



City of Langley

Thermal Safety in Apartment Buildings

LOCAL GOVERNMENT POLICY TOOLKIT

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Presentation to City of Langley Council, October 6th 2025

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THERMAL SAFETY TOOLKIT



Thermal Safety in Existing Multi-Unit Residential Buildings

A Policy Toolkit for Local Governments in BC's Lower Mainland

April 2025

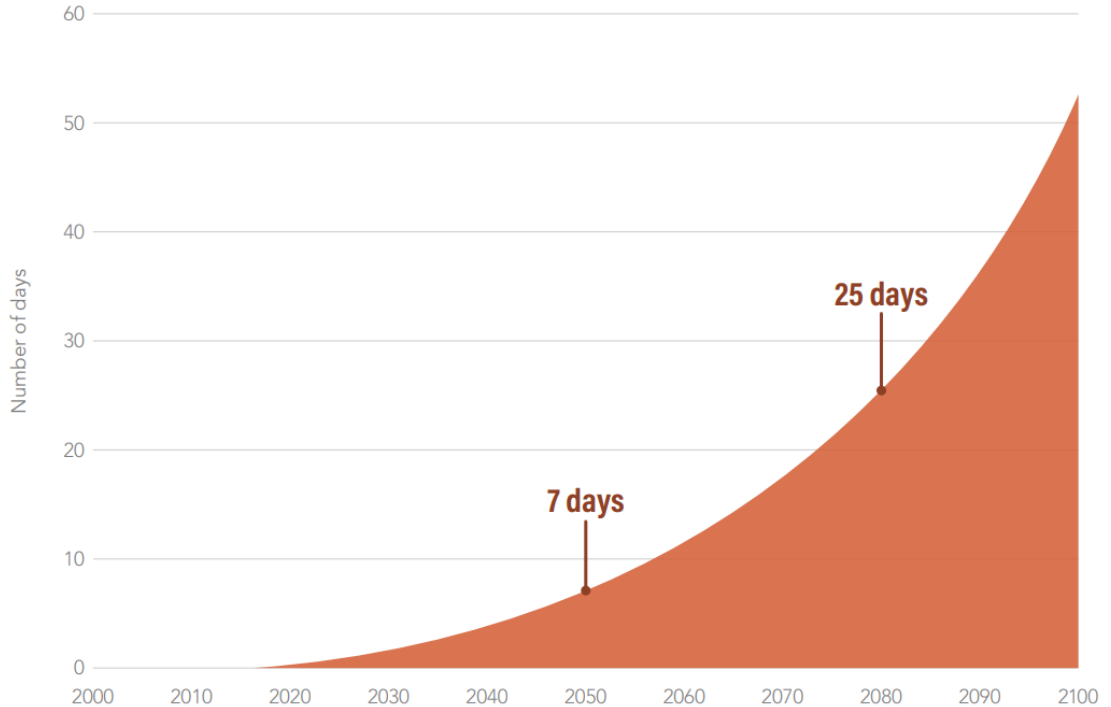


WESTERHOFF
climate strategies



HEAT RISKS ARE REAL AND GROWING

- 619 deaths in BC during the 2021 Heat Dome
- 12-fold increase in days requiring cooling expected by 2080s
- Heat risks impact seniors, low-income residents, and those with health conditions most



Source: ClimateData.ca

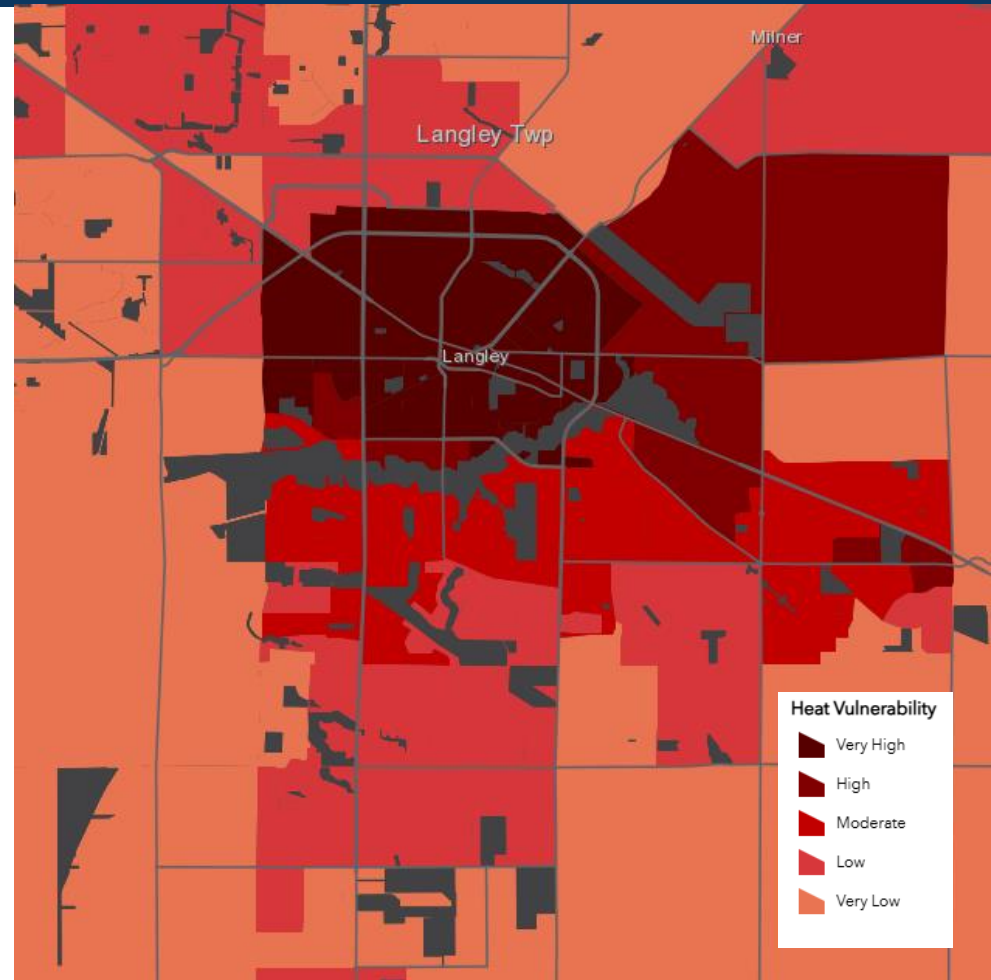
HEAT VULNERABILITY

City of Langley

Heat vulnerability is defined as a function of three key factors:

- *exposure* to heat
- *sensitivity* to heat
- *adaptive capacity* (ability to manage or adapt to heat)

Source: Fraser Health South
Vulnerability Mapping

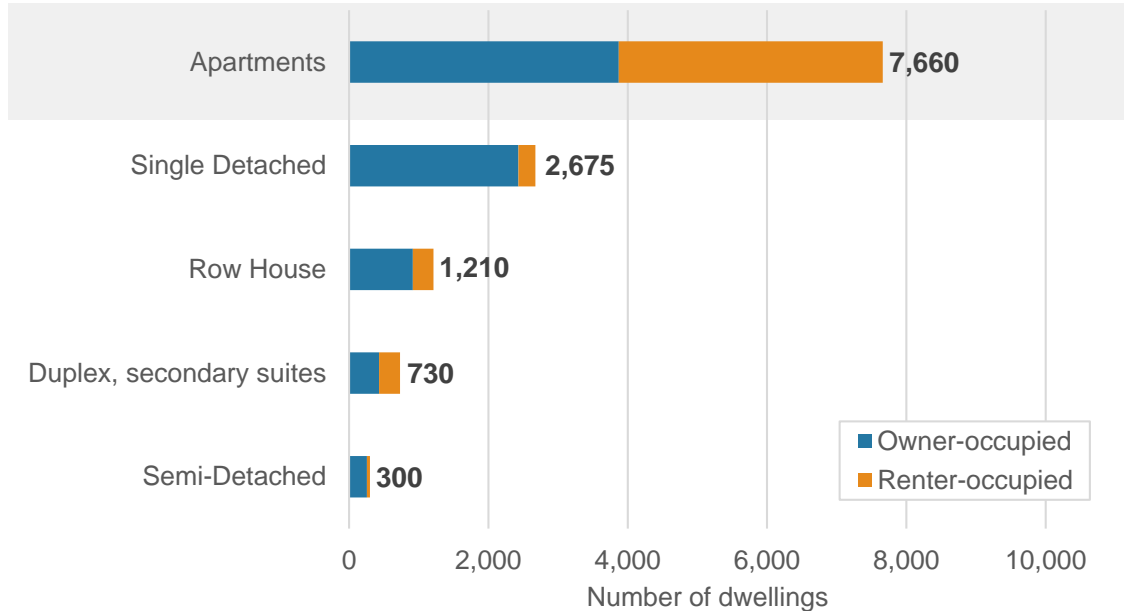


OWNERS & RENTERS IN APARTMENTS

City of Langley

- 61% of residential dwellings in the City of Langley are apartments
- ~50% of apartment occupants are renters

Figure 1 | Residential dwellings in the City of Langley by structure type.



Source: 2021 Census of Population
(Metro Vancouver Housing Data Book)

DEFINING THERMAL SAFETY

A state in which indoor temperatures are maintained at a level that prevents adverse health effects

The BC Building Code now requires a maximum design temperature of 26°C in at least one room



POLICY TOOLKIT

- Purpose: promote actions to protect residents in apartments during extreme heat
- Target audience: local governments and regional authorities



UniverCity on Burnaby Mountain

THERMAL SAFETY SOLUTIONS



Active Cooling - installing heat pumps or air conditioners



Reduce Solar Heat Gain - adding exterior shading and/or trees



Improve Airflow - adding ventilation and operable windows



Interim Solutions - portable air conditioners in one room



Co-Benefit Solutions - green roof, cool roof, decreased impervious surfaces, increased site/community tree canopy

ACTION THEMES



Awareness & Understanding

Expanding knowledge of thermal safety risks and solutions among tenants, building owners, and decision makers



Policy & Legislation

Removing regulatory barriers and enacting policies that enable widespread adoption of cooling measures



Funding & Financing

Increasing access to and affordability of cooling retrofits, including exploring municipal financial tools to support installations



Industry & Technology

Strengthening industry capacity to design, install, and maintain effective cooling solutions

EXAMPLE ACTION

★ 2) Provide educational materials to building tenants

Type of action:
Educate

Develop targeted information and outreach campaigns for tenants to raise awareness of the measures they can implement to increase their thermal safety.

Reference any existing guidance and include information on available supports and points to raise to landlords/owners to make a case for additional cooling.

Potential Partners:
Ecotrust, health authorities, BC Housing, local community groups, BCNPHA, TRAC, people with lived experience of inequities, social equity advocates/advocacy organizations

Work with community-serving organizations and municipal committees to disseminate and tailor information to diverse segments of the community. Examples of groups that can support information distribution include:

- Neighbourhood centres
- Immigration support services (e.g. North Shore Immigrant Inclusion Partnership)
- Community outreach services (e.g. Lookout Society, Vancouver Coastal Health, Intellectual Disabilities Society)
- Social housing & tenant resource groups (e.g. Tenant Resource and Advisory Centre)

Helpful Links and Examples:

- Residential Tenancy Branch. [Air Conditioning \(AC\) Units](#)



NEXT STEPS

Supporting Local Government Action on Thermal Safety

Engage with member jurisdictions to explore priorities and use of the toolkit

Support implementation of priority actions where there's interest

Collaborate with provincial partners to align on retrofit policies

Advance priority actions for improving thermal safety in apartment buildings without cooling



Vancouver Skyline

Thank you

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