



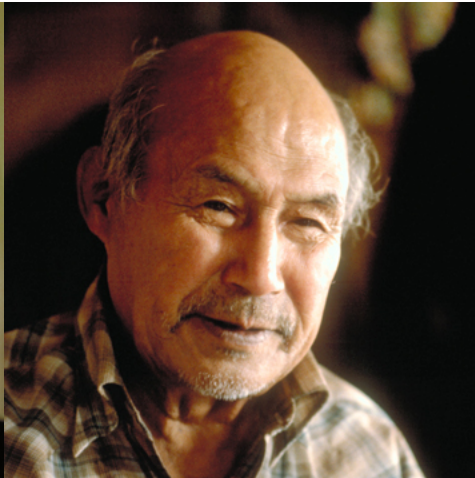
Health
Canada Santé
Canada

*Your health and
safety... our priority.*

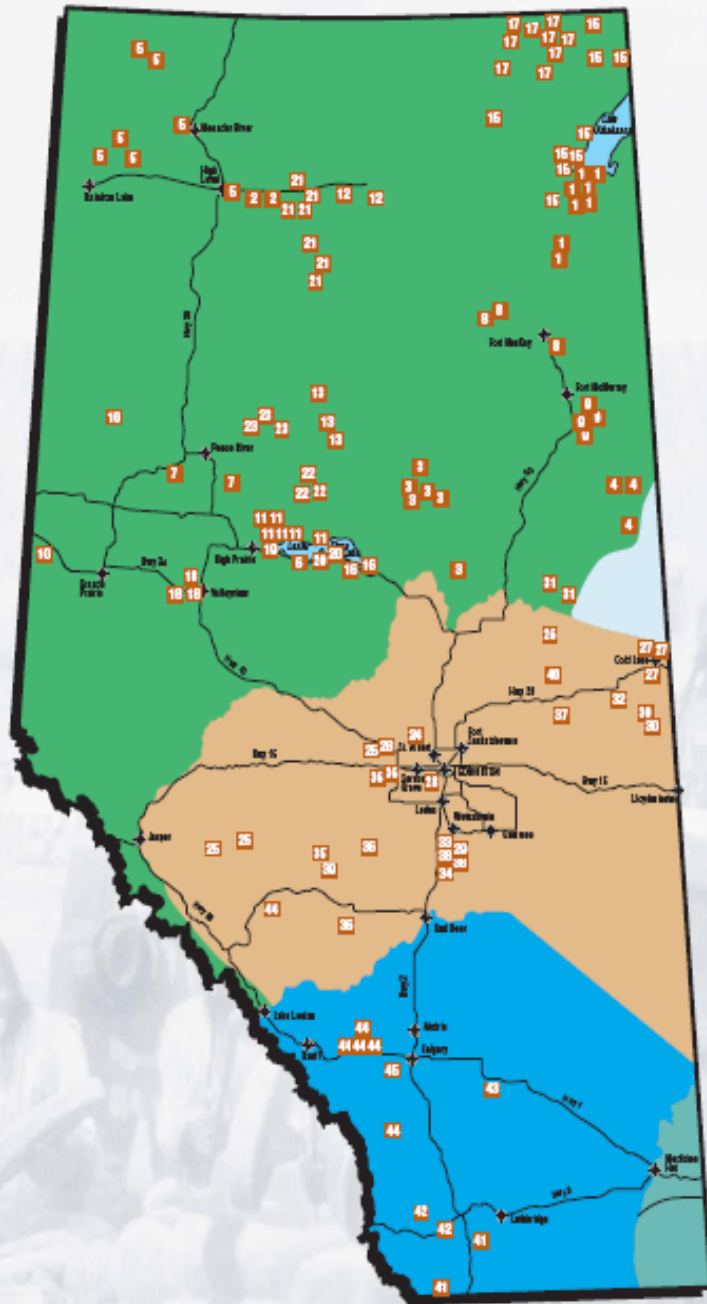
*Votre santé et votre
sécurité... notre priorité.*

Environmental Health Services

Housing and Health



Canada 



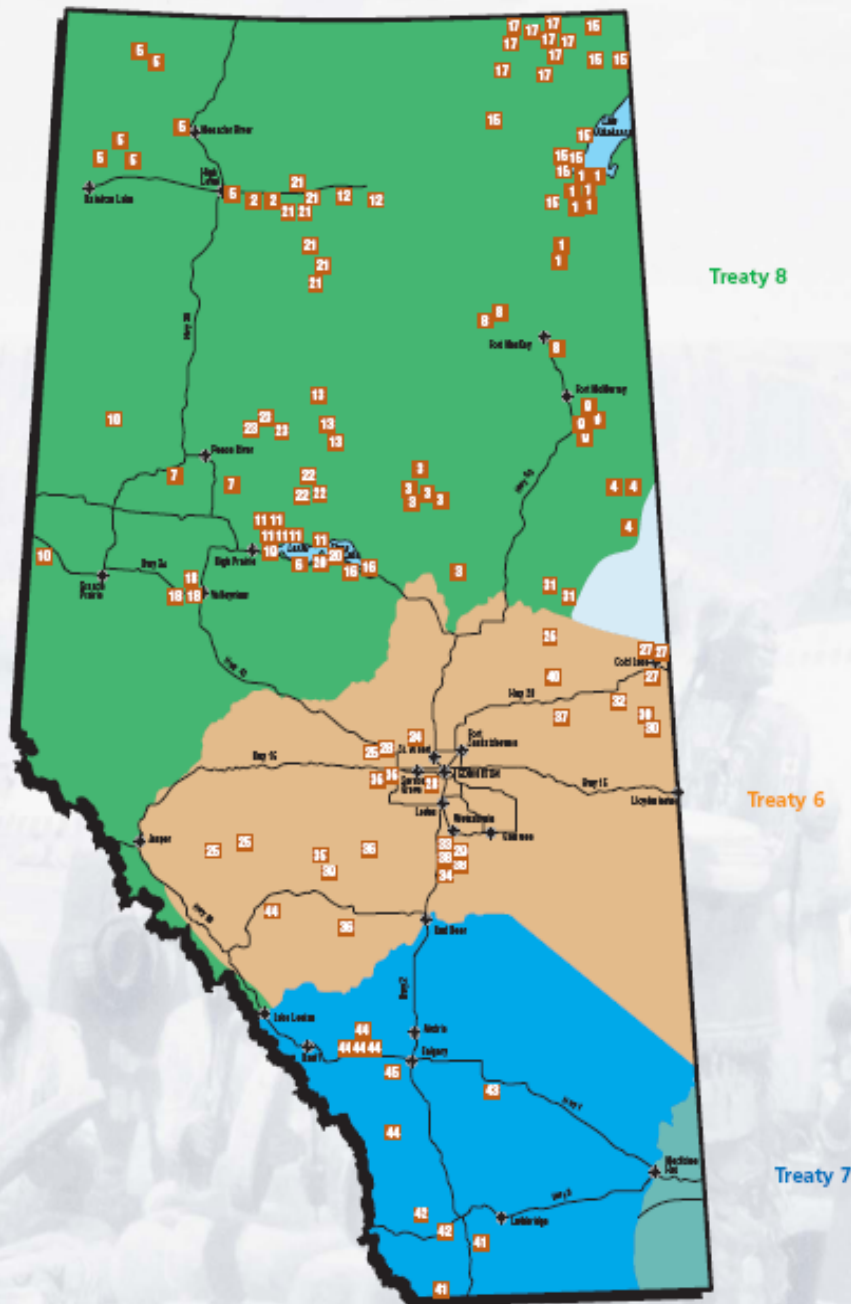
Treaty 8

Treaty 6

Treaty 7

Alberta Region:

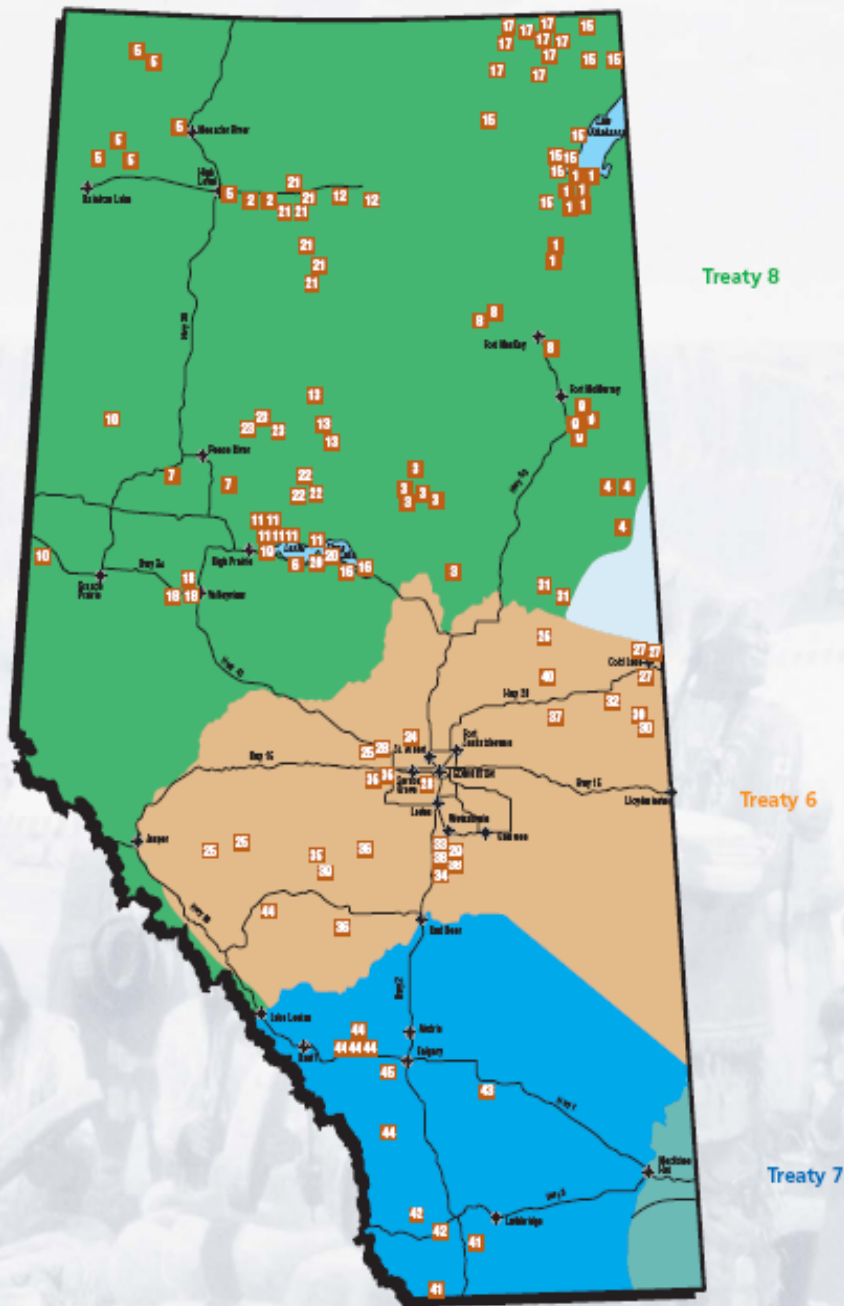
3 Treaty Areas



13,596 houses

1/3 of houses supplied by community water, 1/3 supplied by private wells, 1/3 supplied by cisterns

* Source: www.ainc-inac.gc.ca/



MOH

Regional Environmental Health Manager (REHM)

Senior EHO

- 11 EHO's- Edmonton
- 2 EHO's - Calgary
- 1 EHO- Lethbridge



Environmental Health Services

Programs

- Environmental Health
- Transportation of Dangerous Goods
- Environmental Contaminants
- Environmental Assessments



Environmental Health

- Communicable Disease
- Food Safety
- Pest Control
- Health Promotion/ Education
- Emergency Response
- Sewage Treatment/ Disposal
- Solid Waste Management
- Water Quality
- Zoonotics
- Housing



Housing Inspections

- Upon request
- Conditions compared to *Minimum Housing and Health Standards*
- Write report with recommendations
- Assists housing directors identify important issues
- Referrals to other specialists



Causes of House Health Issues

- Pests in the house
- Over Crowding
- Failure of house systems
- Improper construction / lack of maintenance
- Air quality problems in the home
- Moisture and mould in the home



EHO Involvement of new Homes

- Site Selection (flood plain/ ground water)
- Water Systems
 - community / private
 - testing for chemical and bacterial
- Sewage systems
 - PSDS
 - design review, final inspection
 - protocol





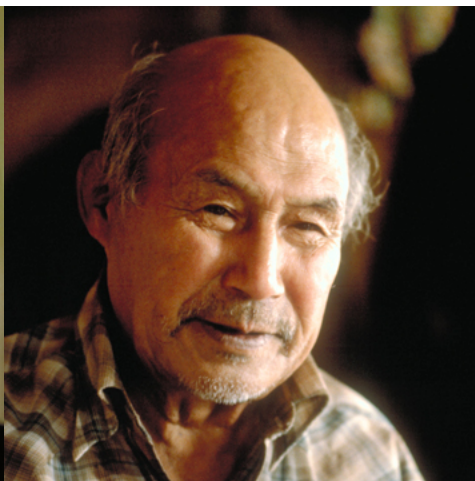
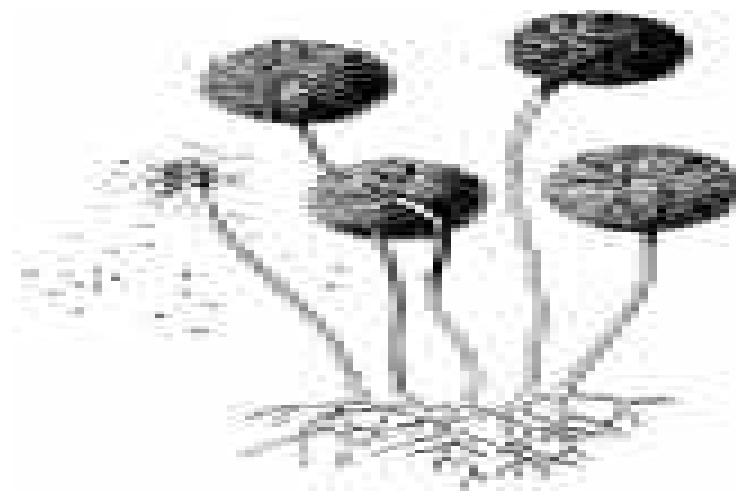
Health
Canada Santé
Canada

Your health and
safety... our priority.

Votre santé et votre
sécurité... notre priorité.

Mould IN HOUSING

and keeping it in perspective



Canada

Mould AND HOUSING



- Microorganisms that digest material to get their nutrients
- Often called “mildew”
- Mould is the symptom of a greater problem
(i.e. - Water and damp conditions in the home.)



Where are Mould Spores Found?

- Outside (trees, hay, soil, etc)
- Inside buildings (anywhere there is moisture)
- Food (bread, cheese)



Mould can grow...

in a crawl space
in the basement
on walls
within the walls
on ceilings
on windows
in the attic
in closets

under carpet
under wallpaper
under sinks
under toilet tanks
in the fridge pan
on furniture
in plants



Five Reasons for Mould


- Sewage backups/ Floods
- Water leaks (roof)
- Water infiltration (grading/downspouts)
- Lack of Ventilation
- Maintenance issues (not repairing leaks)











The only method of Mould control is moisture control!!



Residential Indoor Air Quality Guidelines

- Recognized that mould in a building may be a health hazard
- Health Risk :
 - Level of exposure
 - Asthma symptoms
 - Allergic sensitization
- There are no exposure limits



Residential Indoor Air Quality Guidelines

- Suggest:
 - Control humidity
 - repair water leaks and damage
 - clean up visible or concealed mould
- These suggestions apply to all species of mould





Can we test for Mould

Short answer: Yes

Do we test for mould: NO

Why – if you see it is a problem – they
are all treated the same



Health Effects of Mould

Depend on:

- Type of Mould
- Amount of Mould
- Length of exposure
- Sensitivity of person exposed (age, health, genetics, #of previous exposures)



Health Effects Continued...

- Some people react adversely to some Moulds
- Affects may be immediate or long term (from repeated exposures).
- Those with respiratory problems or with a suppressed immune system will be at highest risk.



Who can be affected?

Building occupants

- Long term exposure
- Effects depend on individual

Mould Remediators

- Potential for high short-term exposure

Building investigators and inspectors



Reported Symptoms

- Fatigue
- Nausea
- Headaches
- Respiratory irritation; shortness of breath
- Eye irritations
- Skin rashes
- Inability to concentrate



Who Can Remove Mould?

- Depends on Amount
 - Small Amounts can be removed by occupant
 - Larger amounts require **TRAINED** maintenance personnel



Recognized Consensus Guidelines

- New York Protocols 2000
- Mold in Housing - First Nations Kit (1999)



Cleaning

- Intent is to remove mass of organic/allergenic material
- Use of biocides (ie bleach) only as a final step, after thorough cleaning
- Wet wipe hard surfaces and allow to dry



Occupants be Present During Remediation?

- Decisions about building evacuation should be based on medical evaluation
- Susceptible individuals should be removed from a mouldy area during remediation
 - infants
 - people recovering from surgery
 - people with immune suppression, asthma, hypersensitivity pneumonitis, severe allergies, sinusitis or inflammatory lung diseases
- Evacuation not generally required



Risk of mould coming back

Moisture collection mechanism must be addressed

- Correcting building deficiencies
- Eliminating moisture sources
- Educating occupants

Reacting to wetting events

- Floods; Sewer back-ups; Missing shingles



Keeping it in Perspective

- Mould is an important housing issue, but other items also cause problems that affect occupant health
 - Smoking
 - Overcrowding
 - Poor ventilation
 - Lack of proper construction and maintenance





Questions?

