

Radon & Real Estate Discussion Panel

Brian Hanson, NRPS

Todd Stock, ReMax Greenwood

Lesli Gibson, Maywright Property CO

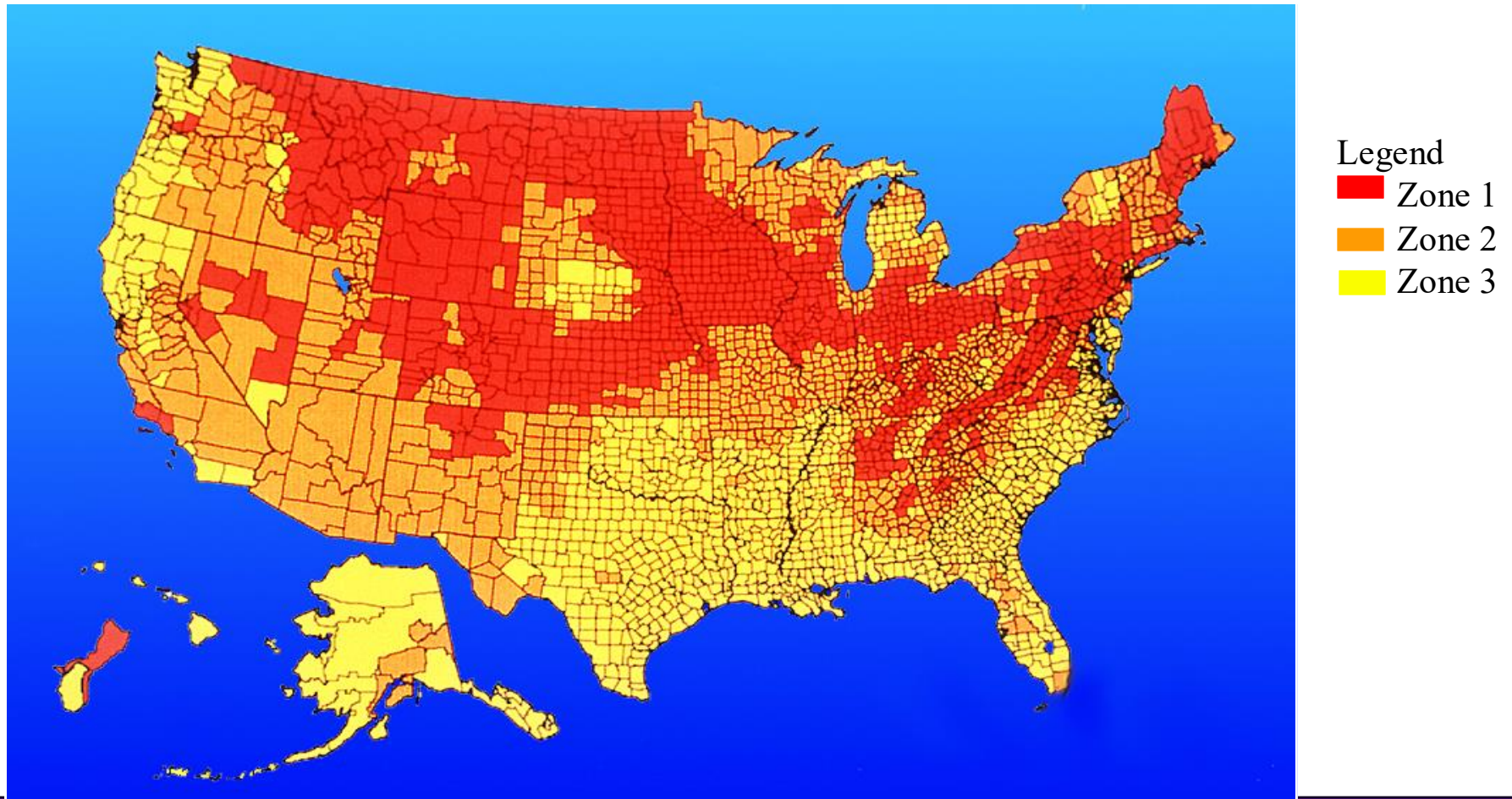
Bob Coffee, YES Labs

Topics

- Brief introduction
 - Why we focus on single-family real estate
 - Issues of buy-in
 - Issues of communication
 - Impacts on real estate transactions
- Open discussion
 - Martie Robison, opening remarks and Q&A
 - Mike Hammock, Hammock Homes LLC

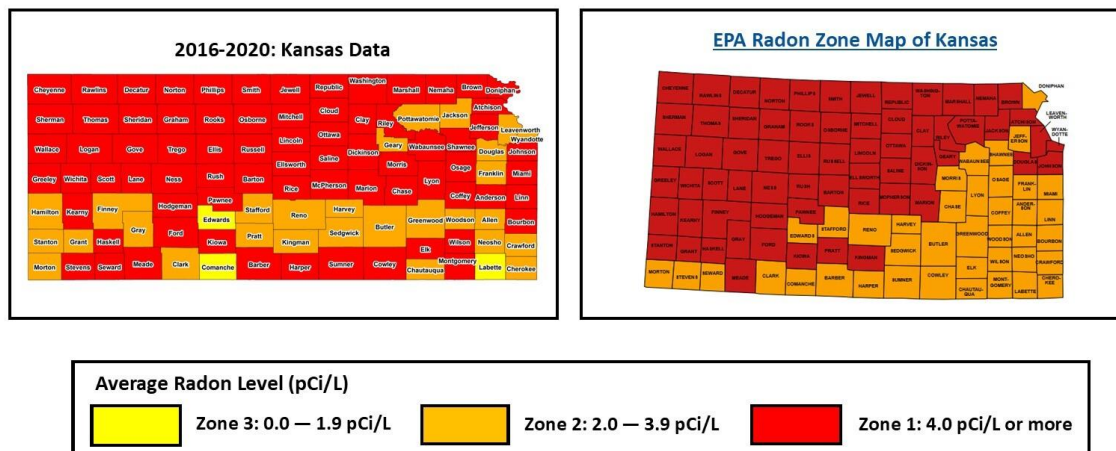
Intro Remarks

U.S. Radon Zone Map



Limitations of the US Radon Zone Map

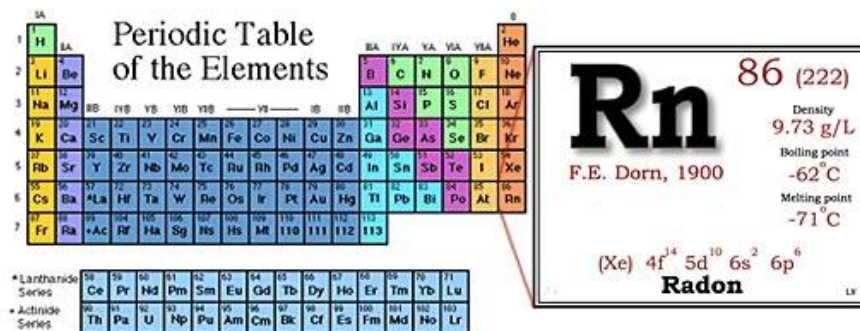
A Comparison of Average Radon Levels by Kansas County



Radon

- Invisible, odorless, tasteless, colorless, inert, **radioactive** gas
 - Occurs from the natural breakdown of Uranium
 - Travels through soil
 - Enters homes, schools, other buildings
- Elevated indoor levels found in every state

Periodic Table of the Elements



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
H	He																
Li	Be	B	C	N	O	F	Ne										
Na	Mg	Al	Si	P	S	Cl	Ar										
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Ac	Rf	Ha	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po

* Lanthanide Series
* Actinide Series

Rn 86 (222)
F.E. Dorn, 1900
Density 9.73 g/L
Boiling point -62°C
Melting point -71°C
(Xe) 4f¹⁴ 5d¹⁰ 6s² 6p⁶
Radon



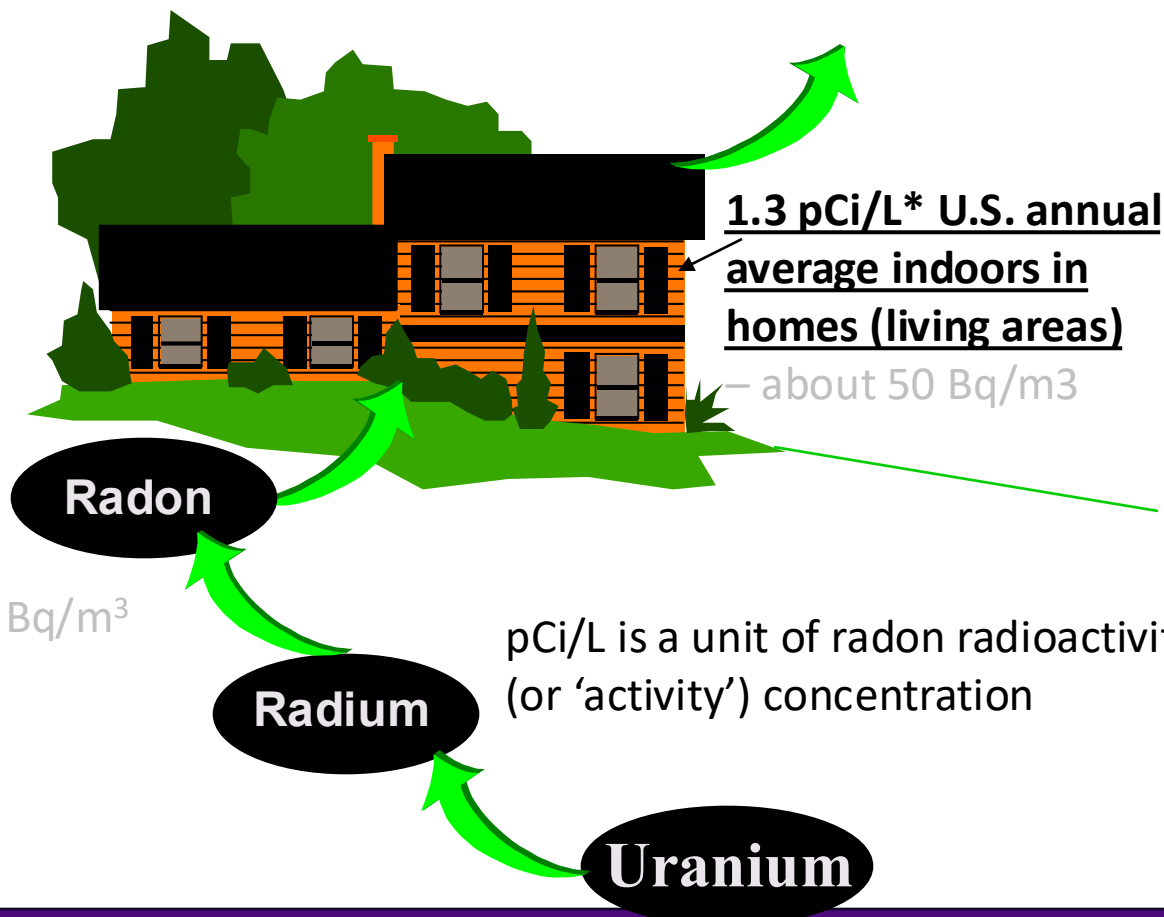
Radon Entry

0.4 pCi/L * U.S. annual
average outdoors

— about 15 Bq/m³

100s - 100,000s pCi/L

— 1,000s – 1,000,000 Bq/m³



Current Understanding: Radon Health Effects

- Radon causes lung cancer even BELOW EPA's radon action level of 4 pCi/L (150 Bq/m³)
 - North American, European, and Chinese studies report 8 to 16% increase in lung cancer 2.7 pCi/L (100 Bq/m³)
- **MOST radon-induced lung cancer occurs below EPA's action level**
 - Protracted radon exposure increases the risk of all types of lung cancer
 - Prevention and mitigation methods reduce the risk
 - Susceptibility to radon-induced lung cancer varies (e.g., smoking, genetics)
- Protracted radon exposure appears to have adverse health effects beyond lung cancer (e.g., leukemia, stomach and liver cancer)

(Field, RW 2008 "Testimony Before the President's Cancer Panel," Charleston, SC [December 4])

Issues of Buy-in

- Realtors
 - Radon becomes an impediment
 - Issues of liability related to environmental health risks?
- Sellers
 - If I had a radon problem I'd be sick
 - Unnecessary costs
- Buyers
 - What the heck is radar?
 - Additional layer of due diligence

Issues of Communication

- Testing phase communications
 - Are sellers present during due diligence inspections?
 - Communicating building operational conditions to the occupants
 - Owner-occupied
 - Tenant-occupied
- Mitigation phase communications
 - Seller-organized installations
 - Mitigator communication with the end-user?

Impacts on Real Estate Transactions

- Current challenges with due diligence
 - Are buyers still having to discard due diligence to make a successful bid?
 - Are sellers changing their responses to due diligence requests by buyers when inspections occur?
- Does radon testing/mitigation requests cause home sales to fall through?

Menti Live Discussion

Panel Discussion

National Radon Programs

@

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Todd Stock, ReMax Greenwood

- Opening remarks
 - Brief review of national changes in real estate transaction commissions
 - Any thoughts on transactional impacts related to the commission changes
- Questions of interest
 - What issues related to due diligence and radon specifically do you see in your market?
 - How do you personally discuss radon issues with both your buyers and your sellers?

Lesli Gibson, Maywright Property Co.

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Bob Coffee, YES LABs

- Opening remarks
 - Service area
 - Service type(s)
 - Radon
 - Other environmental services
- Questions of interest
 - How do you address the cost (seller) v. quality (buyer) issue?
 - Are you receiving calls/questions about other chemical of concern (CoC) contaminants?

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Open Discussion