What is the Radon Change Package?
This change package is a guide for achieving life saving results, including radon tests, mitigations, and radon resistant new construction (RRNC). It synthesizes years of research, including studies of effective ways to promote residential action to reduce health risks; historical analysis of the national radon program; field research on program strategies with a demonstrated link to mitigation and RRNC results; and ideas from CRCPD’s Radon Cookbook and EPA’s “Local Efforts to Reduce Exposure to Radon”.

The Change Package captures the current knowledge base to support the Radon Leaders Saving Lives Campaign. It presents strategies, approaches, and actions that state radon programs and their industry and community partners can use to improve program effectiveness and double their results. Radon stakeholders will update this document as real-time learning drives improved radon risk management. As we work together to reduce the risk and save lives, we will catalogue what we learn about effective approaches to radon risk reduction in this Change Package. The Change Package will live on the Radon Leaders Saving Lives web portal. You can visit the portal at http://www.radonleaders.org/resources/changepackage to contribute to the evolution of this Change Package by participating in discussion forums and suggesting new content.

How Can I Use the Radon Change Package?
The Change Package provides all the information you need to identify successful strategies and take action to incorporate those strategies into your work. It is organized into five Leadership Concepts that represent the core elements of a successful radon program:

• Cultivate High-Performing Collaborations & Partnerships
• Build Local Infrastructure
• Design a Results-Driven Program
• Cultivate Effective Relationships with Industry
• Maximize the Impact of Your Outreach

Under each Leadership Concept, you will find specific Leadership Strategies that describe proven approaches for getting results. The Strategies are supported by Testable Ideas that present simple and specific activities programs can follow to enhance the effectiveness of their work. Finally, the Change Package includes Strategies in Action, which are examples of the Testable Ideas at work in radon programs across the country. Together, the Leadership Concepts, Strategies, Testable Ideas and Strategies in Action provide an easy-to-understand and easy-to-replicate blueprint for radon program success.

### Leadership Concepts

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<thead>
<tr>
<th>Leadership Strategy</th>
<th>Testable Ideas</th>
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<td>Action 1</td>
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<td>Action 2</td>
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### Strategies in Action

Examples of Testable Ideas at work in State radon programs. What the States and their partners have done and the results the Testable Ideas delivered

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<tbody>
<tr>
<td>AL – Alabama Department of Public Health and Cooperative Extension System’s Radon Program</td>
<td>Health/Cooperative Extension</td>
<td>4.5 million (21%)</td>
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<td>NJ – New Jersey Department of Environmental Protection’s Radon Program</td>
<td>Environment</td>
<td>8.7 million (25%)</td>
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<tr>
<td>PA – Pennsylvania Bureau of Radiation Protection’s Radon Program</td>
<td>Environment</td>
<td>12.4 million (76%)</td>
<td>X</td>
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<tr>
<td>WI – Wisconsin Division of Public Health’s Radon Program</td>
<td>Health</td>
<td>5.5 million (41%)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>ALL STATES</td>
<td>300 million (27%)</td>
<td>17</td>
<td>32</td>
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* You can find these resources online at [http://www.crcpd.org/radon/Cookbook/Radon_Cookbook.pdf](http://www.crcpd.org/radon/Cookbook/Radon_Cookbook.pdf) and [http://www.epa.gov/radon/pdfs/success_stories.pdf](http://www.epa.gov/radon/pdfs/success_stories.pdf)*
Enroll strategic partners to broaden and enhance your capacity, expertise, and resources

Testable Ideas

- Name your program’s specific needs and recruit partners that can meet them
  - Consider: community credibility, proven communication channels, staff on the ground, technical expertise, and access to data
  - Regularly evaluate your needs to identify new partners
- Partner with organizations that can influence your audience
  - Consider: medical and public health, community clinics and hospitals, youth organizations, schools and universities, home inspectors, real estate organizations, insurance companies, etc.

Strategies in Action

- PA partnered with the American Lung Association (ALA) to gain access to schools. The partnership has delivered access to schools statewide, in-school education and test kit distribution, science lessons on radon testing and results tracking, and a wealth of data on school-based outreach, including the number of test kits deployed and the percentage of those that led to radon mitigations.
- PA secured partners inside the Bureau’s IT department and (at no cost) got an Oracle database with more than 900,000 geo-coded radon test results.
- NJ and the Department of Community Affairs (DCA), which oversees the state’s building codes, partner on Tier 1 radon resistant new construction (RRNC) requirements. “We develop the science on Tier 1 zones, DCA distributes information…and builders pay attention because DCA is their regulator.”
- WI partners with 16 public health environmental sanitarians to deliver its program. “They are certified professionals with local experience. They know how to reach people, have strong connections to local leaders and media, and because they bundle their messages and target them to local concerns, they have a great impact.”

Persistently pursue the partners you need

Testable Ideas

- To win partners, point out the overlap in your missions and be clear about how you can help each other
  - Approach partners with an offer, not just a request
  - Make it easy to say yes by asking for small commitments at first
  - Talk to potential partners in person; it’s harder to say no face-to-face

Strategies in Action

- AL recruited radon testing labs as partners in data collection by “looking for something that’s in it for them. We told them that the publicity we can give is good for business and if they give us data, it’s good for publicity. We now have data on over 37,000 short-term test results from labs.”

continued...
Strategies in Action (continued)

- NJ needed DCA to get an RRNC requirement on the books so pursued a partnership with DCA for years, took small steps to build the partnership over time, and compromised with DCA to find a goal both organizations could agree on. NJ made it easy for DCA to say yes by providing an RRNC presentation for builders, showing that it wasn’t a big added cost, regularly sharing data, and training code officials to do inspections so DCA didn’t face a new burden. “Now, we send DCA an updated Tier 1 map and within a month, it’s in the code.”
- PA got a graphic designer to develop a 3-D diorama of an installed mitigation system for free by visiting him in-person and emphasizing the impact his work could have on people’s decisions to reduce their risk.

Establish shared objectives for the partnership and periodically assess effectiveness

Testable Ideas

- Make sure objectives and collaborators’ commitments are clear from the start
  - Put agreements, goals, milestones, and measures of success in writing
  - Make sure more than one person at a partner organization supports the partnership
- Continually assess both organizations’ goals and plan for the partnership’s evolution
  - Publicly celebrate success to build long-term ownership for your cause

Strategies in Action

- Over 10 years, PA and the regional ALA have refined a strategy to reduce lung cancer from radon that builds on each one’s strengths. “We’ll discuss things at the early stages of planning and see who has which strengths and how we can best leverage them. It’s never a one way street with our partnership.” Their agreement stipulates that PA will provide resources, expertise, and materials and ALA will deliver school, web and field-based outreach. The results: ALA has distributed over 86,000 test kits leading to an estimated 4,800 mitigations, tracked test results by county and collected data on the likelihood of action in response to high levels. In 2008, PA nominated ALA for the CRCPD Radon Hero Award to recognize ALA’s outstanding leadership on radon risk reduction.
Build Local Infrastructure for Effective Program Delivery

Engage local experts for program credibility, efficiency and sustainability

Testable Ideas
- Recruit community partners that are trusted for their scientific and health expertise
  - Offer financial support, materials, and other resources to bring partners to the table
- Listen to local ideas—allow community expertise to influence program strategy
  - Invite local experts, such as public health officials, tribal leaders, AARST members, cooperative extension staff, and others, to your planning table

Strategies in Action
- 90% of WI’s SIRG dollars go to 16 local Radon Information Centers (RICs) and to mini-grants. RICs, which are run by certified testing and mitigation experts, field geographically-routed calls from a 1-800 number; provide low-cost test kits; follow-up on high test results; recruit local mitigators; and track results. “Local public health has unique expertise about how to reach people, what messages matter and to whom. They have better outreach skills than state people or consulting firms because it’s based on local experience.”
- AL regularly convenes extension agents to discuss the best ways to implement the program statewide. “We give 90% of our SIRG dollars to extension so their input and ownership is essential. The result [of the meetings] is more effective education and greater job satisfaction.”

Empower local partners to lead to create shared ownership for results

Testable Ideas
- Encourage local partners to pilot-test program approaches
- Recognize local leadership and publicly celebrate partners’ success
- Put local partners in front of the public, industry representatives, and state officials to talk about goals and plans

Strategies in Action
- PA learned that good ideas often come from the grassroots. “One of our most successful programs came out of a mini-grant: the newborn program to get maternity wards to provide new moms with information about testing homes for radon... We now have more than 70 hospitals participating and see a good return with many new parents testing and mitigating high radon levels.”
- WI empowers RICs to lead. One result: the RICs produced a map of certified mitigators and recruited new mitigators to meet public needs. “When they first made the maps, mitigators were only in the highly populated areas, but now they’re all over the state because of the RIC’s efforts. They do what it takes to promote public health and when they saw that required more certified mitigators, they created an industry.”
- At a biennial radon meeting for industry and public health, WI recognizes particularly successful local programs to share their lessons for success and goals for the future.
Build strong connections to encourage communication between local and state staff

Testable Ideas

- Make it easy for local partners and state staff to communicate regularly through meetings, newsletters, listservs, etc.
- Encourage continual discussion of effective outreach strategies, ways to overcome common challenges, and joint planning for media outreach, industry partnerships, results tracking, National Radon Action Month (NRAM), etc.

Strategies in Action

- WI convenes state, RIC and other local health staff twice per year, including one meeting every December to plan for NRAM.
- AL’s state coordinator captures activity information from extension agents in a quarterly newsletter for all offices; and convenes a Radon Advisory Committee (RAC) of state staff and staff from a rotating group of extension offices each quarter to discuss how to run the program, organize NRAM events, develop educational materials, and more. “Our best ideas come from brainstorming with them. The RAC gives local agents a window into state-level program deliberations and improves two-way communications.”
Design a Results-Driven Program

### Use data to drive program strategy

**Testable Ideas**
- Establish a baseline of program performance against which you can track your progress
- Refine your program implementation over time based on your data
- Use technology to simplify data collection, analysis and management

### Strategies in Action

- **NJ** uses data provided by testers and mitigators to target outreach to homes with high radon levels that haven’t been mitigated and uses DCA data to promote risk reduction. “The data from DCA is great because it lets us target our outreach specifically to people who live in new homes that we know were built with RRNC.”
- **AL** fine tunes program strategy based on impact results data that compares test kit sales to actual usage. Results helped AL discover that displaying zip code maps at local home shows, offering radon test kits via their web site, and providing community group presentations were all more effective tactics than sending radon information home on the first day of school, so AL shifted their resources and focus.
- **PA** is developing a web interface to streamline results reporting: testers and mitigators will access the database online, including through their PDAs.

### Make use of partnerships and incentives to get the data you need

**Testable Ideas**
- Get creative to collect data—train local partners to collect it, forge alliances with industry for voluntary reporting, work with schools and universities, etc.
- Provide incentives, such as public recognition, to encourage partners to collect data

### Strategies in Action

- **NJ** teams with Rutgers University to analyze new home construction and radon testing data to assess how many RRNC homeowners activate their mitigation systems and conduct post-tests of their radon levels.
- **WI** requires grantees to examine surveillance data for homes with elevated radon, keep records of tests conducted with agency assistance, and follow cases of elevated exposure to promote mitigation by working with labs that will report results to the tester and the agency.
- **AL** recruited labs willing to include a specialized datasheet in radon test kits. AL designed a datasheet to gather information on who performs test, the type of tests, type of foundation, whether homes have active or passive systems, and what led people to test for radon. The labs willing to partner with AL to provide the data got good publicity on AL’s web site.

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Set bold goals and share them publicly

Testable Ideas

Name the results you're after, establish metrics for tracking progress, and share your goals and measures so everyone knows how to measure success.

Strategies in Action

- In the RFPs for radon grant dollars, WI sets out its long-term program goal—the reduction in lung cancer incidence due to radon—and output measures for tracking progress—the number of homes tested and those with levels over 4 pCi/L that are mitigated.
Cultivate Effective Relationships with Industry

Develop open dialogue with industry to build trust

Testable Ideas

- Create open communication with industry by being very visible
  - Get involved with industry groups, attend and convene meetings with industry, read and write for trade journals, etc.
- Work with industry to build the supply and demand for RRNC homes
  - Ask them what they need and show that you want to help

Strategies in Action

- WI hosts a radon conference every other year that attracts a large industry audience. “Though we may not always agree, by convening this event we keep in touch and make sure everyone has a chance to be heard.” WI’s leaders also participate in online trade group discussions, such as the International Association of Certified Home Inspectors (InterNACHI) message boards.
- PA conducts outreach in trade magazines by, for example, writing articles for the builder’s association magazine. “They featured our story in an article that describes RRNC and says that the Builders Association sees the value in it and will not oppose it. That’s a really big win for us.”
- “Industry folks are in the field every day. [PA] works with them as much as we can. Our approach shows that we want them to succeed and the more they work with us the less likely they are to face mandatory action. We build relationships by admitting that industry partners have something to teach us and asking for their advice.”

Position your industry partners for success

Testable Ideas

- Describe how your work can profit testers, mitigators, and builders and enlist them to help you succeed
  - Consider industry as a partner in public education, media outreach, data gathering (e.g. conducting homeowner surveys), etc.
- Help certified industry prosper
  - Train testers, mitigators and builders; promote “the good guys”; share the latest science and technology innovations; and provide talking points, marketing messages and materials they can use to attract customers

Strategies in Action

- AL motivated builders “by using test results to identify zip codes with high radon risk and sharing information with builders in those areas. A builder incorporated RRNC so we made promotional signs for his houses that said ‘this home is radon safe’. The builder did the right thing; we wanted to draw attention to that.”
- WI lists certified industry members on its web site and promotes certified vendors through RIC and local health agencies. WI also supports ‘the good guys’ by giving them data that demonstrates the radon risks to customers. “Though there is no regulation that says you must be certified, between the close relationships with the state and industry and the activities of the RICs, we have created a lot of competition for people who aren’t certified.”

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"We can go to township trainings for builders and share data from the Analyzer [PA's database] that breaks down risk by zip code and shows the probabilities and statistics of radon in each area. We can make it personal during those trainings and can give builders local numbers and messages to market RRNC."
Maximize the Impact of Your Outreach

Team with credible sources to bolster your message

**Testable Ideas**
- Recruit trusted sources of information to endorse and distribute your messages
  - Consider: universities and research institutes, lung cancer victims and their families, health care and public health experts, etc.
- Help your audience understand the seriousness of radon risks by partnering with health care representatives to deliver messages
  - Consider: home visit nurses, oncologists, primary care providers, etc., as messengers
- Train industry insiders to deliver radon messages to their peers

**Strategies in Action**
- During NRAM, NJ works with county cancer coalitions, the Lung Cancer Circle of Hope, and county smoking cessation programs to deliver radon informational lectures at local venues.
- AL partnered with oncologists to distribute information about radon risks and provide coupons for test kits for patients: 38% of kits distributed through oncologists’ offices were deployed.
- PA partners with local real estate associations and builder associations to provide radon testing, mitigation, and RRNC trainings for their members.
- AL encourages its certified mitigators and testers to help promote radon education at home shows, public meetings and civic group presentations. “The certified professionals gain exposure while providing expert and technical support to our program.”

Make your messages clear and personal

**Testable Ideas**
- Help your audience understand the risk by delivering information that is vivid, concrete and personal
  - Talk about local rather than national statistics and risk
  - Compare radon to familiar risks like x-rays or smoking; avoid unfamiliar risks like lightning strikes
  - Personalize the threat with stories from people who share your audiences’ characteristics
- Highlight the loss or harm that can result from inaction, such as negative effect on property values, cancer, and death

**Strategies in Action**
- WI advises RICs to give the media stories with local flavor. “A press release from local experts that speaks to local concerns will get published. Locally sourced and cited information reaches more people than state outreach.”
- NJ always thinks of new ways to make radon messages vibrant. Recently, NJ began emphasizing that radon is the leading cause of lung cancer in non-smokers. “Some people don’t like it, but we have seen that it’s a powerful message that gets attention, so we’re going for it.”
- At home shows, AL uses a huge color-coded zip code map. “The map draws people like flies because it brings radon close to them…to their neighborhood. We use it as an outreach tool. People stop to look at their zip code and when they’re looking we start talking. They almost always purchase a test kit if their home is in 25% or greater probability zip code area…We also provide zip code maps to city councils in high radon counties and use the map in our fact sheets.”

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Prepare straightforward answers to common questions

Testable Ideas
- Provide clear directions on what to do when radon levels test high
  - Consider peer modeling of the decision to mitigate
  - Demonstrate the positive consequences of mitigation
- Advise your audience on ways to manage the costs of mitigation
- Provide information on how to select qualified mitigators
  - Promote effective mitigations by encouraging follow-up testing

Strategies in Action
- The 16 RICs that support WI offer local access to technical expertise on radon testing and mitigation: at least one staff person at every RIC is certified for measurement, mitigation and contracting. When the public calls 888-LOW-RADON, they are geographically routed to their closest RIC where they can find technical experts, access lists of local testers and mitigators, and hear examples of how their neighbors have managed high radon levels.
- NJ counsels schools to use RRNC in new buildings or additions to reduce potential costs of mitigation if elevated radon levels are later discovered.