

Massachusetts Department of Environmental Protection (MassDEP) Bureau of Water Resources— Drinking Water Program

Mercury Questionnaire Results Summary (2007-2025)

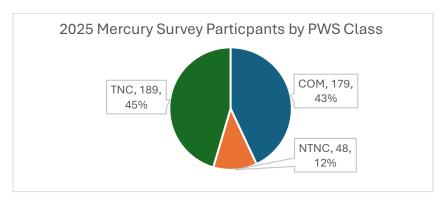
Survey Background

Since 2007, the MassDEP Drinking Water Program (DWP) has established a five-year recurrent mercury questionnaire survey to determine the extent of Public Water Systems (PWS) use of mercury-containing products and equipment. The Survey results help to develop tools to assist PWS as they work toward the reduction of mercury-containing products and equipment. The highest priority is to address concerns about potential mercury public water supply contamination with products and equipment that have direct contact with drinking water, or in locations where release could directly enter the water source.

For additional information on proper removal, and disposal of mercury-containing products and equipment, mercury-free replacement alternatives, mercury recyclers, clean up for mercury spills, and mercury spill kit vendors see the <u>Identification and Best Management Practices of Mercury-Containing Equipment at Public Drinking Water Systems Guidance.</u>

For 2025, the mercury questionnaire survey was sent out on Monday, November 3, 2025, with a submission deadline of December 1, 2025. 416 active PWS submitted the Mercury Survey by the provided deadline. Of the 416 systems, 179 (43%) are Community (COM) PWS, 189 (45%) are Transient Non-Community (TNC) PWS, and 48 (12%) are Non-Transient Non-Community (NTNC) PWS. Review the full Excel file of Mercury Survey Results from 2007 to 2025 here.

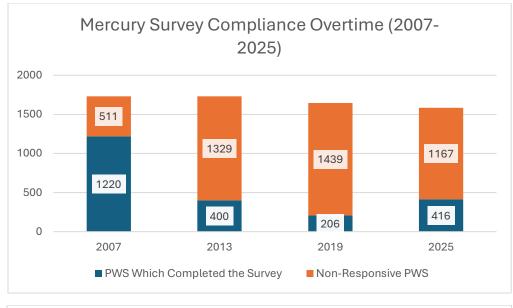
Disclaimer: This survey requested that PWS report the total number of equipment in the system which are known to contain mercury or is unknown if it contains mercury. The survey does not cover the percentage of equipment containing mercury in each system.

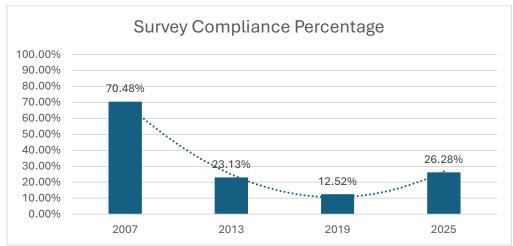


2007 - 2025 Survey Results Summary

Over time, there has been variability in the amount of PWS completing each survey. In the first survey effort of 2007, over 1000 PWS completed the survey. In the following survey efforts, responsiveness has varied from 260 to 416 PWS submissions by the provided deadline. The most recent survey effort in 2025 has the most responses since the original 2007 Mercury Survey effort.

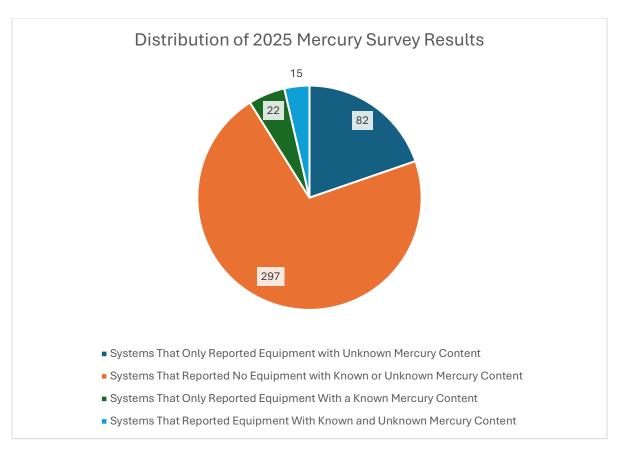
When comparing the total responsive PWS to the total amount of active PWS at the time of the survey, the percentage of PWS is similar, with 2025 having the most responsive PWS since 2007 at 26.28%.



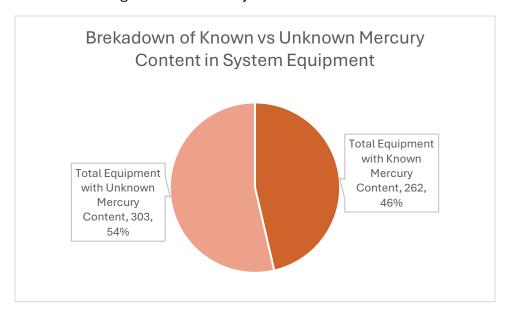


2025 Mercury Survey Results Summary

416 Systems of a total of 1,583 Active PWS (as of November 2025) submitted the Mercury Survey, with a response rate of 26.22%. When reviewing the results in depth, most systems report that they have no equipment containing mercury, and no equipment with unknown mercury content. This equates to 297 systems, or 71.4% of PWS which responded to the survey.

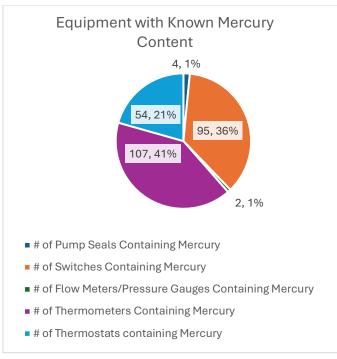


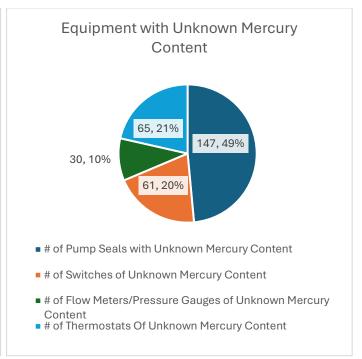
When reviewing systems with equipment which contains or may contain mercury, the results are similar, with 54% of the total equipment reported containing unknown mercury content, and 46% of the total equipment reported as containing a known mercury content.

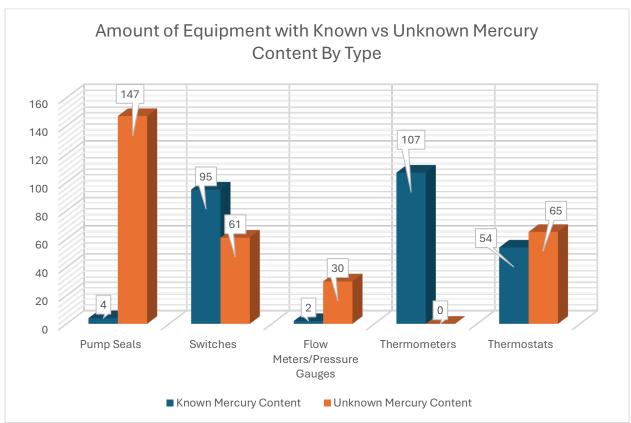


Of the equipment with known mercury content, the largest percentage (41%) of the equipment was thermometers. Following this were switches (36%) and thermostats (21%).

Equipment with unknown mercury content, on the other hand, has the largest percentage of the reported equipment being pump seals, at 49%. Thermometers are not shown on this graph, as there is no option in the survey to report thermometers with an unknown mercury content.



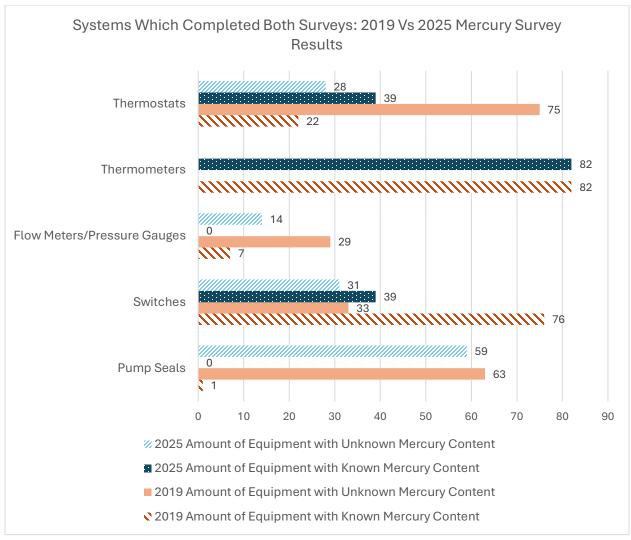


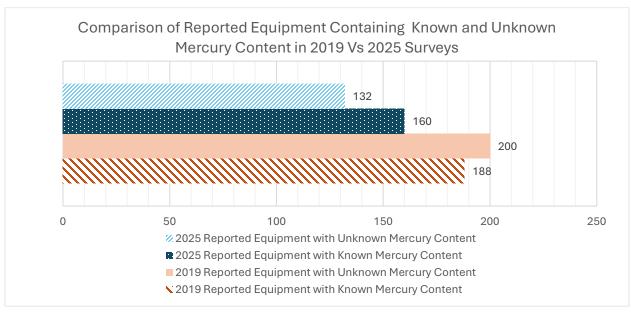


2019 Versus 2025 Survey Results

A total of 121 systems had completed both the 2019 and 2025 Mercury Survey. Below is a comparison of how much equipment these systems have which is known to contain mercury or may contain mercury. See the legend at the bottom of the graph for more information, 2025 results are listed in blue and 2019 results are included in orange.

Based on these results, the number of thermometers with a known mercury content has not changed over the past 6 years, however, the number of known switches containing mercury has decreased, and the number of thermostats of unknown mercury content has also decreased. There is a small difference in the number of pump seals with an unknown mercury content since the last survey, and flow meters/pressure gauges with either known or unknown mercury content have both decreased.





NEW Survey Section! Mercury Spill Awareness

Background Information

For the 2025 Mercury Survey, a new section was created to survey PWS about their Mercury Spill Awareness. This section covers topics such as: does the PWS screen for mercury in products, does the PWS have mercury spill kits, do you know who to contact if mercury is spilled or needs to be disposed of, and so on.

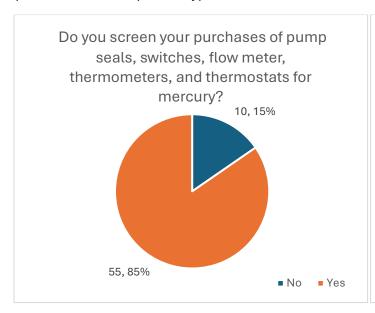
This section was only displayed if a PWS answered b or c to the question below. Due to this, 66 PWS that answered the online survey provided answers for this section.

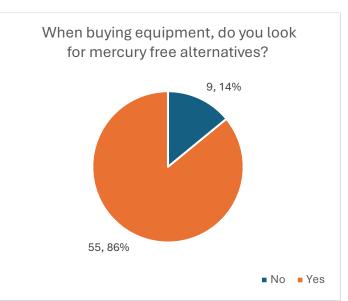
Based on the answers to the [previous] questions, does your PWS have any equipment or materials containing mercury, or have equipment of an unknown mercury content?

- a. My PWS does not have any other equipment or materials which contain mercury, all of our equipment is known to be mercury-free.
- b. My PWS is not certain if all equipment and materials are mercury free.
- c. My PWS does still use equipment and/or materials which contain mercury.

Results

The majority of PWS which answered this section state they screen their equipment purchases for mercury. These PWS, at a similar rate, look for mercury free alternatives to purchase whenever possible (85% and 86% respectively).





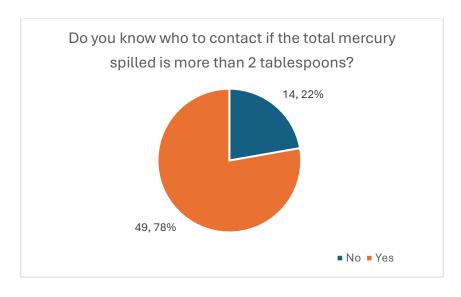
Answers regarding Mercury Spill kits varied by PWS. When asked if their Mercury Spill kit contains absorbent materials, protective gear and manipulation items, many PWS entered an answer of "N/A" (not applicable). This may be due to many of these PWS only having equipment where it is unknown if the equipment contains mercury and therefore have no equipment with a known mercury content.



When PWS do have Mercury disposal kits, the following businesses/brands were identified where these disposal kits are purchased:

- Veolia North America
- USA Bluebook
- ULINE Catalog
- PIG inc
- Green Environmental
- Grainger
- Fisher Scientific
- New Pig Corporation
- Amazon

The majority of PWS that answered this portion of the survey were aware of who to contact should there be a mercury spill greater than 2 tablespoons. According to EPA, the general public can clean up small mercury spills no greater than the amount contained in a thermometer if spilled on a flat surface. If you are cleaning up a mercury spill, use a mercury spill kit, following the provided instructions. If you do not have a mercury spill kit, follow the instructions provided in the Mercury Best Management Practices Guidance.



PWS stated that they have regularly disposed of the following types of mercury containing products:

- Button Cell Batteries
- Fluorescent Bulbs
- Switches
- Thermostats
- Reading Devices
- Thermometers
- UV Lamps/Compact Fluorescent Lighting/UV Light Bulbs

If you're unsure of how to dispose of mercury or who to contact for mercury spills refer to the Mercury Spill section starting on page 27 of the <u>Identification and Best Management Practices of Mercury-Containing Equipment at Public Drinking Water Systems Guidance</u> for more information.

Conclusion and Resources

The full Excel file of Mercury Survey Results from 2007 to 2025 which this report is analyzing has been posted online and is available for all to review. This Excel file will be hosted on the <u>Drinking Water</u>

Contaminants Information for Water Suppliers webpage under **Mercury**, along with other DWP specific mercury guidance and information. Should MassDEP/DWP determine that it is necessary, the next Mercury Survey will be released in **2030**.

For more information on Mercury, check out the <u>MassDEP Mercury Information webpage</u>. If you have any questions regarding the Mercury Survey or other Mercury questions, please reach out to <u>program.director-dwp@mass.gov</u>, subject: Mercury.