

# Region 10 Tribal Radon Update

Johna Boulafentis, Nez Perce Tribe

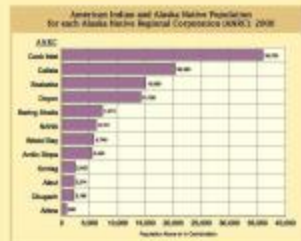
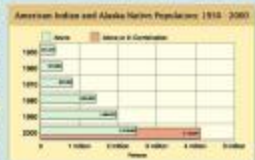


# American Indians and Alaska Natives in Alaska

RUSSIA

Arctic Ocean

CANADA



Bering Sea

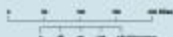
Calista

Alaska

Bristol Bay

Gulf of Alaska

Sealaska



USCENSUSBUREAU

**Legend**

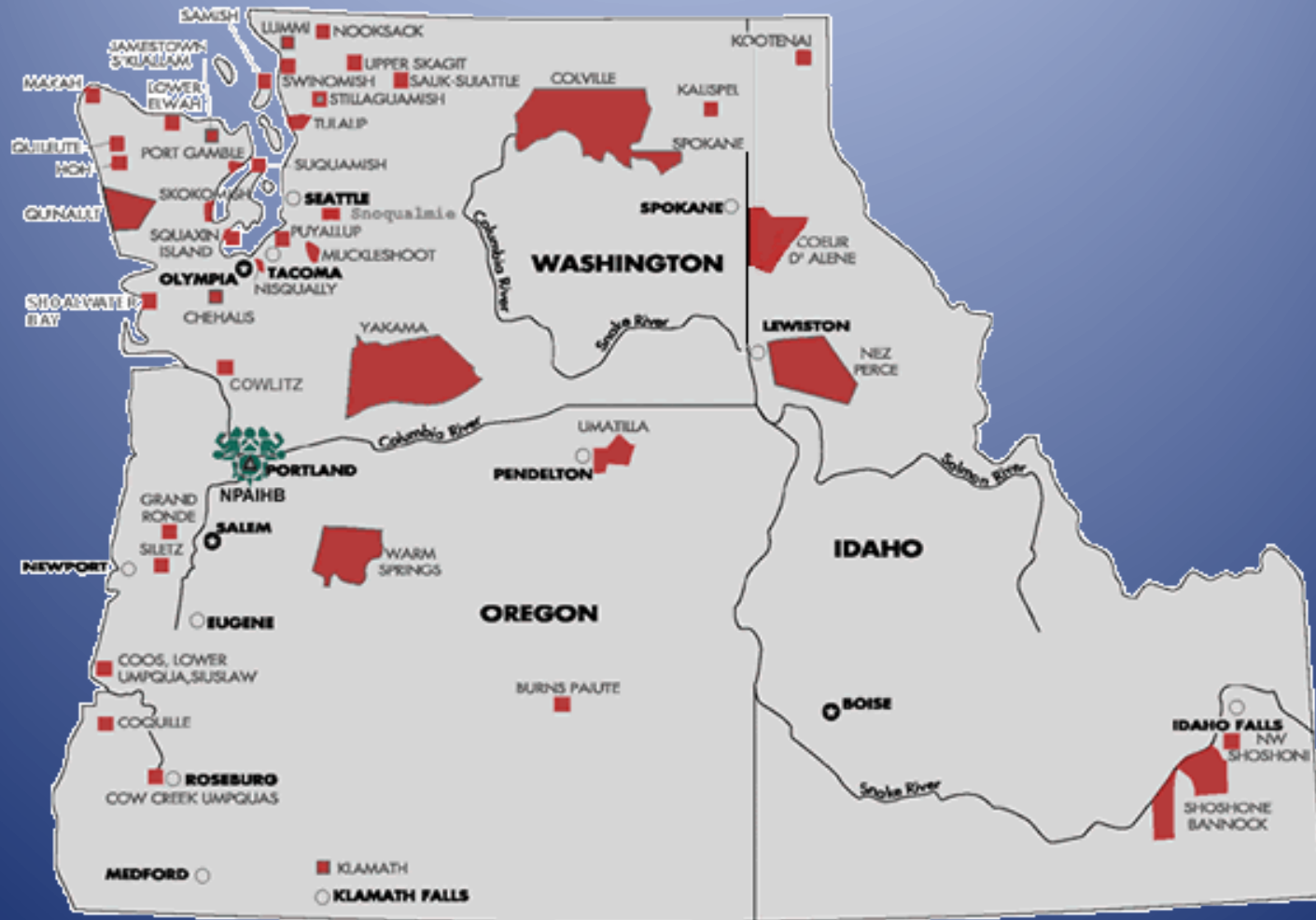
- American Indian Reservation and/or CE Reservation (Dark Land Pattern)
- Other Reservation (Light Land Pattern)
- Alaska Native Village Statistical Area
- Alaska Native Regional Corporation
- International Boundary
- State Boundary

See Most Populated Reservations and CE Reservations (Total Land, 2000)

Reservation	Total Land (2000)
Navajo	~10,000,000
San Carlos	~10,000,000
Fort Belknap	~10,000,000
Fort Hall	~10,000,000
Fort Lapwai	~10,000,000
Fort Lemhi	~10,000,000
Fort Snelling	~10,000,000
Fort Tule Lake	~10,000,000
Fort Verde	~10,000,000
Fort Yuma	~10,000,000
Fort Stanton	~10,000,000



# Tribes in Idaho, Oregon & Washington



# Enrolled Tribal Members in EPA Regions

EPA Region	Estimated Population of Enrolled Members
AK*	26,026
10	23,440
9	332,468
8	27,264
7	19,423
6	413,944
5	95,338
4	2,761
3	
2	6,362
1	6,991
Total Population	1,969,167
567 Federally Recognized Tribes	

# Study Process

- Survey Background
- Pilot
  - Four tribes from other regions
  - Agencies/organizations with a tribal indoor air quality (IAQ) focus
- Distribution through tribal environmental, tribal air and tribal housing networks and newsletters
- Survey open for eight weeks
- Supplemental concurrent research



WE SHOULD REALLY HAVE THE OFFICE'S AIR QUALITY TESTED.  
WE HAVE RADON COMING FROM BELOW.  
WE HAVE ASBESTOS IN THE CEILINGS.  
THESE ARE SILENT KILLERS.



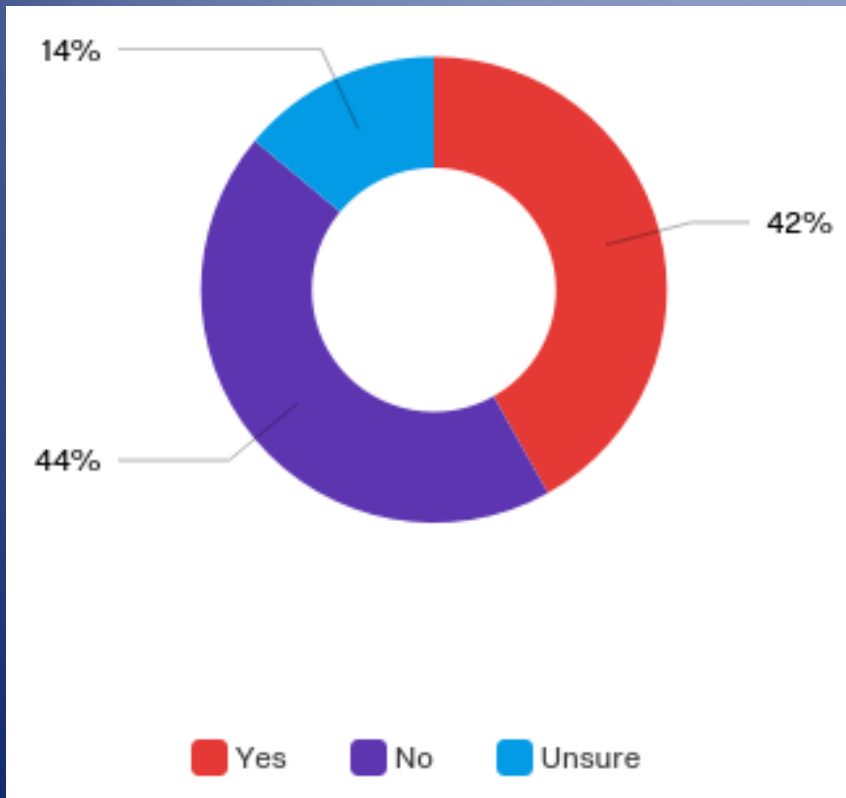
YOU ARE THE SILENT KILLER. GO BACK TO THE ANNEX.

# Survey Results

- 59 total surveys
  - 43 completions for data analysis
  - One completion per tribe (housing, air, environmental or planning departments)
- Response rate
  - 53% of 43 Idaho, Oregon, Washington tribes
  - 9% of 229 Alaska tribal communities
  - Average of 8 years in position

# Radon Work for R10 Tribal Communities

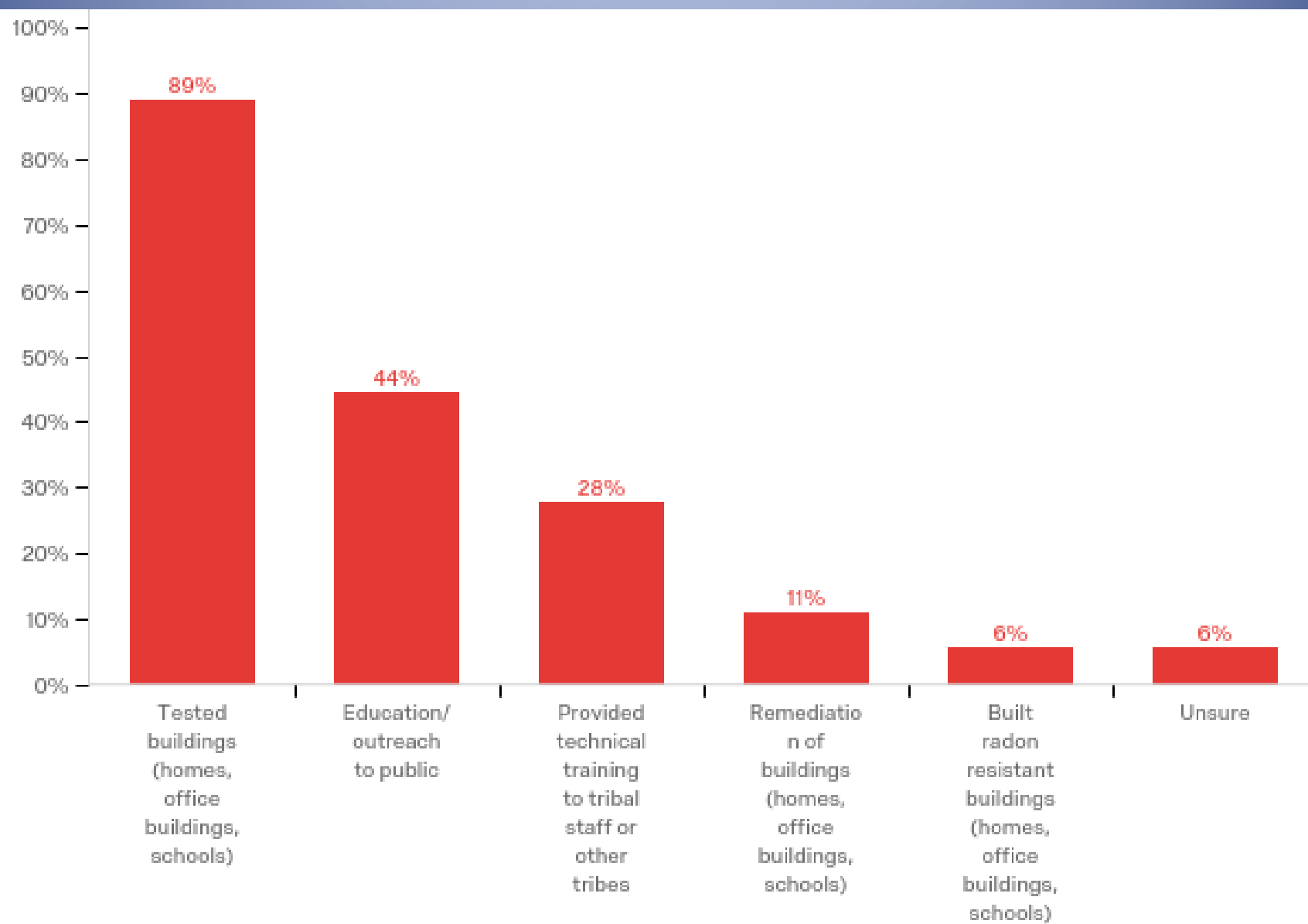
Has your Tribe ever done any radon work?



- 55% of the work conducted in the 2010s
- 28% of the respondents are currently working on radon issues
- Funding from tribal, federal, and state government



# R10 Tribal Radon Activities

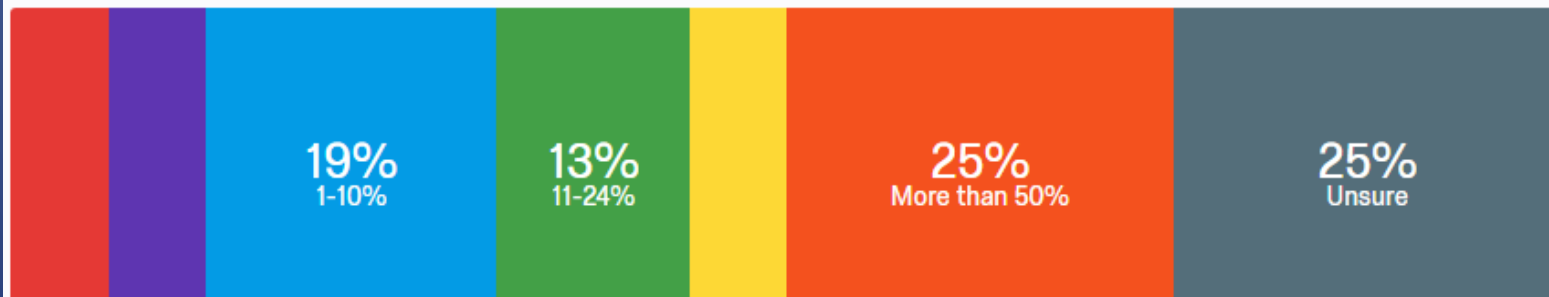


# Radon Testing

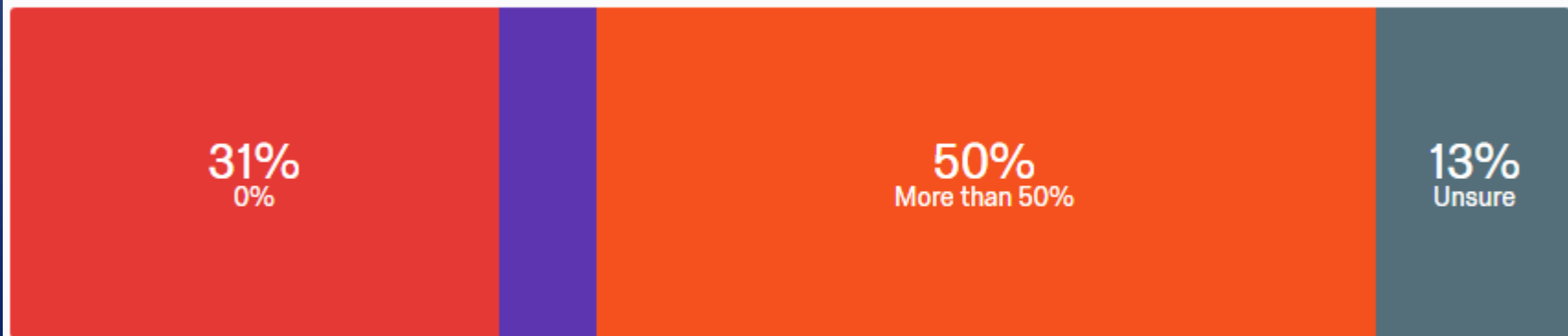
What percentage of tribal homes were tested?



What percentage of tribal office buildings were tested?



What percentage of tribal schools were tested?



0%    Less than 1%    1-10%    11-24%    25-50%    More than 50%    Unsure

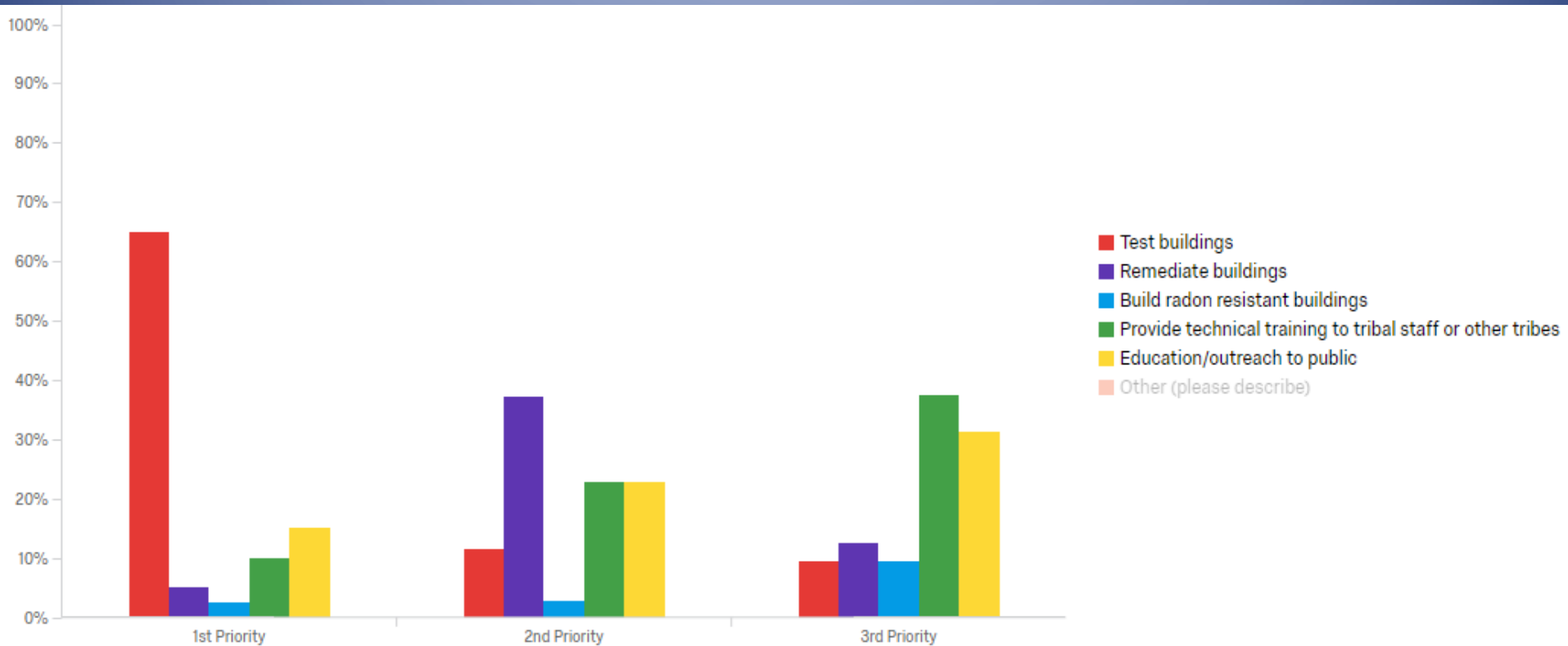
# Radon Outreach & Education

- Outreach/education to public
  - Primarily providing general radon education with 50% of respondents offering test kits
  - 14% offered specific education on radon
- ITEP IAQ trainings for tribal staff (1990s - present)
  - 19 trainings in R10 tribal communities, 353 people trained
- Online training – Radon Fundamentals
- Washington State University, Extension Energy Program (2000s-2010s)
  - 11 tribes; workshops ranged from general radon education to radon testing to mitigation
  - EPA and Indian Health Service funding
- Technical trainings to staff

# Supplemental Research

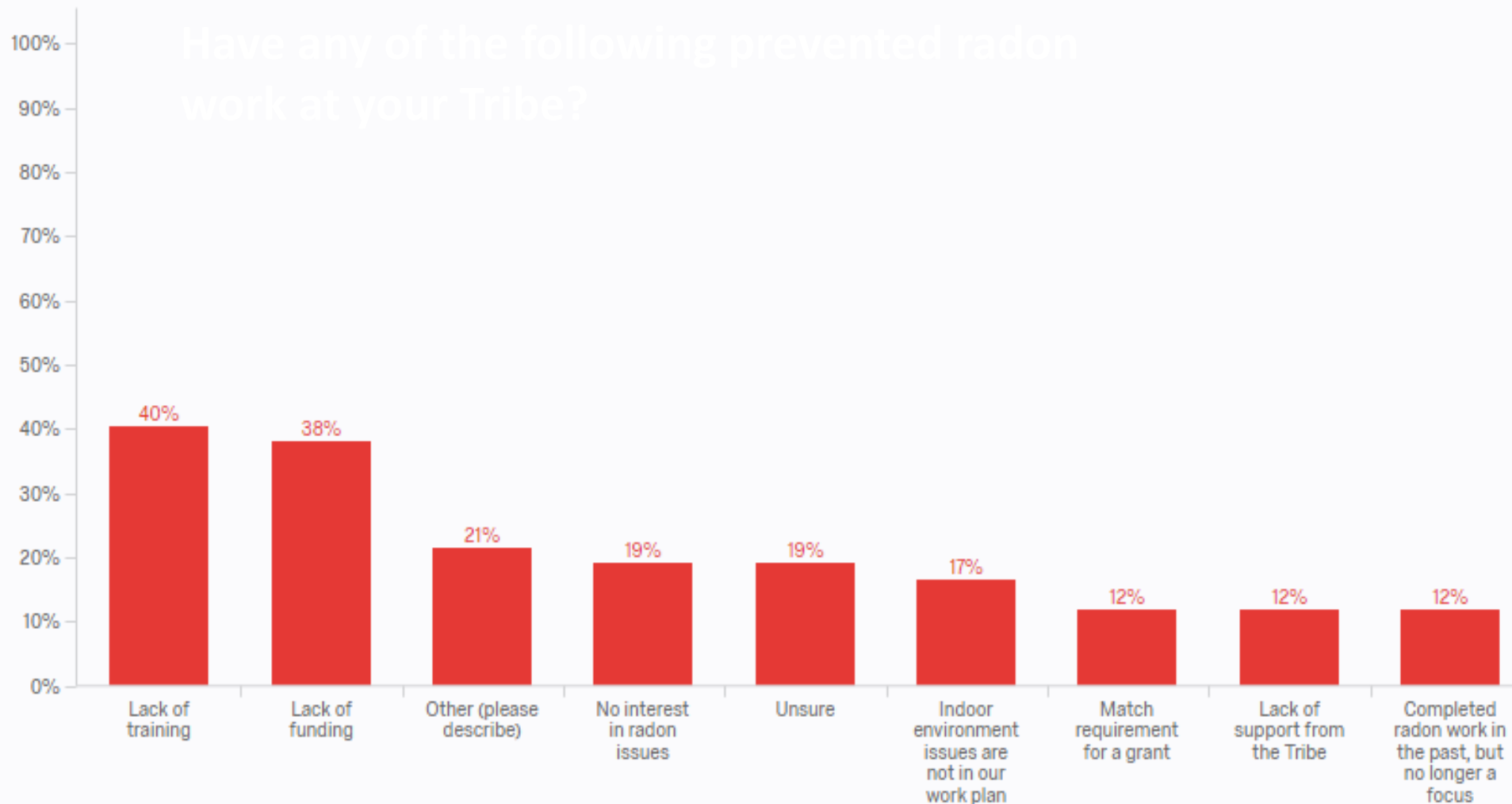
- Alaska Native Health Consortium
- Institute for Tribal Environmental Professionals
- Former Employee of an Alaskan Village
- IAQ & Building Science Expert formerly with Washington State University
- NTAA Indoor Air Quality Needs Assessment for Indian Country, May 2017
- Tribal Healthy Homes Network - 2017 IAQ Funding Guide for American Indian & Alaska Native Communities
- Environmental Law Institute -Database of State Indoor Air Quality Laws

# Prioritizing Radon Activities



# Barriers to radon work

Have any of the following prevented radon work at your Tribe?



# Challenges & Barriers

- Misconception about radon
- Small offices, many hats
- Loss of institutional knowledge
- Lack of communication between programs
- Record storage and sharing
- National and regional funding cuts

# Strengths & Opportunities

- R10 tribal communities have or are currently conducting radon activities
- R10 staff have received training and need more
- Collaboration occurs to address radon issues AND there are more opportunities to partner
  - Regionally with tribes, federal and state
  - Within tribal departments
- This research fits into the national conversation about tribal indoor air quality and confirms the need for more regional perspectives and regional agency collaborations



# Acknowledgments

- Region 10 RTOC
- Northwest Indian Housing Association
- Tribal Healthy Homes Network
- EPA R10 Tribal Air
- Alaska Native Health Consortium
- National Tribal Air Association & NTAA Indoor Air Quality Workgroup
- Institute for Tribal Environmental Professionals
- Survey Piloters & Interviewees