Interior Health

The Interior Health Daycare Testing Experience BC Lung, Radon Workshop

Greg Baytalan B.Sc., C.P.H.I.(C)
Air Quality Specialist
Interior Health Authority

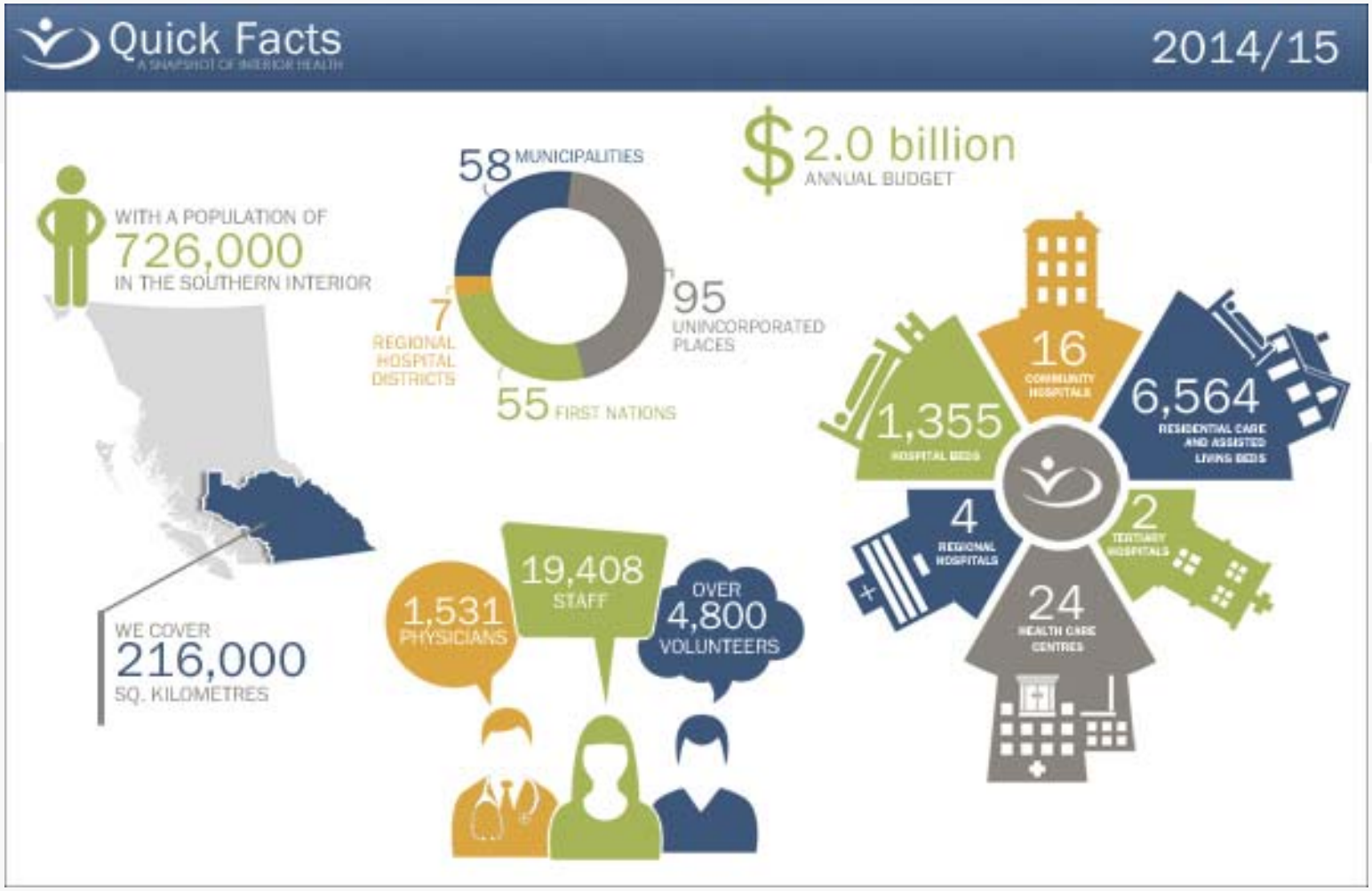
November 23, 2015
Kamloops, BC

Daycare Sampling

Part of the Health Canada & Interior Health Radon Awareness Project Memorandum of Agreement (MOA)

Interior Health

IH At a Glance



Interior Health

Steps So Far

- Dec. 10, 2010 (prior to MOA) – Radon education letter from Senior MHO encouraging testing
  - Very little uptake, very few inquiries
- November 9, 2012 Health Canada and IH MOA
  - 3 Years, to March 31, 2015
  - Extended to March 31, 2016

Interior Health

Steps continued…

- December 10, 2013 – Radon detector with education letter from Senior MHO encouraging Operators take advantage of this initiative
- January 30, 2014 – Repeat mailing letter to approximately 200 daycares
- November 17, 2014 - Reminder letter to approximately 550 daycares

Interior Health

Outgoing Information with Detector

- Introductory letter
- Instruction sheet
- Pouch with detector inside
- Gold Seal taped to Requisition Form
- Requisition (test data sheet)
- BC Lung Building Envelope Survey
- Return envelope, self-addressed postage paid

Interior Health

Clear Information

- Topic Introduction, who, what, where, when, why
- Education & Health Canada website
- Testing is the only way to know
- Reassurance that detector is safe (remember topic involves radiation)
- Large (>200m² (2152ft²) multi-room building provisions (more detectors)
- Promote, Encourage, Sell Health!

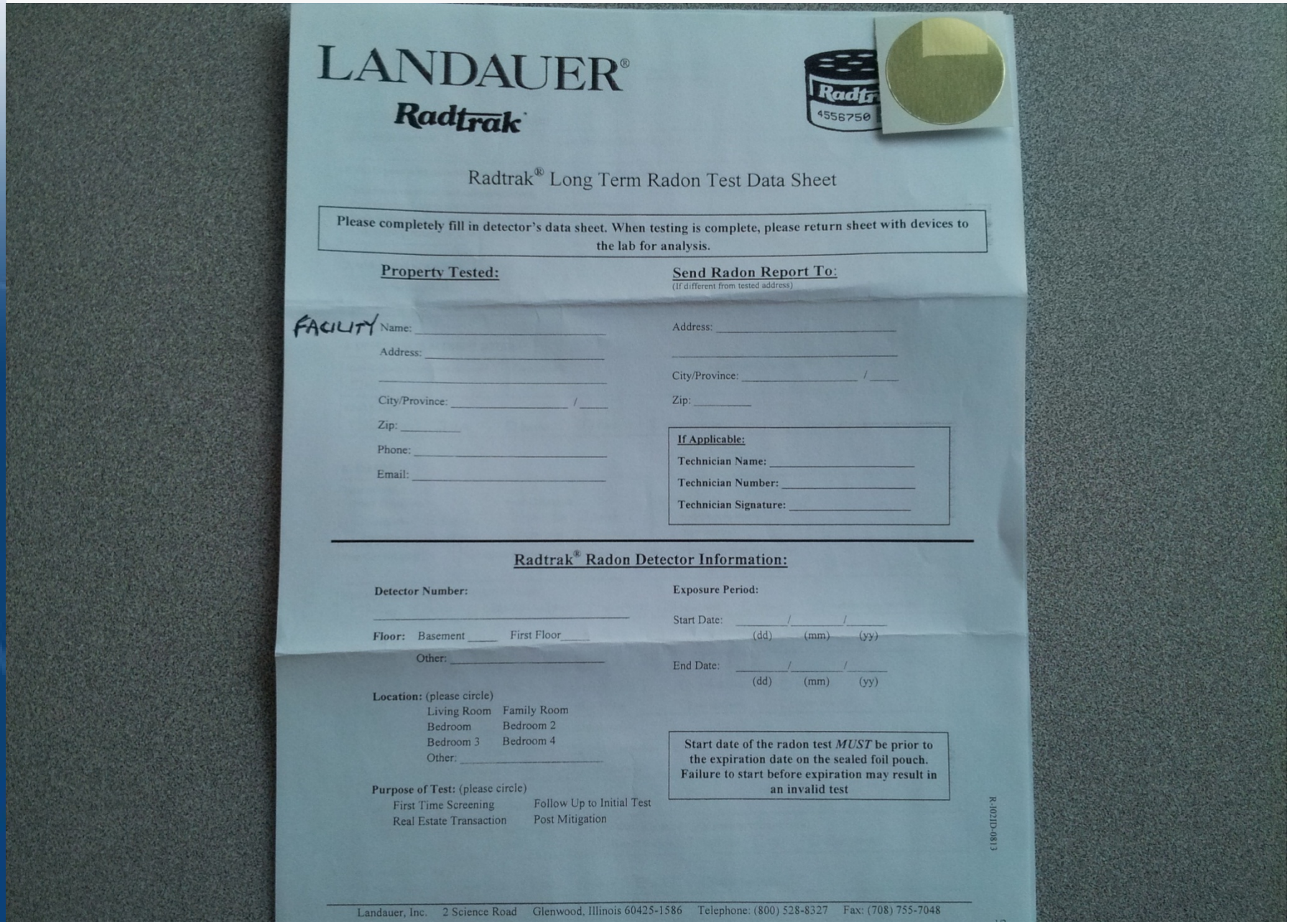
Interior Health

Deployment Instructions

- Define goal (test child's indoor air)
- Ideal location & areas to avoid
- Recognize challenges and provision for leeway when acknowledged
- 91 day minimum (don't say 3 months)
- Please Reply - Detector is deployed
- Suggest reminder on calendar
- Return in postage-paid envelope
- Duplicate & Blank description (simple)
- Any questions call or e-mail…

Interior Health

Keep it Simple, Yet Retain Quality



LANDAUER®

Radtrak

Radtrak® Long Term Radon Test Data Sheet

Please completely fill in detector's data sheet. When testing is complete, please return sheet with devices to the lab for analysis.

Property Tested:

FACILITY Name: _____

Address: _____

_____

City/Province: _____ / ____

Zip: _____

Phone: _____

Email: _____

Send Radon Report To:
(If different from tested address)

Address: _____

_____

City/Province: _____ / ____

Zip: _____

If Applicable:

Technician Name: _____

Technician Number: _____

Technician Signature: _____

Radtrak® Radon Detector Information:

Detector Number:

_____

Floor: Basement ____ First Floor____

Other: _____

Location: (please circle)

Living Room Family Room
Bedroom Bedroom 2
Bedroom 3 Bedroom 4
Other: _____

Purpose of Test: (please circle)

First Time Screening Follow Up to Initial Test
Real Estate Transaction Post Mitigation

Exposure Period:

Start Date: _____/_____/_____
(dd) (mm) (yy)

End Date: _____/_____/_____
(dd) (mm) (yy)

Start date of the radon test *MUST* be prior to the expiration date on the sealed foil pouch. Failure to start before expiration may result in an invalid test

R-102ID-0813

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586 Telephone: (800) 528-8327 Fax: (708) 755-7048

Consistency & Continuity

Interior Health

Reliance on Operator Sampling…

- No paperwork
- Conflicting information on paperwork
- Illegible
- No facility name
- No dates
- PO Box for physical address
- No gold seal
- Etc., Etc…

Time & More Time, Big-Time!

Interior Health

Quality Assurance

- Return to Sender

Paperwork

- Paper records, Excel spreadsheet…

Results Relay - Letter

- Crystal Clear… Clarity…
- More Quality & Assurance
- Individualized letter
  - Name of Facility
  - Detector Number(s)
  - Address Deployed
  - Location in Building Deployed
  - Deployment Start & End Dates
  - Result(s)
  - Error Acknowledgement
  - Comparisons, Cdn. Guideline, WHO

Interior Health

Letter - Promotion & Awareness

- Don't use "safe" or "low risk"
- The lower the Bq/m³ the better
- Lowest reasonably possible
- Health Canada suggested mitigation timelines
  - 200 – 600 Bq/m³ fix within 2 years
  - >600 Bq/m³ fix within 1 year
- Transparency of results (notify clients)
- Influencing factors (seasons, HVAC, renovations, pressure differences)

Interior Health

Letter – Promotion & Awareness

- Retest every 5 years
- Mitigation website & Mike Holmes clip
- Google Map the location & cc Letter (School District, First Nations Band, Owner, NGO, etc.)

Interior Health

Child Care Facility Inventory

- Total 852 (includes 43 new March 31 to Oct. 24, 2014)
- Facilities Returning Detector(s) 375
- Follow-Through Participation 44%
- Facilities With Lab Results 360

Interior Health

Results Summary

<=100 Bq/m³

255 or 71% of those with results

<=200 Bq/m³

318 or 88% of those with results

>200 Bq/m³

40 or 11% of those with results

Interior Health

Results Summary Continued

>600 Bq/m^3

8 or 2% of those with results

>1000 Bq/m^3

4 or 1% of those with results

Interior Health

>600 Bq/m³

875 Bq/m³ Invermere (mitigated)

941 Bq/m³ Fruitvale

667 Bq/m³ Revelstoke

Interior Health

>1000 Bq/m³

1868 Bq/m³ Coldstream (Vernon)
(18 day test; owner re-testing)

1235 Bq/m³ Oliver (moved Dec. 2014)

1013 Bq/m³ Sicamous area
(no response)

3160 Bq/m³ Castlegar
(mitigated to 30 Bq/m³ long-term test)

Interior Health

Funding Assistance

- Ministry of Children and Family Development (MCFD)
  - Minor capital funding for emergency repair, Child Care Capital Funding
  - Up to $2000.00 per facility
  - Can be used for radon mitigation
  - Certain restrictions
  - www.mcf.gov.bc.ca/childcare/pdfs/cf_1304.pdf

Interior Health

Fall 2015 Initiatives

- School Newsletter Invite to Participate in School screening (~6 responses)
- local government building screening (5 participating)
- First Nations Health Authority (FNHA) & IHA working together on screening
- UBCO 3rd Year Marketing, Student Marketing "Health" project

Interior Health

- IH Buildings (owned & leased) screening; re-testing & mitigating ~2300 detectors for 308 sites
  - 88 samples in 23 sites at or >200 Bq/m³
    10 samples (3 sites) >600 Bq/m³
    5 samples (1 site) >1000 Bq/m³
    highest 5461 Bq/m³
  - Compared to Daycare

	Daycare	IH
>200 Bq/m³	11%	8%
>600 Bq/m³	2%	1%
>1000 Bq/m³	1%	0.3%

Interior Health

Thank You

Greg Baytalan
Greg.Baytalan@interiorhealth.ca
(250) 868-7853