

Overview of EPA's State Indoor Radon Grant Program: House Report 114-170

Exposure to radon causes an estimated 21,000 lung cancer deaths annually. Radon is the second-leading cause of lung cancer after smoking. Effective, affordable measures to reduce indoor radon are available and, when employed, can prevent radon-induced lung cancer and save lives. For nearly 30 years, the U.S. Environmental Protection Agency's (EPA or Agency) State Indoor Radon Grants (SIRG) program has supported state and tribal efforts to reduce radon-related lung cancer. This collaborative partnership between the states, tribes and EPA is critical in reducing radon risk and saving lives. States and tribes are financial partners in the SIRG program, matching at least 40 percent of the federal funds received. About 75 percent of state programs have reported they would shut down or significantly curtail their radon program in the absence of EPA grants.

As detailed in this summary report, state and tribal radon programs are making significant progress in implementing Congressional direction to the Agency with regard to use of SIRG funds. Despite this important progress, the radon problem in the United States remains dire. State and tribal radon programs remain vital to national efforts aimed at reducing radon risk and complement the work of the National Radon Action Plan partners. (See the overview of the National Radon Action Plan below.) About 7 million homes are estimated to have levels of radon above the EPA action level. Housing construction during the last 25 years has contributed a significant number of homes with elevated radon levels.

National Radon Action Plan

This Plan represents a collaborative effort among 11 organizations dedicated to eliminating avoidable radon-induced lung cancer in the United States, with the near-term goal of reducing radon risk in 5 million homes and saving 3,200 lives annually by 2020. Led by the American Lung Association, the Plan is aimed at sustainably incorporating radon testing, radon mitigation and radon-resistant construction into systems that govern purchasing, financing, constructing, and renovating homes and other buildings. The Plan builds on earlier federal action. View the plan at www.radonleaders.org/resources/nationalradonactionplan.

FY16 Appropriation & Accompanying House Report

Congress appropriated \$8.051 million for the SIRG program in FY2016 (\$7.978 million after rescission). This appropriation was accompanied by House Report 114-170, which contained several recommendations specific to the application of SIRG funds in three broad areas:

1. Awareness, education and outreach to the **medical community** and inclusion of radon within **state cancer control plans**.
2. Testing and remediation of **schools** in high-risk radon areas (presumed to be Zone 1 or the state equivalent).
3. **Education and technical support** related to industry best practices and standards and the adoption of radon-related guidelines in **building codes**.

EPA's Response

In the spring of 2016, the EPA Headquarters radon program took several steps to implement the House Report language, including:

The House Report recommendations were considered in the context of the Indoor Radon Abatement Act's statutory priorities and direction and the Office of Air and Radiation National Program Manager Guidance for FY 2016–2017. In addition, consideration was given to states' and tribes' current work plans, capabilities and capacities.

- Senior and mid-management level meetings with EPA Regional offices to detail the House Report recommendations and implementation options.
- A memorandum to Regional program managers providing a summary of the recommendations found in House Report 114–170 and outlining requirements on Regional reporting of their states' implementation of the language.
- Issuance to EPA Regional offices of a special grant Term and Condition requiring SIRG states and tribes to report on progress toward implementing House Report language.

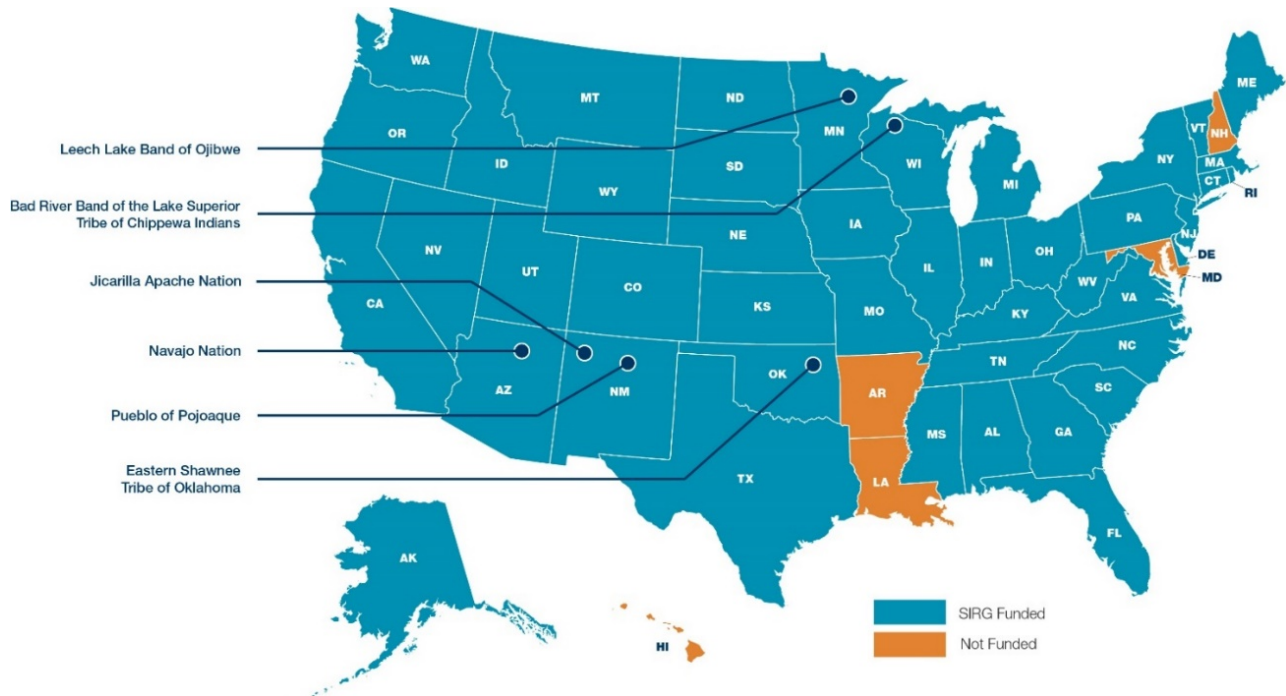
States and tribes reported work planned or already in progress in five activity areas aligned with EPA's radon-related strategic goals and in response to House Report 114–170:

1. Promoting awareness about radon exposure to the **medical community (Medical)**.
2. Including radon in **state cancer control plans (CCPs)**.
3. Testing for and remediating radon in **schools (Schools)** in high-risk radon areas.
4. Providing **continuing education (CE) and technical support (Support)**.
5. Including radon-reduction strategies in **state and local building codes (Industry Codes)**.

The primary aim of EPA's radon program is to protect public health, especially the health of families, by reducing the risk from radon exposure. Major actions are those that directly result in expanded radon testing of existing homes, mitigation of high radon levels within those homes, and radon-resistant new construction.

Overall Findings

After receiving responses from states and tribes, EPA examined the planned and in-progress activities and coded them into three categories. If a state or tribe had not made plans within a certain area, the response was coded as "none." Actions that had been initiated, but were in early stages and had potential for radon risk reduction were coded as "minor." Actions that had been achieved with a greater potential for risk reduction were coded as "major." **The summary of the states' and tribes' responses tells a powerful story of risk reduction using SIRG funds in alignment with House Report language.** The SIRG program received 49 responses describing state and tribal efforts that address the key areas identified in House Report 114–170, representing a response rate of 96 percent. **Significantly, the program found that all EPA Regions addressed all of the components of the House Report language in at least one of their state or tribal programs.**



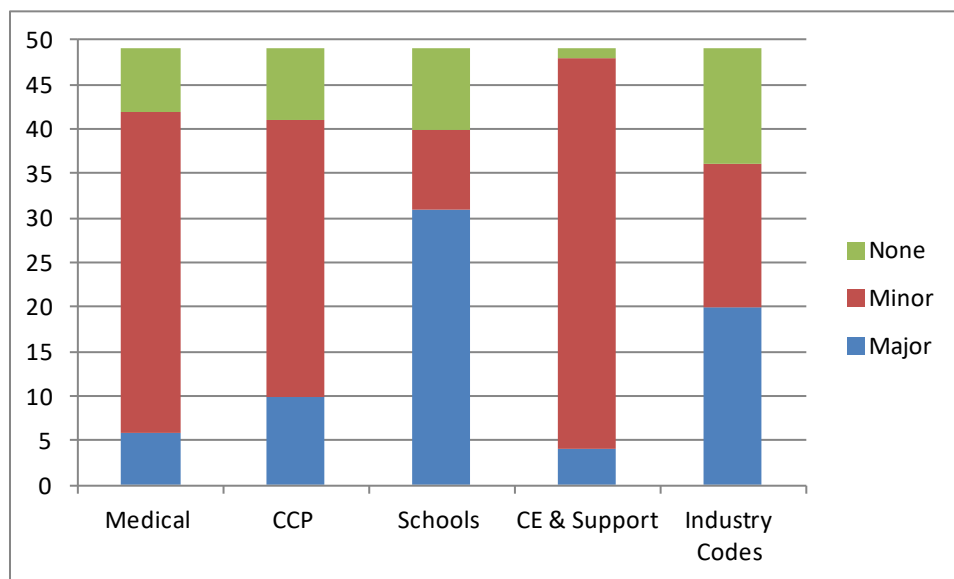
Map showing states (blue) and tribes (called out) that received FY16 SIRG funding.

Key Take-Aways

- All of the 46 states (including the District of Columbia) that received FY16 SIRG funding responded. Of the six tribes that received FY16 SIRG funding, three (50%) responded.
- A majority of reporting grantees (63%, 31 out of 49) performed major actions to support efforts toward reducing radon exposure in schools and building new schools with radon-reducing features.
- 74% of the states and tribes (36 out of 49) that responded develop and disseminate educational materials and/or engage in outreach events for medical professionals; 22% (11 out of 49) provide or distribute free or low-cost radon test kits through the medical community.
- A vast majority (94%, 46 out of 49) of the grantees that responded are undertaking activities to provide continuing education and technical support, representing a significant investment area among SIRG-funded programs.
- Of the responding grantees, 27% (13 out of 49) do not have activities to include radon-reduction strategies in state and local building codes; this area provides an opportunity for increased emphasis and growth.
- As a result of grantee efforts, 84% (41 out of 49) of the state cancer control plans mention radon; 24% (12 out of 49) of these include strategies aimed specifically at reducing radon risk.

Tribes receiving SIRG funding continue to excel in the area of testing for and remediating radon in schools in high-risk radon areas, with all three reporting tribes conducting major activities in this area.

The below graph highlights the number of states and tribes undertaking actions to reduce radon exposure risk in each of the activity areas identified in House Report 114–170.



State and Tribal Activities Within Activity Areas (n = 49)

Spotlight: Successful Approaches for Reducing Radon Risk

This section showcases current, major activities funded at least in part by EPA’s SIRG program in FY16 that states and tribes are undertaking in alignment with the House Report language.

Education and outreach to the medical community:

- **Nevada** partners with the Nevada Nurses Association to offer continuing education credits. The state also co-hosted a radon meeting that provided an education and networking forum for medical personnel and other stakeholders.
- **Rhode Island** partners with hospitals and national, state and local cancer coalitions to educate medical personnel. The state program also provides the medical community with information about radon reported in air measurements in residential and public buildings.
- The **Minnesota** Department of Health focuses on Commission on Cancer–accredited hospitals to train hundreds of people about radon and resulting in hundreds of radon tests completed.

Inclusion of radon in state cancer control plans:

- The **Iowa** Cancer Control Plan supports radon-resistant new construction, encourages the use of qualified mitigators, advocates for the testing and mitigation of rental housing, and supports financial assistance and incentives for radon mitigation. The plan also calls for advocacy for comprehensive legislation requiring radon-resistant new construction and encouragement of radon testing before all home sales.
- **Kentucky’s** state cancer control plan includes radon in one of its four cancer-prevention goals related to environmental carcinogens. This goal includes three specific objectives in seven categories that focus on radon.

Testing and remediation of schools in high-risk radon areas:

- Because parts of the **Navajo Nation** have elevated radon levels and legacy uranium mining sites, the Nation encourages public and private radon testing and plans to test Navajo Nation Head Start and Navajo child care and development facilities.

Continuing education and technical support:

- **Colorado's** radon program educates state regulatory agencies and legislative representatives, provides technical information to customers, and communicates with all the state's radon measurement and mitigation contractors. The program also assisted with the writing and coordination of a bill to implement a statewide low-income mitigation assistance program.
- The **Nebraska** radon program promotes radon mitigation by qualified professionals and manages a website for the public on proper radon mitigation.

Adoption of radon-reduction strategies in building codes and construction:

- The **Illinois** Radon Resistant Construction Act (RRCA) mandates that all new one- and two-family dwellings be built using radon-resistant construction techniques. The Illinois Emergency Management Agency promotes installation of active radon mitigation systems during new home construction and is developing a partnership with local health departments to draft ordinances that include local code official inspection and compliance with the RRCA.
- **Minnesota's** state radon program works with the Minnesota Department of Labor and Industry to confirm that new building codes were effective, needed and reasonable. The state helps to ensure code implementation and has found that radon-resistant new construction techniques have reduced indoor radon concentrations by 40% compared to previous construction techniques.

Moving Forward

The responses indicate that states and tribes are making significant progress in addressing the key areas identified in the House Report language. States and tribes will report in September 2018 on activities conducted during FY17 and FY18.