

# Grading the nation: State disclosure policies for lead pipes

How does your state measure up?

March 14, 2017 (Revised 3/1/18)



Lead service lines – the lead pipes connecting water mains under the street to homes and other buildings – are the main source of lead in contact with drinking water.<sup>1</sup> Homebuyers deserve to know about this liability when they choose a home and negotiate a price.<sup>2</sup> When done properly, removing the full lead service line (LSL) significantly reduces the risk of lead exposure.<sup>3,4</sup>

Environmental Defense Fund (EDF) analyzed and graded the housing disclosure policies of all U.S. states and the District of Columbia (D.C.) according to their ability to help homebuyers make informed decisions about LSLs before they sign a sales contract. We did not address the extent to which LSLs are actively being disclosed under each policy. Four states, Connecticut, Delaware, New York, and Pennsylvania scored an A-. Twenty states scored a D or F. The remaining 26 states and D.C. scored a B or C because they help buyers but are silent or ambiguous on lead pipes or disclosure of lead pipes is voluntary.

EDF sees significant opportunities for states to help protect homeowners from lead by improving their disclosure requirements. Water utilities can help this effort by informing all property owners if they are likely to have an LSL. Home

inspectors can also help by checking the service line as it comes into the home and letting the buyer know whether or not it is lead and recommending replacement.

## Introduction

When purchasing a home, buyers expect to be informed about deficiencies, defects, or environmental hazards on the property. Since 1996, they have been told about lead in paint. However, the likelihood that a buyer will be told their prospective home has lead pipes, including an LSL, depends on where they live.

## Lead in drinking water

LSLs are the largest potential source of lead in drinking water.<sup>5</sup> Other sources include lead solder and brass fixtures. An estimated 6-10 million homes across the U.S. have an LSL. Water utilities typically do not know how many LSLs are in the system or where they are located.

Many utilities address the problem of LSLs by treating the water to build a protective coating on the inside of the pipe to prevent the leaching of lead, a process known as corrosion control. However, corrosion control can fail when the line is disturbed, resulting in the release of unpredictable levels of lead into drinking water. The most effective way to deal with LSLs in the long-term is to locate and fully replace them using methods

### Why is reducing exposure to lead important?

A portion of any lead in the water we drink is absorbed into our blood. The science now makes clear there is no safe level of lead in the blood of children. The lead is likely to impair children's normal brain development, contribute to learning and behavioral problems, and lower IQs. Despite decades of progress in reducing children's exposure to lead, America continues to have a toxic legacy of lead. Approximately 500,000 children have elevated blood lead levels and poor and minority children remain at the greatest risk.

shown to protect residents. Housing disclosure policies can help create market incentives for removal.

**Property disclosures**

In the 1980s, many states began requiring sellers to proactively disclose to buyers information about known property defects. Requirements differ by state, and some states do not have disclosure requirements at all. Disclosure laws are intended to protect buyers from purchasing a property without full knowledge of potential defects. They also help protect sellers from legal liability.

While the only federal housing disclosure requirement for environmental hazards is for lead-based paint, many states have requirements or policies that would trigger disclosure for LSLs.<sup>6</sup> As noted earlier, this report does not analyze the extent to which policies are actively being used to provide buyers with such information.

The Lead Service Line Replacement Collaborative,<sup>7</sup> a diverse group of 25 organizations that aims to accelerate full LSL replacement, identified expanding federal, state, and voluntary disclosure policies to include LSLs as an opportunity to help consumers make informed decisions.<sup>8</sup>

EDF believes that buyers deserve to know about the presence of environmental hazards, including the presence of an LSL, on property they are considering buying. An informed buyer can decide how to value the property and take appropriate precautions. If the property has an LSL, the buyer can decide to add the cost of replacement to the mortgage, deduct the estimated cost from the sale price, demand replacement prior to purchase, or plan to replace it later. Over time, increased transparency can increase market incentives to replace LSLs.

**How did we grade the nation?**

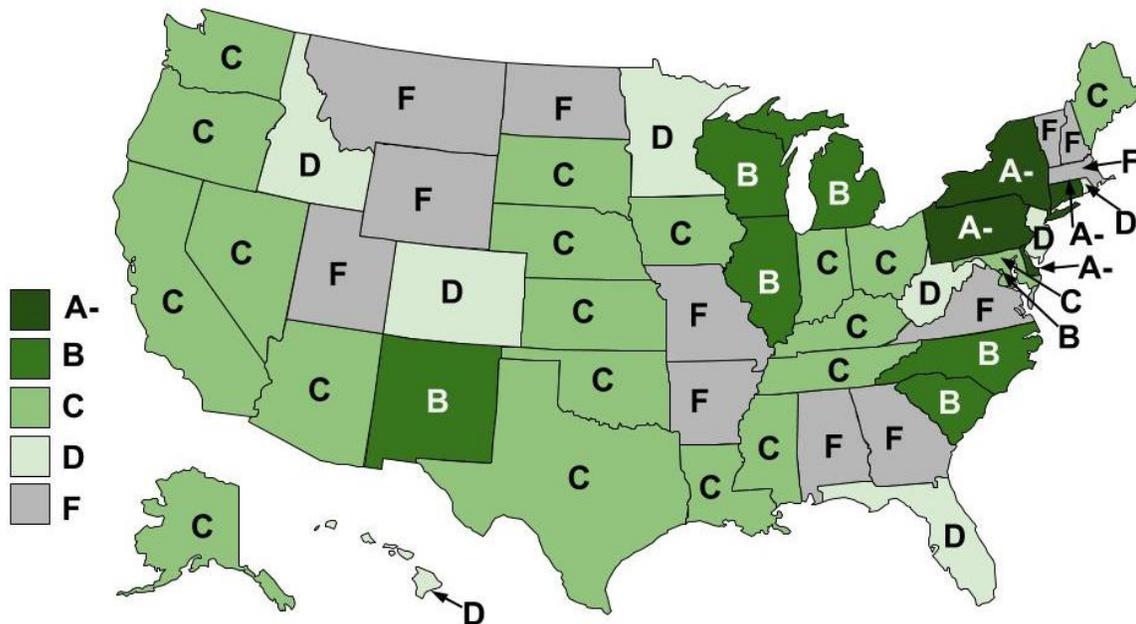
EDF graded the housing disclosure policies of all states and D.C. according to their ability to help homebuyers make informed decisions about LSLs before they sign a sales contract. We started our search using the database of legal articles at www.Nolo.com to identify state disclosure laws, required disclosure forms, and voluntary disclosure forms.<sup>9</sup> Where we could not identify a publicly available form on a state government website, we looked at the state realtor association website to give credit for voluntary programs not supported by the state. If we could not find a form, we followed-up with state realtor associations to access additional voluntary disclosure forms. Ultimately, if the form was only accessible to members, we did not give them credit (noted with ♦ in the table below).

We assessed the following aspects of the seller disclosure policies:

1. Does the state law require any disclosures of deficiencies, defects, or environmental hazards at sale?
2. Is there a required or voluntary form for disclosure?
3. Does a seller need to disclose knowledge of lead pipes or pipe material?
4. Does a seller need to disclose knowledge of environmental hazards generally?

Using the above questions, we defined the conditions for each letter grade. The highest grade we gave was an A- to reflect the fact that even the top performing states have room for improvement. States with mandatory disclosure specifically asking about lead pipes received an A-. All other states were compared to these top performers. We did not assess enforcement or confirm that disclosure of lead pipes is actually occurring in each state.

**Find out how your state measures up below.**



## What did we find?

Four states, Connecticut, Delaware, New York and Pennsylvania, scored an A- because they each have a state-required disclosure form that specifically asks if the home has lead plumbing.

Six states and D.C. received a B. Of these, three states and D.C. require disclosure of pipe material (lead not explicitly addressed), two states require disclosure of unsafe conditions or

Grade	Description	# States	States
<b>A-</b>	<b>Mandatory disclosure of lead pipes</b> <i>(Example: State-required form asks, "Is lead plumbing present? If yes, state location or locations.")</i>	4	<a href="#">Connecticut</a> <a href="#">Delaware</a> <a href="#">New York</a> <a href="#">Pennsylvania</a>
<b>B</b>	<b>Mandatory disclosure (M) of pipe material (lead not specifically addressed) or lead pipes if seller determines conditions unsafe</b> <i>(Example: State-required form asks, "Type of plumbing system: Copper/Galvanized/Plastic/Polybutylene./Unknown/ Other")</i>  <b>Voluntary disclosure (V) of lead pipes</b> <i>(Example: Voluntary form asks, "Type of water supply pipes: Lead/ Galvanized Copper/ Polybutylene/ Other/ Don't know")</i>	7	<a href="#">District of Columbia</a> (M) <a href="#">Illinois</a> (M)* <a href="#">Michigan</a> (M) <a href="#">New Mexico</a> (V)* <a href="#">North Carolina</a> (M) <a href="#">South Carolina</a> (M) <a href="#">Wisconsin</a> (M)*
<b>C</b>	<b>Mandatory disclosure (M) of general environmental hazards</b> <i>(Example: State required form asks, "Have there been or are there any hazardous conditions on the property, such as methane gas, lead paint, radon...")</i>  <b>Voluntary disclosure (V) of pipe material (lead not specifically addressed)</b> <i>(Example: Voluntary form asks, "Are you aware of the type of water pipes, such as galvanized, copper, PVC, CPVC, or polybutylene?")</i>	20	<a href="#">Alaska</a> (M) <a href="#">Arizona</a> (V) <a href="#">California</a> (M) <a href="#">Indiana</a> (M) <a href="#">Iowa</a> (M) <a href="#">Kansas</a> (M) <a href="#">Kentucky</a> (M) <a href="#">Louisiana</a> (M) <a href="#">Maine</a> (M) <a href="#">Maryland</a> (M) <a href="#">Mississippi</a> (M) <a href="#">Nebraska</a> (M) <a href="#">Nevada</a> (M) <a href="#">Ohio</a> (M) <a href="#">Oklahoma</a> (M) <a href="#">Oregon</a> (M) <a href="#">South Dakota</a> (M) <a href="#">Tennessee</a> (M) <a href="#">Texas</a> (M) <a href="#">Washington</a> (M)
<b>D</b>	<b>Mandatory disclosure (M) of defects and deficiencies but not specifically environmental hazards</b>  <b>Voluntary disclosure (V) of general environmental hazards</b> <i>(Example: Voluntary form asks, "Have there ever been substances, materials, or products which may be an environmental hazard...")</i>	8	<a href="#">Colorado</a> (V) <a href="#">Florida</a> (M)♦ <a href="#">Hawaii</a> (M)♦ <a href="#">Idaho</a> (M)♦ <a href="#">Minnesota</a> (V)(M) <a href="#">New Jersey</a> (V) <a href="#">Rhode Island</a> (M)♦ <a href="#">West Virginia</a> (V)
<b>F</b>	<b>Limited or no disclosure requirements</b> <i>(Example: Disclosure only required if seller "knows the home may pose a health or safety risk to the buyer...")</i>	12	Alabama Arkansas♦ Georgia♦ New Hampshire♦ North Dakota Massachusetts♦ Missouri♦ Montana♦ Utah♦ Vermont♦ Virginia Wyoming♦

\* Disclosure if unsafe concentrations or unsafe conditions related to lead in water pipes

♦ State also has less detailed mandatory requirements

♦ Voluntary state realtor association disclosure form does address lead pipes or environmental hazards generally, but is not made public by the association

unsafe concentrations related to lead in water pipes, and the remaining state has a voluntary disclosure form that specifically asks about lead pipes.

**New York: A-** (*mandatory disclosure of lead pipes*)

**Mandatory form asks, “Is lead plumbing present? If yes, state location or locations below.”**

**New Mexico: B** (*voluntary disclosure of lead pipes*)

**Voluntary form asks, “Water pipes are: Lead/ Galvanized/ Copper/ Polybutylene/ Other/ Don’t Know.”**

Twenty states scored a C because they require disclosure of environmental hazards generally but do not address lead pipes specifically. One state, Arizona, scored a C because the voluntary disclosure used by realtors requires identification of pipe material.

**California: C** (*Mandatory disclosure of env. hazards*)

**Mandatory form asks, “Are you...aware...of any of the following substances, materials, or products which may be an environmental hazards such as, but not limited to, asbestos, formaldehyde, radon gas, lead-based paint, fuel or chemical storage tanks, and contaminated soil or water on the subject property?”**

Eight states scored a D because they have mandatory disclosure requirements that do not broadly address environmental hazards and/or they have a voluntary disclosure form that asks about environmental hazards generally.

**Colorado: D** (*Voluntary disclosure of env. hazards*)

**Voluntary form asks if there are/is, “Hazardous materials on the Property, such as radioactive, toxic, or biohazardous materials, asbestos, pesticides, herbicides, wastewater sludge, radon, methane, mill tailings, solvents, or petroleum products?”**

Twelve states failed because they lack or have extremely limited disclosure requirements.

**North Dakota: F** (*Limited disclosure requirements*)

**Buyer Beware: The responsibility is on the buyer to investigate hazards.**

Thirteen states have voluntary disclosure forms developed by the real estate association that are available only to member licensed agents or available for purchase (noted with ♦). If these associations were to make their forms publicly available, it would have the potential to benefit more people in these states. For example, Missouri, Rhode Island, and Vermont appear to have

voluntary real estate association forms not made public by the associations that specifically address lead pipes or lead in water.

**Variation and limitations of state requirements**

We found a remarkable amount of variance in state disclosure laws regarding LSLs – from states that require sellers to fill out detailed, 10+ page disclosure forms to “buyer beware” states, where the responsibility is on the buyer, not the owner, to investigate hazards.

A buyer’s likelihood of being informed of whether a home has an LSL before signing a sales contract depends entirely on the state. However, it is important to note that there are limitations to the effectiveness of disclosure even in those states where it is required by law. A seller only needs to disclose information they know, and sellers are usually given the option to select “unknown” on forms. States generally do not require the seller to examine the property for hazards, and a real estate agent may discourage a seller from performing testing to avoid disclosing negative information to buyers. Presumably, if a utility notifies a property owner that there is an LSL or makes maps of LSL locations available online, it should result in a more effective disclosure.

None of the state laws specifically address LSLs, but rather “lead pipes” or “lead plumbing.” A seller may interpret this language as referring only to a house’s internal plumbing, as opposed to the service line connecting the water main in the street to the house. While EDF believes the language in these laws is broad enough to create a framework for LSL disclosure, actual practice may differ.

The timing of providing disclosures to buyers is critical. Unfortunately, state laws often do not prescribe timing beyond requiring delivery of a disclosure statement *before* the purchase agreement is fully executed. Ideally, the presence of an LSL would be disclosed as early in the process as possible, including on any online listing of the property and on-site during open houses.



## Conclusions

### States should require disclosure of lead pipes and LSLs

States have significant opportunities to more effectively inform and protect buyers by integrating lead pipe disclosure into state disclosure requirements and policies. Connecticut, Delaware, and New York are useful examples, which each earned an A- by requiring sellers to specifically inform a buyer if the property has lead pipes. However, all states can do better, including those earning an A-. Those seven locations (six states and D.C.) that earned a B by requiring identification of pipe material could improve by specifically listing lead as a potential material. Over 20 states scored a C because they only call for identification of environmental hazards broadly; they could improve by calling out one specific hazard: lead pipes, including LSLs. State laws and policies could generally be improved by specifically requiring disclosure of LSLs – in addition to lead pipes or plumbing.

In states that do not already require housing disclosure, a change of statute, rule, or common law would be necessary to ensure improved transparency. Short of changing state law, however, the state or real estate association could update the forms that realtors use voluntarily.

### Buyers and sellers can seek information through inspections

Buyers and sellers can be proactive by hiring an inspector certified by the American Society of Home Inspectors (ASHI) to identify the pipe material. The ASHI Standard of Practice for Home Inspectors requires inspection and description of the pipe material of the interior water supply and distribution system.<sup>10</sup> It is our understanding from ASHI that this includes any lead pipe visible from within the building. Buyers can also check for information from previous property inspections.

### Water utilities can help increase transparency

Water utilities can proactively inform property owners if they are likely to have an LSL and create a responsibility for the property owner to disclose what is known about the service line when they sell their home. The utility could directly notify the property owner, through a letter, or indirectly through online mapping tools that disclose what is known and unknown about LSLs in the service area. Several cities, including D.C.,<sup>11</sup> Cincinnati,<sup>12</sup> Boston,<sup>13</sup> Tacoma,<sup>14</sup> and others, have taken steps to increase transparency by creating online maps and search tools for the public. Utilities could go a step further by recommending that property owners disclose if their property has an LSL to tenants or at sale.

**Our findings support the need for greater transparency in real estate transactions regarding LSLs. All buyers deserve to know whether their potential home has safe drinking water.**

## Appendix: State disclosure requirements

The citations below indicate the reference for the disclosure requirements.

**Alaska:** [Alaska Statutes 34.70 et seq.](#)

**California:** [California Civil Code Section 1102](#)

**Connecticut:** [Connecticut General Statute § 20-327b](#)

**Delaware:** [Delaware Code Chapter 25, Title 6](#)

**District of Columbia:** [District of Columbia Municipal Regulations Title 17, Section 2708.13](#)

**Florida:** [Johnson v. Davis, 480 So.2d 625 \(Florida 1985\)](#)

**Hawaii:** [Hawaii Statute 508D](#)

**Idaho:** [Idaho Statutes 55-2501, et seq.](#)

**Illinois:** [765 Illinois Compiled Statutes § 77/35](#)

**Indiana:** [Indiana Code §32-21-5-2](#)

**Iowa:** [Iowa Code § 558A](#)

**Kansas:** [Kansas Statute Annotated 58-30.106](#)

**Kentucky:** [Kentucky Revised Statutes §324.360](#)

**Louisiana:** [Louisiana Revised Statutes §9:3198](#)

**Maine:** [Maine Revised Statutes Title 33, §173](#)

**Maryland:** [Maryland Code Annotated, Real Property § 10-702](#)

**Michigan:** [Michigan Compiled Laws Annotated § 565.951](#)

**Minnesota:** [Minnesota Statutes § 513.55 et seq.](#)

**Mississippi:** [Mississippi State Code § 89-1-501 et seq.](#)

**Nebraska:** [Nebraska Revised Statutes § 76-2.120](#)

**Nevada:** [Nevada Revised Statutes 113.130](#)

**New Mexico:** [New Mexico Statutes § 47-13 et seq.](#)

**New York:** [New York Real Property Law §§ 460-467](#)

**North Carolina:** [North Carolina G.S. 47E](#)

**Ohio:** [Ohio Revised Code 5302.30](#)

**Oklahoma:** [60 Oklahoma Statutes § 833](#)

**Oregon:** [Oregon Revised Statutes 105.465\(2\)](#)

**Pennsylvania:** [Pennsylvania Code § 35.284a and 35.335a](#)

**Rhode Island:** [Rhode Island Code § 5-20.8-2](#)

**South Carolina:** [South Carolina Code § 27-50-10 et seq.](#)

**South Dakota:** [South Dakota Statutes § 43-4-37 et seq.](#)

**Tennessee:** [Tennessee Code Annotated § 66-5-201 et seq.](#)

**Texas:** [Texas Property Code Section § 5.008](#)

**Washington:** [Washington Code § 64.06 et seq.](#)

**Wisconsin:** [Wisconsin Statutes Chapter 709](#)

## Authors and contacts

Lindsay McCormick, *Chemicals and Health Project Manager*  
Samantha Lovell, *Health Project Specialist*  
Thomas Neltner, *Chemicals Policy Director*

Contact Lindsay McCormick at [lmccormick@edf.org](mailto:lmccormick@edf.org) for more information

## Endnotes

<sup>1</sup> “Lead pipes: A threat to kids across America.” Environmental Defense Fund. Web <https://www.edf.org/health/lead-pipes-threat-kids-across-america>.

<sup>2</sup> “People deserve to know if lead pipes and paint are present where they live and work.” Environmental Defense Fund. 20 August 2016. Web. <http://blogs.edf.org/health/2016/08/20/lead-disclosure-live-work-play/>.

<sup>3</sup> “Lead pipes must be replaced as soon as possible to protect children.” Environmental Defense Fund, 16 March 2016. Web. <http://blogs.edf.org/health/2016/03/16/lead-service-lines/>.

<sup>4</sup> “Lead Service Line Replacement Collaborative.” Lead Service Line Replacement Collaborative. Web. <http://www.lslr-collaborative.org/>.

<sup>5</sup> “Lead in Drinking Water: What You Should Know.” National Drinking Water Alliance. Web. <http://www.drinkingwateralliance.org/lead>.

<sup>6</sup> “Lead hazard disclosure: Time to better inform homebuyer and renters.” Environmental Defense Fund. 14 April 2016. Web. <http://blogs.edf.org/health/2016/04/14/lead-hazard-disclosure/>.

<sup>7</sup> The Lead Service Line Replacement Collaborative is a group of organizations that aims to accelerate full LSL replacement. EDF is a Steering Committee Member.

<sup>8</sup> “Helping consumers make informed decisions.” Lead Service Line Replacement Collaborative. Web. <http://www.lslr-collaborative.org/helping-consumers.html>.

<sup>9</sup> “State by state disclosure requirements.” Nolo. Web. <http://www.nolo.com/legal-encyclopedia/state-state-seller-disclosure-requirements>.

<sup>10</sup> “The Standard of Practice for Home Inspectors and the Code of Ethics for the Home Inspection Profession.” American Society of Home Inspectors. Web. [https://www.homeinspector.org/files/docs/standards\\_updated3-4-2015.pdf](https://www.homeinspector.org/files/docs/standards_updated3-4-2015.pdf).

<sup>11</sup> “DC Water – Water Service Information.” DC Water. Web. <https://geo.dcwater.com/Lead/>.

<sup>12</sup> “Greater Cincinnati Water Works Service Line Information.” Greater Cincinnati Water Works. Web. <https://gcww.maps.arcgis.com/apps/webappviewer/index.html?id=0a170c268c694e46a8a4e394630df0bd>.

<sup>13</sup> “Lead Service Map.” Boston Water and Sewer Commission. Web. [http://www.bwsc.org/community/lead/leadmaps.asp#TOP\\_PAGE](http://www.bwsc.org/community/lead/leadmaps.asp#TOP_PAGE).

<sup>14</sup> “Possible Gooseneck Locations.” Tacoma Public Utilities. Web. <https://www.mytpu.org/tacomawater/water-quality/new-information-on/possible-gooseneck-locations.htm>.