



MASSACHUSETTS MEDICAL SOCIETY

Every physician matters, each patient counts.

**TESTIMONY IN SUPPORT OF H.902/S.482
AN ACT PROMOTING DRINKING WATER QUALITY FOR ALL
BEFORE THE JOINT COMMITTEE ON ENVIRONMENT & NATURAL RESOURCES
SEPTEMBER 27, 2023**

**The Massachusetts Medical Society (MMS) wishes to be recorded in support of
House Bill 902, and Senate Bill 482**

The MMS is a professional association of over 25,000 physicians, residents, and medical students across all clinical disciplines, organizations, and practice settings. The MMS is committed to advocating on behalf of patients for a better health care system, and on behalf of physicians, to help them to provide the best care possible. MMS supports equity in the regulatory protection of safe of drinking water from private wells that is at least comparable to the regulatory oversight and protections required for public water systems.

Over 500,000 Massachusetts residents depend on private wells and 30% of wells have contaminants above current Department of Health guidelines.¹ Families that use private wells are at risk of drinking water contaminated by neurotoxins, bacteria and carcinogens, all of which have important health risks, particularly to children. Bacterial contaminants, such as E coli, and other coliform bacteria can cause significant gastrointestinal illness.

Chemical contaminants found in Massachusetts well water have serious health effects. Nitrates, often runoff from fertilizers, are carcinogenic and can cause methemoglobinemia – a potentially life-threatening condition in which blood cannot carry sufficient oxygen throughout the body. Uranium can come from granite and cause kidney injury. Similarly, arsenic is found in certain rock formations and can be carcinogenic.

Lastly, a family of chemicals known as *PFAS*, often referred to as “forever chemicals” as they do not breakdown in the environment or within the human body, are found in Massachusetts well water. MassDEP private well sampling found that ~5% of households had PFAS levels that exceed state health standards.² PFAS have significant health impacts, according to a recent article in the [New England Journal of Medicine](#), are broad: they include cancer, reproductive, metabolic and neurodevelopmental diseases. No level of exposure is considered safe.³ These harms fall heavily on PFAS exposed children, who experience low birth weight, prematurity and

¹ [Coalition for Safe Drinking Water \(whatsinyourwellwater.org\)](https://www.whatsinyourwellwater.org)

² Ibid

³ Enhancing Regulations to Reduce Exposure to PFAS — Federal Action on “Forever Chemicals”, Joseph M. Braun, Ph.D., R.N., M.S.P.H., *N Engl J Med* 2023; 388:1924-1926 (<https://www.nejm.org/doi/full/10.1056/NEJMp2303333>)

impaired vaccine response. Particularly concerning are the health effects that occur during gestation or early childhood that may show up years following exposure.

Children are uniquely susceptible to the negative health effects of contaminated drinking water. Severe bacterial illness can stall growth and development. Exposure to nitrates and arsenic in utero can result in fetal demise or poor birth outcomes. Nitrates can also inhibit thyroid development in children, leading to life-long issues regulating body temperature, heart rate and weight. With these unique impacts in mind, the *American Academy of Pediatrics* has called for state governments to fund well water testing annually for nitrates and bacteria and at regular intervals for other harmful chemicals as guided by local health authorities.

S.482/H.902 *An Act promoting drinking water quality for all*, would authorize MassDEP to develop health-based regulations to ensure private well water is safe to drink. Currently, MassDEP lacks the authority to regulate private wells, as that authority rests with local boards of health, many of which have limited resources to address well water quality amidst many other competing priorities.

Well water quality has a disproportionate impact on residents of the Commonwealth. In the more urban parts of the state, residents have access to public water systems, which are subject to MassDEP regulations and are routinely tested for contaminants. While Massachusetts residents in rural areas are far more likely to rely on private wells for water, an inequity exacerbated for rural residents of limited financial resources who are more likely to be affected by contaminants in private wells. Importantly, this legislation takes into account the potential cost of mitigation by expanding the existing MassHousing Septic Repair Loan Program (SRLP) to provide low-income homeowners with access to financial assistance to remediate contaminated private wells.

The state has successfully stepped in to address similar public health threats in the past. The 1995 Title 5 legislation regulating septic systems could be a useful model for how this could work. Creating a uniform system out of an existing patchwork of regulation and providing important protection for environmental and public health.

Article 97 of the Massachusetts Constitution enshrines the right to clean water. However, absent statewide regulations, residents relying on private well water have little assurance that the water they rely on is clean and safe to drink.

We therefore ask the Committee to report House bill 902, and Senate bill 482 out favorably as an important step in realizing the promise of Article 97 by establishing uniform statewide private well regulations to protect public health. Thank you very much for your consideration of these important issues. We appreciate the opportunity to offer these comments.