience lead levels above the action level. What this means is that a portion of the samples taken by the PWS at homes/buildings that are susceptible to high lead or copper concentrations had lead samples exceeding the action level. Your home may not have a detectable level of lead, as the level of lead detected in your drinking water is typically elevated due to the materials that your service line and plumbing are made of. Lead is typically not present in the source of drinking water, like rivers or lakes, but instead enters the water supply through corrosion of lead-containing plumbing materials within a home's plumbing system. Particularly in older homes with lead pipes and solder; meaning the contamination happens after the water leaves the treatment plant and enters the household plumbing. See the following EPA infographic for more information on where you may find

lead in your home: <https://www.epa.gov/ground-water-and-drinking-water/infographic-lead-drinking-water>.

If you are unaware of your service line material, you can confirm the material of your service line by reaching out to your PWS and then if still a concern, look into testing your drinking water for lead, by taking a sample and having it analyzed by a Massachusetts certified laboratory. Sequential Sampling is the most comprehensive way to test if there is any lead in your plumbing or service line; see this infographic from EPA for more information on sequential sampling:

<https://www.epa.gov/sites/default/files/2020-12/documents/fifthliterinfographic-lcr-final.pdf>. A list of all MA certified laboratories is available on our webpage at: <https://www.mass.gov/how-to/find-a-certified-laboratory-for-water-testing>. However, you should reach out to your water system first, as some water systems may offer drinking water testing. See **Question 1** for a contact list for Massachusetts public water systems.

## **6. What are some recommended good drinking water tips to reduce lead exposure in my home?**

To routinely reduce or remove lead from tap water while working with their local public water system to address lead, galvanized requiring replacement (GRR), or unknown service lines, consumers are recommended to use some of the following good drinking water practices:

- Use only cold, fresh water for drinking, cooking, and preparing baby formula. Run your water. The more time water has been sitting in your home's pipes, the more lead it may contain.
- After water has been sitting overnight or longer, or sitting while away at work, flush your home's pipes before drinking by running the tap, taking a shower, doing laundry, or doing a load of dishes or other non-consumptive, non-drinking or cooking purposes, to avoid wasting water. For more information about flushing in buildings, see <https://www.mass.gov/doc/massdep-building-flushing-information/>.
- If you have a filter, use it properly. Using a filter can reduce lead in drinking water. If you use a filter, it should be certified to remove lead. Read any directions provided with the filter to learn how to properly install, maintain, and use your cartridge and when to replace it.
- Clean your aerator. Regularly remove and clean your faucet's screen (also known as an aerator). Sediment, debris, and lead particles can collect in your aerator. If lead particles are caught in the aerator, lead can get into your water.
- Do not boil the water to remove lead. Boiling water will not reduce lead. Excessive boiling can increase lead levels as lead remains behind when the water boils away.
- Contact your health care provider if you have any health-related questions or contact your local health department to find out if your child needs to be tested for lead. A blood lead level test is the only way to know if your child is being exposed to lead. For more information on Massachusetts' childhood lead testing program, contact the Department of Public Health at 1-800-532-9571 or see [www.mass.gov/orgs/childhoodlead-poisoning-prevention-program](http://www.mass.gov/orgs/childhoodlead-poisoning-prevention-program).

MassDEP has multiple good drinking water tips in our [What you Should Know about Lead in Drinking Water and Consumer Notices](#) Guidance document: <https://www.mass.gov/doc/what->

[you-should-know-about-lead-in-drinking-water-and-consumer-notices/download](#). More lead and copper resources and tips are available in the answer to **Question 18**.

**7. When are PWS first required to start distributing this Public Notice?**

COM and NTNC PWS are required to distribute Tier 1 24-Hour PNs as of October 16, 2024, if they exceed the lead 90<sup>th</sup> percentile action level.

**8. When does the PWS need to issue the Tier 1 Public Notice (PN)?**

Within 24 hours after the PWS learns of the lead ALE, but not later than the end of the monitoring reporting period (as per 310 CMR 22.15(2)) noted below:

- July 10<sup>th</sup> - for the January to June monitoring period,
- January 10<sup>th</sup> - for the July to December monitoring period, and
- October 10<sup>th</sup> - for the June to September four-month reduced monitoring period (unless MassDEP has approved a different four-month period).

**9. What does it mean “when the PWS learns of the exceedance”?**

A PWS learns of the exceedance when the system receives all lead sample results and calculates the 90<sup>th</sup> percentile. Systems have the ability to calculate their 90<sup>th</sup> percentile as soon as they receive the last sample result from their certified laboratory and are strongly encouraged to do so, in the interest of protecting public health and alerting consumers as soon as possible if there is an exceedance.

**10. What steps do the PWS need to take after they learn their system has a lead ALE?**

**Within 24 hours after the PWS learns of the lead ALE, the PWS must:**

- Consult with MassDEP as soon as practical to notify MassDEP of the ALE and to determine if there are any additional PN requirements (e.g., content, repeat notices, and/or posting).
- Issue the PN to customers within 24 hours after PWS learns of the lead ALE.
- Send a copy of Final Tier 1 PN to MassDEP/DWP and EPA, to notify both departments/agencies that the notice has been distributed.

**Within 14 days after the PWS learns of the lead ALE, a Community PWS must:**

- Publish the notice in their local newspaper as a one-day advertisement within 14 days of the exceedance.

**Within 10 days of finalizing all Tier 1 PN required activities:**

- PWS must submit a certification to MassDEP/DWP and local board of health that the PN meets all requirements. Certification must also be submitted for repeat notices if required.

**11. What must be included in the Tier 1 Public Notice?**

- What happened – the PWS exceeded the lead action level.
- When the lead ALE occurred.
- The mandatory LCRR health effects language: *Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and*

*attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.*

- While PWS are required to use the LCRR health effects language, MassDEP/DWP strongly encourages PWS to begin using the LCRI health effects language instead, as this is more stringent language which protects public health:

*There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.*

- Whether alternative water supplies should be used.
- What actions consumers should take.
- What you are doing to address the lead ALE.
- When you expect to resolve the lead ALE.
- Contact information for the PWS owner, operator, or designee.
- The following mandatory statement to share the notice: *Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

## **12. Is there a Tier 1 Public Notice template available for PWS use following a lead ALE?**

Yes. A MassDEP/DWP Template for the lead ALE Tier 1 Public Notice template is available for PWS use on the MassDEP Public Notification Forms and Templates webpage:

<https://www.mass.gov/lists/public-notification-forms-and-templates>

## **13. What are the forms of delivery a PWS can use to distribute the Tier 1 Public Notice?**

The Tier 1 PN must reasonably reach all people served by the system, including residential, transient, and non-transient customers. If the PN is printed or posted, it must be displayed in a prominent way. PWS must use one or more of the following forms of delivery:

- Radio
- Television
- Reverse 911
- Hand or direct delivery
- Posting in conspicuous locations
- Another delivery method approved in writing by MassDEP.

If a large proportion of the population the community served does not speak English, the PWS must provide a PN that either:

- Include information in the appropriate language(s) regarding the importance of the notice, or
- Provide a phone number or address where people may contact the PWS to obtain a translated copy of the PN or to request assistance in the appropriate language.

In addition to one (or more) of the above methods, Community systems must publish the Tier 1 public notice within their local newspaper as a one-day advertisement no later than 14 days after the exceedance. A copy must be submitted to MassDEP/DWP no later than the time published.

**14. Can a PWS use local cable access as its main method of sharing our Public Notice?**

No, PWS must use additional methods with local cable access, as a notice on the local cable access channel alone would not be expected to reach all consumers or do so in a timely manner. PWS should be using the same broadcast media outlets that would be used for public health orders (e.g. boil water notices). Other methods that would reach all customers may be proposed by the PWS for MassDEP's approval.

**15. If a PWS is a small community system, such as a condominium building/apartment building, does it need to post the notice in the town/local newspaper?**

Yes, the notice must be published in the local newspaper, but it does not need to be the city newspaper. Instead, if the building/PWS has a local newsletter, such as a mailing/emailing that goes out to all consumers, that may be used instead with MassDEP's approval.

**16. Are there additional notification requirements when the lead Action Level is exceeded (ALE)?**

In addition to the 24-hour Tier 1 Public Notice for a lead 90<sup>th</sup> percentile ALE, PWS must also fulfil the following notification requirements:

- Distribute consumer notices with their lead sample results to individuals whose homes are sampled for lead and copper, within 30 days of receipt of laboratory results.
- PWS must complete public education requirements within 60 days of the end of the monitoring period when the lead action level is exceeded, and

**17. Does a PWS have to have a drafted Public Notice Template ready?**

Yes, drafted 24-Hour Tier 1 Public Notification (PN) Templates are now required by MassDEP to be included in PWS Emergency and Response Plans (ERP). This is to ensure that all PWSs are ready to comply when/if a 24-Hour Tier 1 PN is required, since the system must distribute the Public Notice within 24 hours after learning of the exceedance of the Lead 90<sup>th</sup> percentile. PWS must also create a plan for distribution and include it in their Emergency Response Plan (ERP) to use should the PWS have a lead action level exceedance.

**18. Are there other MassDEP Resources to help consumers understand how to reduce their risk of exposure to lead, or more about the Lead and Copper Rules and Requirements?**

Yes, consumers are encouraged to review the resources below.

**a. Check out the MassDEP Lead in Drinking Water homepages for all lead resources:**

<https://www.mass.gov/lead-in-drinking-water>

**b. For questions specifically about LCRR requirements:**

- MassDEP Consumer's Frequently Asked Questions about the LCRR Service Line Inventory Webpage: <https://www.mass.gov/info-details/consumers-frequently-asked-questions-about-the-lcrr-service-line-inventory>

**c. To see more information about Service Line Inventories:**

- **Massachusetts Service Line Inventories Hub Site:** <https://lead-service-line-inventory-mass-eoeaa.hub.arcgis.com/>
- Service Line Inventory Summary Sheet: <https://www.mass.gov/doc/service-line-inventory-summary-data-march-2025/download>

**d. For more information about lead and reducing lead exposure, review the resources here:**

- **What you Should Know about Lead in Drinking Water and Consumer Notices:** <https://www.mass.gov/doc/what-you-should-know-about-lead-in-drinking-water-and-consumer-notices/download>
- **Is there lead in my tap water?:** <https://www.mass.gov/guides/is-there-lead-in-my-tap-water>
- If your home or facility service line is made of an **unknown material**, use this guide to understand how to inspect it:
  - i. EPA's Protect Your Tap Quick Check For Lead: <https://www.epa.gov/ground-water-and-drinking-water/protect-your-tap-quick-check-lead-0#>

For questions on this information contact the MassDEP Drinking Water Program at [program.director-dwp@mass.gov](mailto:program.director-dwp@mass.gov) or 617-292-5770