Environmental Health

GOAL

Promote health for all through a healthy environment.

Overview

Exposure to hazardous agents in our air, water, soil, and food, and to physical hazards in the environment are major contributors to illness, disability, and death worldwide, causing an estimated 25% of all preventable ill health in the world. Outdoor air pollution alone is associated with an estimated 50,000 deaths annually nationwide. Maintaining safe drinking water in public drinking water systems also poses challenges since many of the known contaminants include difficult-to-detect protozoa and chemicals. Bacterial contamination continues to be the most frequently detected contaminant in both public and private drinking water. With over half (56%) of Maine residents drinking from private wells, we face challenges in assuring both public and private water sources are safe.

Although we are usually exposed to outdoor air pollution and drinking water from sources outside our immediate surroundings, most of our exposure to environmental health hazards will occur within our home or place of work or school. For instance, indoor air quality is an increasing concern in places with inadequate heating, cooling, and ventilation systems, in places where tobacco smoke is allowed, where radon is common, and where structural defects cause moisture buildup with resulting mold and other contaminants. Exposures to lead, mercury in fish, and pesticides are most likely to occur in people's homes or yards. Strategies to reduce these exposures often depend on communicating risk to the public and motivating them to test, mitigate, or otherwise reduce their risk.

PRIMARY
SECONDARY
TERTIARY

Strategies

- **Reduce non-point source pollutants** such as automobile exhaust, backyard trash burning, wood smoke, and tobacco smoke.
- **Minimize reliance on pesticides and reduce pesticide exposure.**
- **Reduce exposure to groundwater pollutants** arising from petroleum-related spills.
- **Reduce mercury emissions** locally, regionally, and nationally.
- **Reduce lead exposure,** especially to children, pregnant women, and workers.
- **Promote healthy fish eating,** especially in those at risk for the most harmful effects from mercury exposure – pregnant women, children, and people who eat a lot of fish (Native Americans, for example).
- **Evaluate and mitigate at-risk buildings,** such as office buildings, schools, and residences for indoor air quality problems.
- **Test and mitigate homes** (air and private well water) for radon.
- **Test and mitigate private well water** for contaminants such as bacteria, arsenic, uranium, radon, and manganese.
- **Screen children and high-risk adults** (such as construction workers and bridge painters) for lead exposure.
- **Treat those who have been exposed** to environmental toxins – lead poisoning, for example.

Health Disparities

(Populations at risk for experiencing environmental health problems, based on national data in *Healthy People 2010*)

- **Pregnant women and young children** (Unborn and young children are more susceptible to the effects of mercury, lead, and other chemicals such as dioxins and PCBs.)
- **People living in Southern Maine and along much of Maine's coast** (higher risk for ground-level ozone exposure during the summer)
- **People living in rental housing** (higher risk for lead exposure, indoor air quality problems, and pesticide exposure)
- **People drinking from a private well** (higher risk for exposure to toxicants such as arsenic, radon, and uranium from drinking water)
- **Agriculture workers** (higher risk for pesticide exposure)
- **Construction workers** who work with older buildings and homes (higher risk for lead exposure)
- **Native Americans, some immigrants, subsistence fishermen, and their family members** (more likely to consume large quantities of freshwater fish, and; therefore, be exposed to excess mercury)
- **Low Socioeconomic Status** (People living with low income or educational attainment are more likely to be exposed to environmental toxicants such as lead and pesticides, or live near hazardous sites.)

Objectives

Objective numbers are *Healthy People 2010* objective numbers.

- **(Developmental) Develop plans and components of a standards-based, coordinated, integrated Environmental Public Health Tracking system that allows linkage and reporting of health effects data with human exposure data and environmental hazard data.**
- **8–26 (Developmental) Improve the quality, utility, awareness, and use of existing information systems for environmental health.**

  Public health practitioners in Maine have long recognized that there is a significant gap in the State's ability to track diseases triggered or exacerbated by environmental causes. Further, although data is available on air pollution, water contamination, and other sources of risk, there is currently no way to link this data to health effects. The Bureau of Health received notice of an award in September 2002, of an environmental health tracking grant from the Centers for Disease Control and Prevention. This grant should help the Bureau and its partners achieve these two developmental objectives.

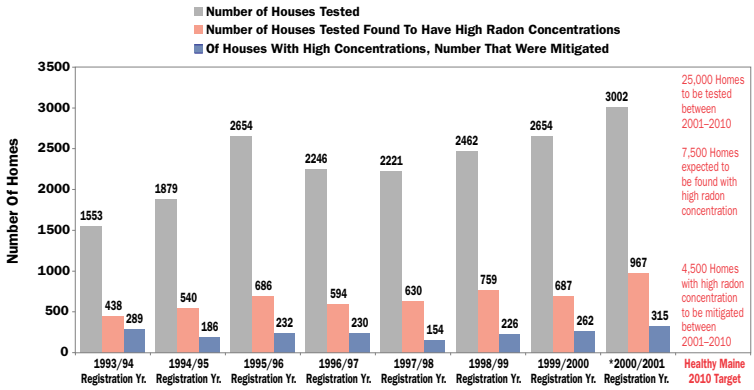
AIR AND WATER QUALITY

Indoor Air Quality – Radon

- **8–18 Increase the proportion of persons whose homes and workplaces are tested for radon concentrations.**

8–18a Increase the number of Maine homes tested for radon.

Healthy Maine 2010 Baseline: 18,671 homes tested since 1993
Healthy Maine 2010 Target: 43,671 total homes tested (25,000 additional homes)



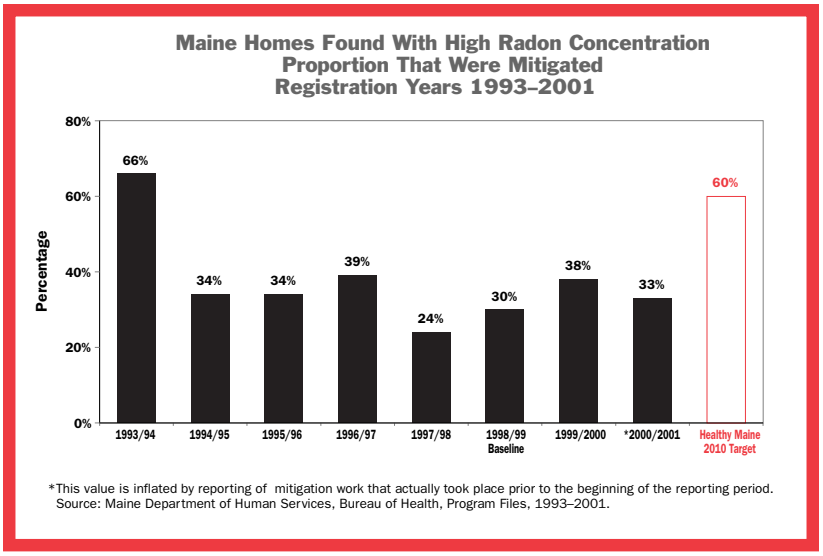
*This value is inflated by reporting of mitigation work that actually took place prior to the beginning of the reporting period.
Source: Maine Department of Human Services, Bureau of Health, Program Files, 1993–2001.

Note: Registration Year is from October to September. Due to reporting procedures, the actual number of homes tested and number of houses with elevated levels (meaning having radon concentrations equal to or greater than 4pCi/l) are approximations based on the number of test kit analysis reports received by the Bureau of Health as required under the Maine Radon Registration Act.

Although poor indoor air quality due to molds and poor ventilation poses major challenges in our office buildings, schools, and residences, there are few mechanisms for tracking many of these issues. We do have some ability to measure one critical indoor air contaminant – radon.

A naturally occurring radioactive gas, radon is found worldwide in varying concentrations in soil and water. Exposure over a long period of time is associated with an increased risk for lung cancer, particularly compounded if there is exposure to tobacco smoke. Radon causes an estimated 163 lung cancer cases each year in Maine.

Found commonly in indoor air and drinking water, Maine's radon concentrations are higher than much of the country. An estimated one in three Maine homes has air radon concentrations higher than the US Environmental Protection Agency's action level. In some areas, such as the Sebago Lake area, as many as two-thirds of homes tested have high levels. In addition, an estimated one-sixth of Maine wells have radon concentrations higher than the recommended amount.



*This value is inflated by reporting of mitigation work that actually took place prior to the beginning of the reporting period.
Source: Maine Department of Human Services, Bureau of Health, Program Files, 1993–2001.

8–18b Of Maine homes tested for radon, increase the proportion mitigated.

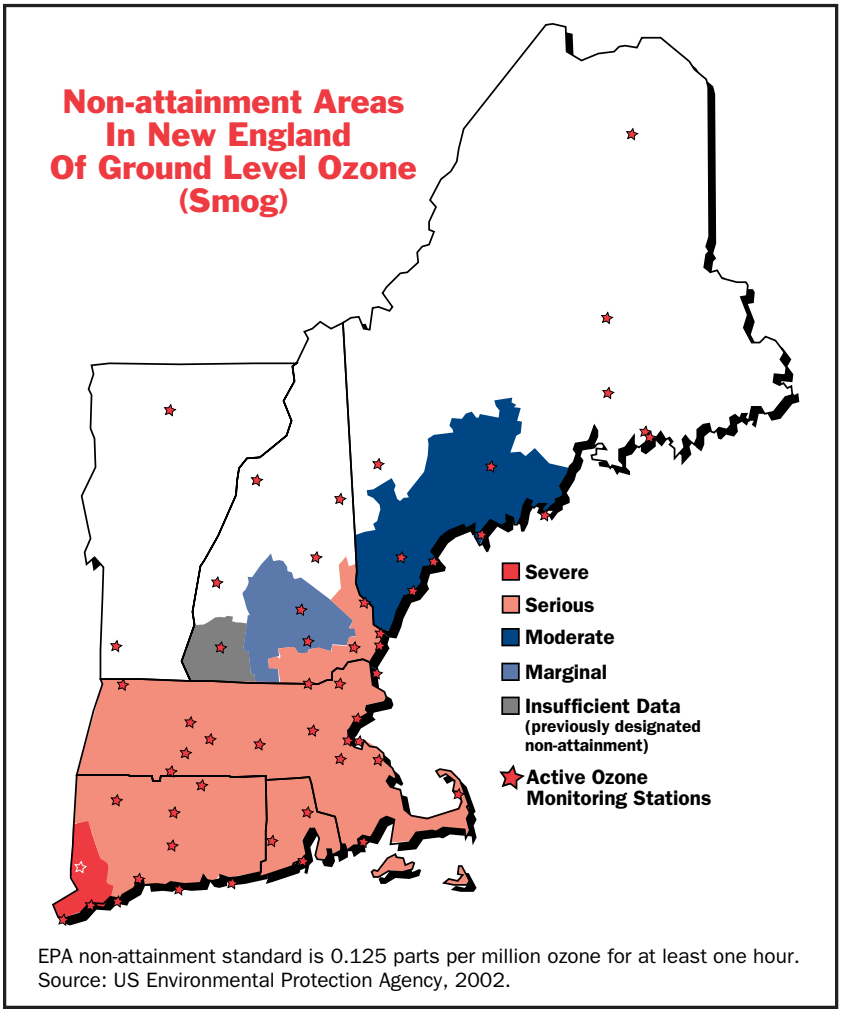
Healthy Maine 2010 Baseline: 30%
Healthy Maine 2010 Target: 60%

Currently the only reporting system for radon is the reporting required under the Maine Radon Registration Act, which went into effect in 1993. The resulting statute requires reporting of radon test results and radon mitigation work by zip code. The current reporting information does not indicate if a house is being tested after a mitigation system is installed, and does not indicate if a house is being tested multiple times. This means that only an approximation can be made when determining the number of homes tested and the number of homes with elevated radon concentrations. Through rule changes, the reporting requirements are planned to be modified in an effort to better determine the number of homes found each year that have elevated radon levels, and to better determine what percentage of homes with elevated radon levels are actually getting mitigated each year.

Radon Concentrations in Maine Public Schools: A radon-testing project conducted from 1988 to 1991 by the Bureau of General Services (then called Bureau of Public Improvements) found that 208 (32%) of the 653 publicly funded Maine school buildings had elevated radon concentrations (elevated means greater than or equal to 4pCi/l). Since then, approximately 20 have completed radon mitigation work. Another five were closed for various other indoor air or structural concerns.

Outdoor Air Quality

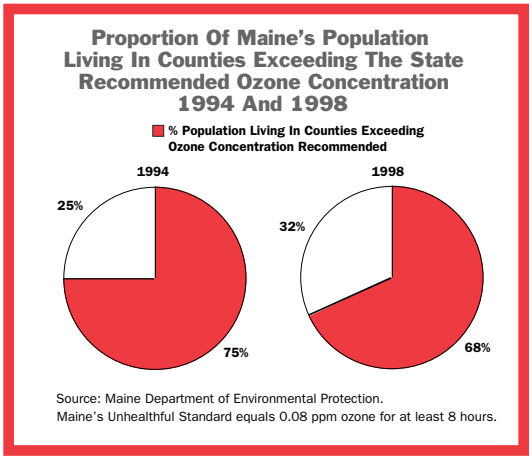
- **8–1 Reduce the proportion of persons exposed to air that does not meet the US Environmental Protection Agency's (EPA's) health-based standards for harmful air pollutants.**



EPA non-attainment standard is 0.125 parts per million ozone for at least one hour.
Source: US Environmental Protection Agency, 2002.

8–1a Eliminate the proportion of Maine people living in counties exceeding the state recommended ozone concentration.

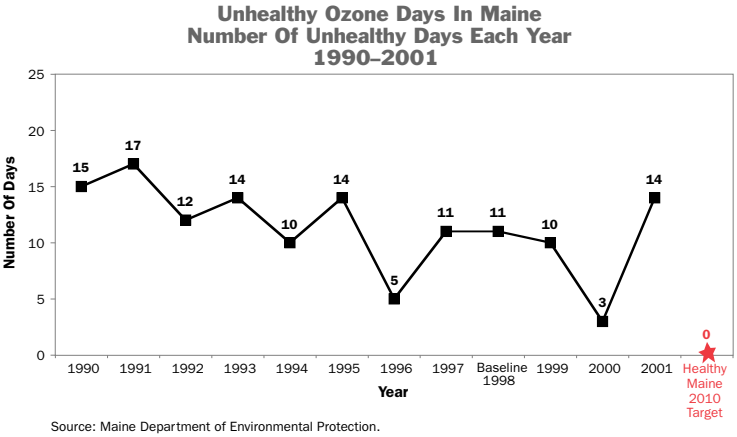
Healthy Maine 2010 Baseline: 68%
Healthy Maine 2010 Target: 0%



Source: Maine Department of Environmental Protection.
Maine's Unhealthful Standard equals 0.08 ppm ozone for at least 8 hours.

8–1b Eliminate the reported number of unhealthy ozone days (based on Maine's standard of 0.08 parts per million ozone for at least 8 hours).

Healthy Maine 2010 Baseline: 11 days
Healthy Maine 2010 Target: 0 days



Source: Maine Department of Environmental Protection.
Maine's Unhealthful Standard = 0.08 parts per million of ozone for at least 8 hours.

Although there are numerous pollutants and issues pertaining to outdoor air quality, two that pose particular challenges in Maine are ozone and backyard trash burning.

Ozone is an odorless, colorless gas composed of three atoms of oxygen. Occurring naturally in the upper atmosphere, it forms a protective layer that shields us from the sun's ultraviolet rays. It also occurs near ground level when pollutants from cars, power plants, and refineries react chemically in sunlight, forming ozone. Ground-level ozone is found in Maine primarily during hot summer days and causes irritation to people's respiratory systems, especially to children and people with chronic lung disease such as asthma.

The number of unhealthy ozone days in a given year is due to a combination of factors, including the levels of pollution in Maine as well as weather factors such as heat waves. Cooler and wetter summers such as seen in 1996 and 2000 often result in lower number of unhealthy ozone days. Pollution causing Maine's ozone levels to be high comes both from within Maine, especially from vehicle use, as well as from pollution sources in other parts of the country, particularly states to the south and southwest of us, carried on the prevailing summer winds.

When trash is burned in someone's backyard, it is common for a number of harmful toxins to be released into the air. Unlike municipal incinerators, backyard burns are at much lower and inefficient temperatures, resulting in the formation of toxic products of incomplete combustion. Today's trash commonly contains polyvinylchlorides (PVCs) and other similar plastics that produce dangerous levels of hydrogen chloride when burned. Polystyrene (used in making foam cups and food containers), polyurethanes (used in wood finishes and adhesives), bleached paper products, slick colored papers, and pressure-treated wood are all commonly found in today's trash and can result in exposure to harmful toxins when burned. Backyard burning of trash that contains harmful substances such as these mentioned was banned by the 120th Maine Legislature in 2001.

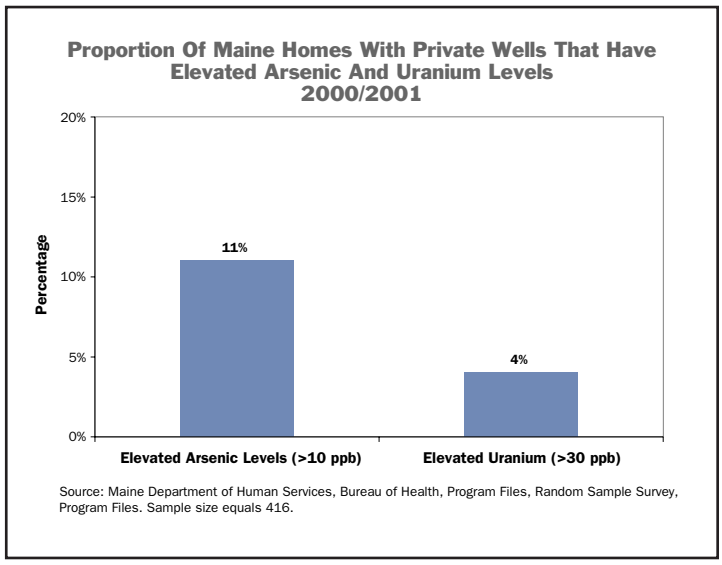
Drinking Water Quality

- **8–25 (Developmental) Increase the proportion of Maine homes with private wells that have been tested for arsenic and other naturally occurring substances of concern, such as uranium and radon.**

  Plans are being developed for measuring the baseline for this objective.

Arsenic Testing:
Healthy Maine 2010 Target: 75% of Maine Homes with private wells will be tested for Arsenic

Uranium Testing:
Healthy Maine 2010 Target: 75% of Maine Homes with private wells will be tested for Uranium



Source: Maine Department of Human Services, Bureau of Health, Program Files, Random Sample Survey, Program Files. Sample size equals 416.

About half of Maine households (56%, 2001 BRFSS) rely on domestic wells as their source of drinking water. While public water supplies are regulated and must perform required testing and remediation of water quality, very little testing is required of our domestic wells. Often water testing only occurs at a required time, such as when a domestic well is drilled or during a home transaction involving a bank loan. Additionally, the scope of these required tests is very limited, mostly focused on tests for bacteria.

Naturally occurring substance such as arsenic, uranium, and radon are routinely found in domestic well water, sometimes at levels posing significant health risks if actions to mitigate exposure are not taken. All three of these chemicals pose cancer risks when exposure is long-term. With arsenic, the primary concern is with skin, bladder, and lung cancer. Recent studies indicate that arsenic in drinking water may also have adverse effects on pregnancy outcomes, such as miscarriages, stillbirths, and pre-term births. Arsenic is an element commonly found in soil and rocks in Maine. Additionally, pesticides containing arsenic were commonly used in farming (blueberry, apple, potato) until about 1960.

With radon, the primary concern is lung cancer through the contribution radon in water adds to indoor air radon levels. Though high levels of uranium may pose a radiological cancer risk, the primary concern with more typical levels is chemical toxicity to the kidneys.

Currently available statistics from a 2001 random sample of about 400 private wells indicate that about 11% of Maine's domestic wells have arsenic levels above the current health benchmarks (10 ppb), yet preliminary data indicate that only about 50% of Maine people with a private well have tested their drinking water for arsenic. (The 10 ppb health benchmark is used by the Bureau of Health, the World Health Organization, and the European Union; the US Environmental Protection Agency has also adopted a level of 10 ppb, to be effective in 2006 – their current standard is 50 ppb.)

This same study also shows that about 4% of Maine's domestic wells have uranium levels above the new Federal standard of 30 ppb. Data for radon in water, while not a random design, indicate that perhaps as many as 20% of domestic wells have radon levels capable of causing a significant increase in indoor air radon levels.

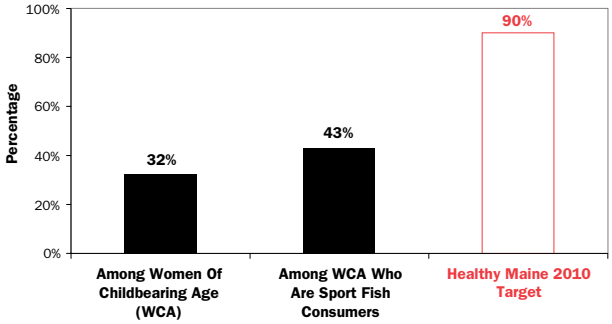
MERCURY FISH CONSUMPTION

- **8–25 Reduce mercury exposure among young children and fetuses.**

8–25a Increase the proportion of Maine women of childbearing age who are aware of the Bureau of Health's "Safe Eating Guidelines" for fish intended to reduce exposure to methylmercury.

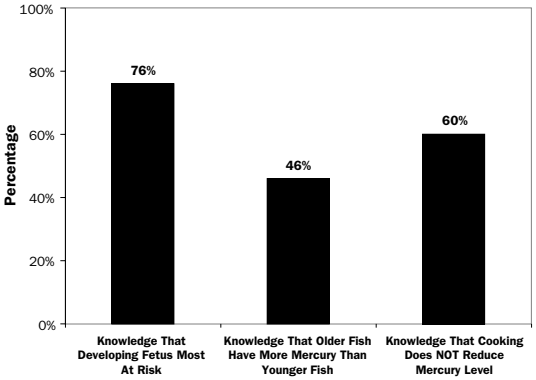
Healthy Maine 2010 Baseline: 32%
Healthy Maine 2010 Target: 90%

Maine Women Of Childbearing Age Who Are Aware Of The Bureau Of Health's "Safe Eating Guidelines" For Fish Intended To Reduce Exposure To Methylmercury 1998



Note: Current data on awareness of advisories was drawn from samples of women of childbearing age. Future efforts will target the awareness of advisories for pregnant women, and subsequent evaluation will use samples drawn from the birth certificate registry.
Source: Maine Department of Human Services, Bureau of Health, RDD Survey of 500 Women of Childbearing Age, Maine & Wisconsin, 1998.

Proportion Of Maine Women Of Childbearing Age Aware Of The "Safe Eating Guidelines" For Fish With Knowledge Of Specific Risks 1998

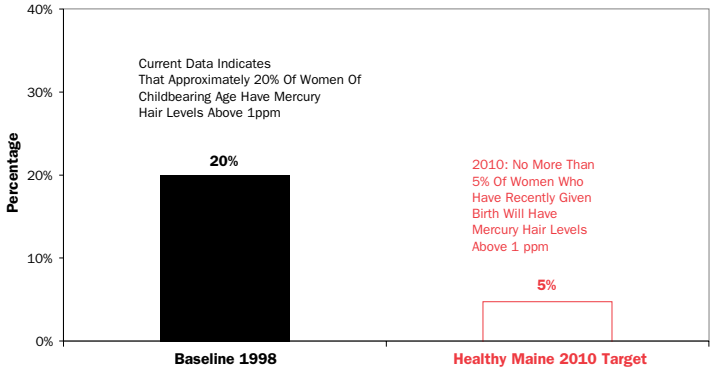


Note: Current data on awareness of advisories was drawn from samples of women of childbearing age. Future efforts will target the awareness of advisories for pregnant women, and subsequent evaluation will use samples drawn from the birth certificate registry.
Source: Maine Department of Human Services, Bureau of Health, RDD Survey of 500 Women of Childbearing Age, Maine & Wisconsin, 1998.

8–25b Reduce the proportion of Maine women of childbearing age with mercury hair levels above one part per million.

Healthy Maine 2010 Baseline: 20%
Healthy Maine 2010 Target: 5%

Women Of Childbearing Age With Mercury Hair Levels Above 1ppm 1998



Note: Current data on mercury hair levels was drawn from samples of women of childbearing age. Future efforts will target the mercury hair levels for pregnant women, and subsequent evaluation will use samples drawn from the birth certificate regististry.
Source: Maine Department of Human Services, Bureau of Health, Program Files, 1998.

Mercury is a naturally occurring heavy metal that is widespread and persistent in the environment. Its use in many commercial products and its emission from combustion processes have caused about a three- to four-fold increase in the global circulation pool of mercury. Upon entering aquatic systems, mercury is converted to an organic form (methylmercury) that is biomagnified through the food chain. Fish can have levels of methylmercury that can be as much as a million times greater than levels in the water.

Studies of people who eat large amounts of fish have found children of women with elevated mercury exposures are more likely to exhibit deficits in cognitive functions related to fine motor skills, attention, language, and memory (National Academy of Sciences Report, 2000). Both national (CDC, 2001) and Maine survey data indicate that more than 10% of women of childbearing age have body burdens of mercury above current estimates of tolerable daily intake, indicating little margin of safety for the developing fetus. Maine, like more than 40 other states, has issued statewide fish consumption advisories for locally caught fish due to mercury contamination. The US Food and Drug Administration has recently issued warnings on consumption of certain species of ocean fish known to be high in mercury, including canned tuna.

Fortunately, the 120th session of Maine's Legislature (2001-2002) passed laws that will help decrease mercury pollution, including a ban on the sale of mercury-containing thermostats for residential and commercial use, effective 2006, as well as the first in the nation law to collect and recycle mercury light switches from vehicles at the end of the vehicle's use. However, the continuing release of mercury from burning of coal and waste, combined with the persistence of mercury in the environment, means we will be coping with mercury pollution for years.

LEAD

- **8–11 Eliminate elevated blood lead levels in children.**

Lead, like mercury, is a heavy metal that exerts toxic effects on brain cells, causing learning disabilities and behavior disorders in children as well as nerve damage in adults. Although adults in Maine, especially housepainters and bridge workers, are at risk for lead poisoning, there currently is no mechanism in place to track the extent of the problem. However, we do have credible systems in place to track the extent of lead poisoning among Maine's children. These data systems show an extensive problem, persuading many public health and health professionals to believe that lead poisoning is Maine's number one environmental health hazard to children in terms of known risk, prevalence, and consequences. For instance, a compilation of six years of data (1994–1999) shows that one in nine Maine children who were screened were found to have elevated levels, yet only one in nine children under six years of age were tested with a simple blood test. Maine faces great challenges in reducing this public health problem – Maine needs to make its high-risk housing stock lead safe, to screen every child, and to assure proper treatment and follow-up for every child who has a high level.

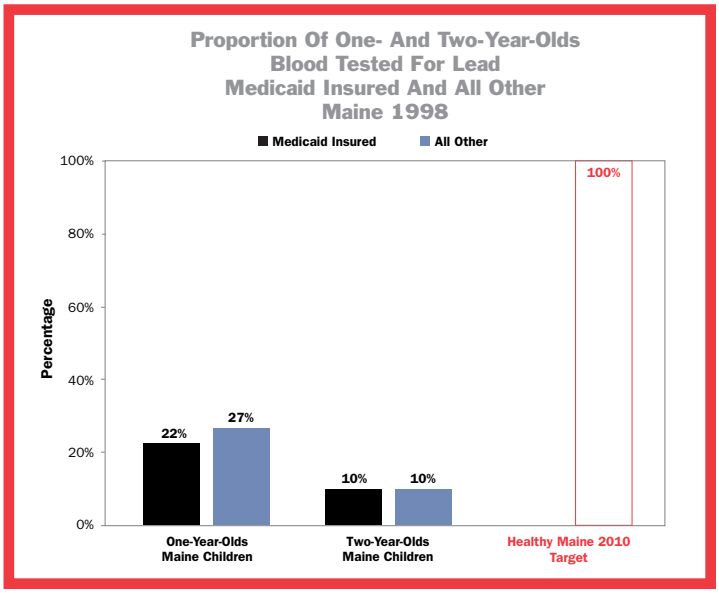
8–11a (Developmental) Increase testing for lead and abatement of lead in Maine homes, with a focus on those homes older than 1960.

Lead was commonly used in paint to make it last longer and give a shine. As of the 1950s, lead concentrations in residential paint were reduced substantially, and banned altogether for residential use in 1978. However, about half of all homes in Maine were built before 1960, and 40% built before 1950. Therefore, they are at high risk for exposing their inhabitants to lead, especially children who tend to be exposed through such normal behaviors as playing on the floor, putting their hands in their mouths, and touching painted window sills. Since many household paints contained as much as 50% lead by weight, only a very small exposure, even from the paint's dust, can result in lead poisoning of a child. Lead is also found in some antique furniture, some foreign-made painted products, and marine paints.

There is no mechanism for tracking the proportion of Maine homes tested and made lead-safe. However, until Maine homes are lead-safe, Maine children will continue to become lead-poisoned. Current initiatives are focusing on assuring that licensed day cares and foster homes are screened for lead hazards, that homes are screened or tested at the time of sale, and that parents with young children or expecting a baby have information on testing for lead and making their homes lead-safe.

8–11b Increase blood lead testing rates among one- and two-year-old children with Medicaid Insurance.

Healthy Maine 2010 Baseline: 1-year-olds 22%
Healthy Maine 2010 Baseline: 2-year-olds 10%
Healthy Maine 2010 Target: 1-year-olds 100%
Healthy Maine 2010 Target: 2-year-olds 100%



Despite Federal regulations that require all children who have Medicaid Insurance to have a blood lead test at age one and two years, blood lead testing rates for these children are lower than for all other children. For instance, in the year 2000, blood lead screening rates for one-year-olds with Medicaid Insurance were 22% compared to 27% for all other one-year-olds. An analysis of Maine data from the six years 1994–1999 showed that Maine children with Medicaid Insurance were twice as likely to be lead poisoned than other children (Bureau of Health, Maine Medical Assessment Foundation, 2000). In fact, of all the factors analyzed, having Medicaid Insurance was the most strongly associated with having elevated lead levels. Data from 1997–2000 also showed that 10.6% of one- and two-year-old Maine children with Medicaid Insurance tested had elevated blood lead levels (>10 ug/dl), compared to 5.7% of all other one- and two-year-olds.

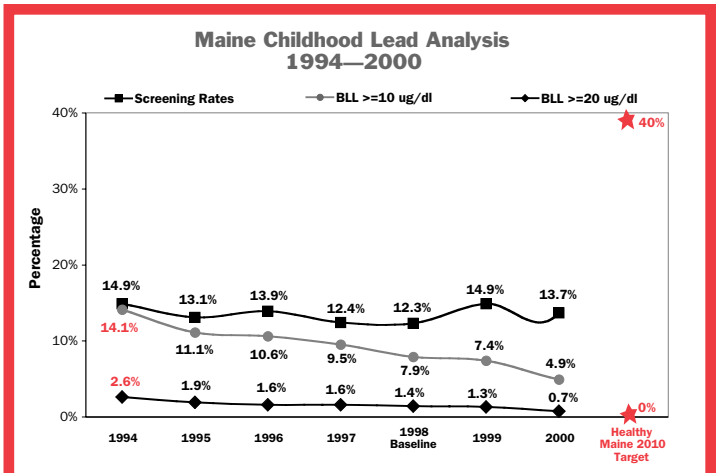
8–11c Increase blood lead testing rates among children under age six.

Healthy Maine 2010 Baseline: 12.3%
Healthy Maine 2010 Target: 40%

8–11d Reduce the proportion of children with elevated blood lead levels (>10 ug/dl).

Healthy Maine 2010 Baseline: 7.9%
Healthy Maine 2010 Target: 0%

Blood lead levels >10 ug/dl reported from 1994–2000 have shown a linear decline of 15% on average per year. If Maine's homes become lead-safe and Maine's children are properly screened, it is hopeful that elevated levels among our children will be eliminated.



Note: Population estimates for 1999 preliminary. 1999 population estimates used for year 2000 analysis. Population estimates based on 1990 postcensial estimates.
Source: Population estimates, Maine Department of Human Services, Bureau of Health, Office of Data, Research & Vital Statistics.
Lead data HETL, Maine Bureau of Health.

8–11e Reduce the proportion of children who are lead-poisoned (lead levels >20 ug/dl).

Healthy Maine 2010 Target: 1.4%
Healthy Maine 2010 Target: 0%

Blood levels >20 ug/dl reported from 1994–2000 have also shown a linear decline of 15% on average per year. Since these children appear to be at highest risk for developmental and behavioral disorders associated with lead, the CDC-funded Maine Childhood Lead Poisoning Prevention Program in the Bureau of Health is focused on outreach to children with elevated blood lead levels, especially with those with levels over 20 ug/dl.

It is recommended that all Maine children under age six be screened through a minimum of a questionnaire (verbal or written) for exposure to lead paint. Blood tests should be conducted in at least all children who screen positively or in children living in high-risk situations (such as low socioeconomic status indicated by Medicaid Insured status or in communities with high-risk housing). Using 1997 Centers for Disease Control and Prevention guidelines, every hospital service area in Maine has enough high-risk housing stock (>26% of housing built before 1950) to warrant universal blood testing for all one- and two-year-olds.

There is no current mechanism for measuring what proportion of children receives a verbal risk assessment. All blood tests for lead in Maine are required to be performed at the Health and Environmental Testing Laboratory (HETL in Maine DHS Bureau of Health), providing us with good public health data on blood testing. When looking at recent trends for blood testing rates, the fact that children ages one and two are at highest need for blood testing, and the fact that 40% of Maine's housing population was built before 1950, making it at very high risk, a target of 40% blood testing screening rate for children under age six appears appropriate. This target may be adjusted as new information and mechanisms for tracking become available.

Maine's Legislature enacted a bill in 2002 requiring all Maine children to have a blood lead test at 12 and 24 months of age, unless the medical provider can demonstrate via a risk assessment questionnaire that the child is not at risk for lead exposure. A recently convened Physician Task Force on Lead Screening is formulating the Maine standard for risk assessment.

PESTICIDE USE

- **8–13 and 8–24 (Developmental) Minimize Reliance on Pesticides and Reduce Pesticide Exposure.**

  Pesticides are agents that kill, control, or repel undesirable and sometimes harmful organisms. They include herbicides, rodenticides, insecticides, disinfectants, fungicides, insect repellents, and antimicrobial pesticides. More than 7,000 pesticides are registered with the Maine Board of Pesticide Control (BPC), and many contain chemicals that are harmful to people.

The BPC, in the Maine Department of Agriculture, monitors pesticides in the environment, particularly in water. For instance, a Statewide groundwater survey looking for pesticides in drinking water wells located within a quarter mile downslope from known pesticide sites was conducted in 1995, 1999, and is planned to be repeated in 2004.

Public water supplies are routinely tested for pesticide contamination. The BPC also has been monitoring surface water for pesticides in the five salmon rivers. Results from the various water monitoring show one sample that has exceeded the health standard for a pesticide – a private drinking water well contaminated by the homeowner's use of Diazinon™ to kill ants.

Since hundreds of pesticides are available to purchase over the counter and since over 90% of our exposure to them occurs in our homes, it is critical to build awareness of pesticides' harmful effects and of alternatives in order to minimize our exposure to them. One recent study in Maine estimated that about one in four schools use pesticides routinely and those pesticides are often applied by untrained and unlicensed personnel ("What's Bugging Our Schools? Pest Concerns and Pesticide Use in Maine Public Schools – Report of the School Integrated Pest Management Survey," found at http://www.state.me.us/agriculture/pesticides/schoolipm/schoolipm_report.pdf). As a result of this report, the BPC gave a grant to the Maine Department of Agriculture to start a school-integrated pest management awareness and education program. Additionally, rules are being promulgated to regulate the use of pesticides in Maine schools.

In 1997 a legislative mandate called for a State policy to minimize reliance on pesticides by promoting principles of Integrated Pest Management (IPM) and other science-based strategies that utilize pesticides as a last resort. The BPC was directed to measure Statewide pesticide purchasing to determine where trends exist. Subsequently, the BPC and several legislative committees cited at-home, do-it-yourself lawn care as the largest sector of pesticide use that is the least regulated. Home lawn and garden pesticide use in Maine has grown from 800,000 pounds in 1994 to 1,600,000 pounds in 1999 to 1,800,000 pounds in 2000 (reports of sales from licensed general use pesticide dealers).

This more than doubling of lawn care pesticide use has led to an education, water quality monitoring, and certification program to encourage homeowners to apply IPM principles. The program, called "BayScaping," has evolved into a dynamic partnership among a number of state and community agencies as well as retailers (including some lawn care businesses). Although its original scope was the Casco Bay watershed, it is hoped it will evolve statewide so that every homeowner chooses pesticides thoughtfully and only as a last resort. (www.thinkfirstspraylast.org/bayscaper)

EXAMPLES OF SOME COMMON PESTICIDES:

- **Sevin™ and Diazinon™ are Insecticides.**
- **D-Con™ is a Rodenticide.**
- **Roundup™ is an Herbicide.**
- **Captan is a Fungicide.**
- **Scott's Turf Builder™ and many other "weed and feed" products contain Herbicides.**
- **Ortho Rose™ and Flower Dust™ is a combination Fungicide and Insecticide.**
- **Lysol™ and Clorox™ bleach are Disinfectants, killing bacteria.**
- **Mildewicides are commonly found in paints.**
- **Bacillus Thuringiensis (Bt) or milky spore is a Biological Pesticide.**

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Barbara	Poirier	University of Southern Maine, Muskie School of Public Service
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Bob	Woods	Maine DHS, Bureau of Health
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** Members who attended half-day Healthy Maine 2010 Environmental Health Priority Area Work Group meeting.*