Distribution of Radon Professionals in the United States

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ABSTRACT

Measurement and mitigation professionals that are members of national radon organizations (NRSB, NEHA-NRPP, AARST) are unevenly distributed across the United States, leaving some areas underserved and others overserved (i.e., highly competitive). The addresses of members were spatially located, using a geographic information system, and service areas were extended to 50 and 75 miles in an effort to visualize areas in which it may be difficult to obtain professional radon services. A national map of EPA radon zones was overlain onto member service territories to identify areas of high radon potential that are underserved by radon professionals.

METHODOLOGY

In early 2011, city and town names were extracted from the listing of radon measurers and mitigators at the NEHA-NRPP, NRSB, and AARST websites. Buffers of 50 and 75 miles from the geocoded centroid of the city/town were applied as indicative of the distance a radon professional would likely travel for business. The buffers were overlain on the EPA map of radon zones. Professionals that share a common city/town appear as a single point.

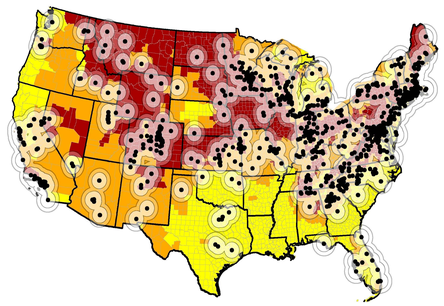

Figure 1. Location of NEHA-NRPP accredited radon measurers.

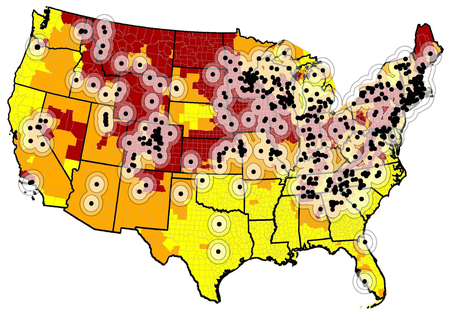

Figure 2. Location of NEHA-NRPP accredited radon mitigators.

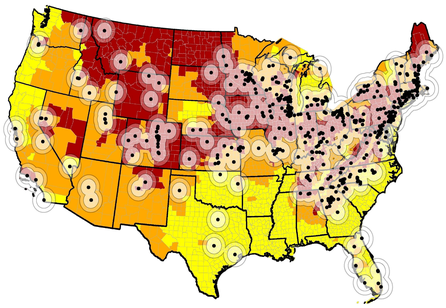

Figure 3. Location of AARST measurement professionals.

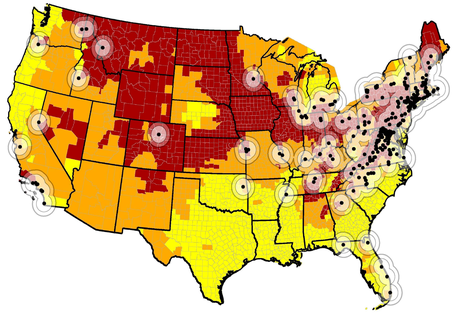

Figure 4. Location of NRSB accredited radon measurement specialists.

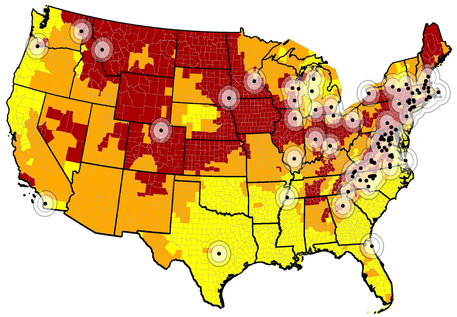

Figure 5. Location of NRSB accredited radon mitigators.

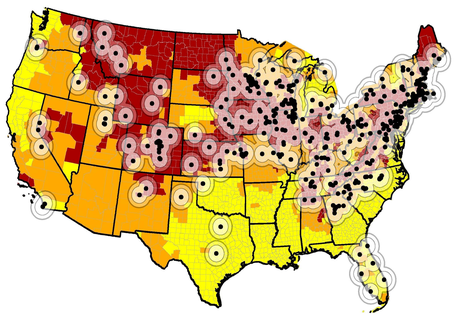

Figure 6. Location of AARST mitigation professionals.

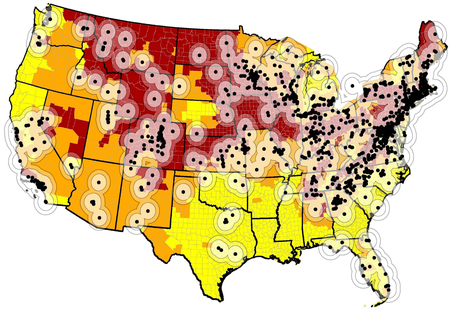

Figure 7. Location of NEHA + NRSB accredited radon measurers.

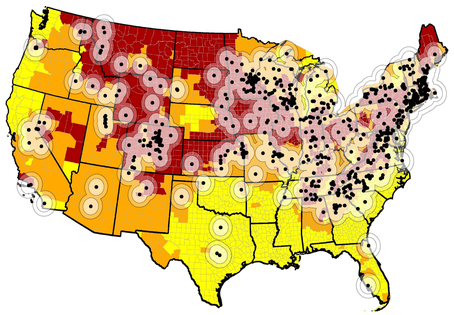

Figure 8. Location of NEHA + NRSB accredited radon mitigators.

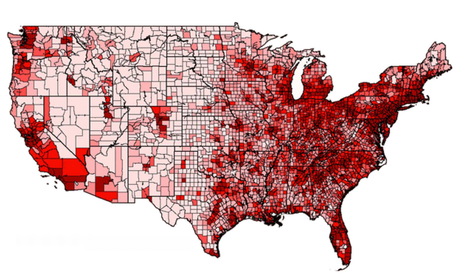

Figure 9. Population density of U.S. by county.

Table 1. Nationally-accredited radon professionals residing in the state, by organization (duplicate companies removed).

State	NEHA-NRPP meas.	NEHA-NRPP mit.	RMS	NRSB RMIT	NRSB mit.	AARST meas.	AARST mit.	SUM* meas.	SUM* mit.	SUM* meas. per 1Million pop.	SUM* mit. per 1million pop.	SUM* meas. per 1million single-family detached houses	SUM* mit. per 1million single-family detached houses
AK	1	1	0	0	0	0	0	1	1	1	1	6	6
AL	10	8	0	0	0	7	4	17	12	4	2	12	8
AZ	5	2	0	0	0	3	1	8	3	1	<1	5	2
CA	37	6	8	1	1	7	3	52	10	1	<1	7	1
CO	50	44	1	0	1	36	39	87	84	17	17	63	61
CT	43	26	27	2	4	26	21	96	51	27	14	112	59
DC	1	1	0	0	0	0	0	1	0	2	0	29	0
DE	5	2	2	0	0	1	1	8	3	9	3	35	13
FL	12	2	5	0	1	10	8	27	11	1	1	6	2
GA	25	9	1	2	1	30	10	56	20	6	2	21	7
HI	3	2	0	0	0	0	0	3	2	2	1	11	7
IA	5	7	0	0	0	21	24	26	31	9	10	26	31
ID	5	4	2	0	0	3	2	10	6	6	4	21	13
IL	8	2	3	0	2	43	23	54	27	4	2	18	9
IN	58	25	7	0	1	25	6	90	32	14	5	44	16
KS	23	14	0	0	0	37	27	60	41	21	14	67	45
KY	13	9	3	1	0	20	17	36	26	8	6	28	20
MA	23	18	13	2	8	17	20	53	46	8	7	37	32
MD	42	13	18	2	4	14	7	74	24	13	4	62	20
ME	15	9	3	0	0	13	13	31	22	23	17	63	45
MI	30	20	6	0	4	20	9	56	33	6	3	17	10
MN	48	49	1	0	0	34	31	83	81	16	15	52	51
MO	24	19	4	0	0	9	9	37	28	6	5	20	15
MT	7	6	1	0	1	3	2	11	9	11	9	36	30
NC	37	30	8	1	9	47	32	92	71	10	7	33	26
ND	3	1	0	0	0	1	1	4	2	6	3	21	10
NE	2	2	0	0	0	9	8	11	10	6	5	19	17
NH	8	11	2	0	3	6	9	16	23	12	17	42	61
NJ	7	5	4	2	2	9	4	20	11	2	1	11	6
NM	7	3	0	0	0	8	6	15	9	7	4	26	16
NV	5	4	1	0	0	3	4	9	8	3	3	13	12
NY	43	43	41	5	9	28	28	112	78	6	4	33	23
OH	21	8	3	0	3	52	28	76	39	7	3	22	11
OK	3	1	1	0	0	4	1	8	1	2	<1	7	1
OR	6	6	1	0	1	2	2	11	9	3	2	10	9
PA	14	12	16	1	3	34	31	64	46	5	4	20	15
RI	20	6	9	0	2	9	11	38	19	36	18	149	74
SC	10	8	1	1	0	6	3	17	11	4	2	13	8
SD	6	6	0	0	1	2	9	8	16	10	20	32	64
TN	20	23	5	0	2	18	20	43	45	7	7	23	24
TX	8	4	0	0	1	6	3	14	8	1	<1	2	1
UT	8	9	0	0	0	4	5	12	14	4	5	18	21
VA	55	14	54	9	31	13	16	122	61	15	8	59	29
VT	7	8	2	0	0	5	3	14	11	22	17	68	53
WA	3	2	1	0	1	3	4	7	7	1	1	4	4
WI	52	55	2	0	3	49	45	103	103	18	18	60	60
WV	14	6	0	0	0	0	0	14	6	8	3	22	9
WY	7	8	10	1	1	10	9	27	18	48	32	167	111
Listed	2226	1513	346	37	122	734	553	1834	1229				
Unique	1572	863	324	35	116	655	434						
Towns/ cities	859	571	266	30	101	709	557						

* SUM includes NEHA-NRPP, NRSB, and AARST, but not State programs.
Three states (AR, LA, and MS) have no resident radon professionals.

RESULTS AND DISCUSSION

- The number of city/towns which have the service of a radon professional varies greatly.
- Three states (AR, LA, MS) have no resident nationally-accredited radon measurers or mitigators.
- Many Zone-1 counties do not contain nationally-accredited radon measurers or mitigators.
- Few states have complete coverage by nationally-accredited radon measurers or mitigators.
- RI and CT have the greatest number of mitigators per 1,000 single-family homes.
- WY and SD have the greatest number of mitigators per capita (due to small populations).
- Every regulated state program has more licensed radon professionals than the national accrediting organizations for those states.
- 24 = Mitigation and measurement individuals accredited by both NEHA-NRPP and NRSB
- 11 = Mitigation and measurement individuals listed by both NEHA-NRPP and AARST
- 2 = Mitigation and measurement individuals listed by both NRSB and AARST