



HEALTHY SCHOOL BUILDINGS

**Department of Education
Government of Newfoundland and Labrador**

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Topics Overview

- K-12 Education Infrastructure
- Funding for School Buildings
- Promoting Physical Fitness
- Promoting Healthy Eating
- Building Standards for Safe and Caring Schools
- Construction Standards
- Occupational Health and Safety
- Natural Ventilation Policy
- Inspection Processes
- Site Inspection Enterprise Management System(SIEMS)



K-12 Education Infrastructure

- The Newfoundland and Labrador K-12 education system currently has 268 public schools spanning five school districts.
- This infrastructure consists of approximately 10.4 million ft² of building space
- In NL titles to schools are either held by the School Boards or title may rest with a denominational authority, in which case the board has the right to continue to use the property for the purpose of education.
- School boards are responsible for the administration and organization of Primary, Elementary and Secondary education within their respective district.
- The Department of Education's Design and Construction Division oversees capital and major repairs and maintenance projects in the province's schools.



Funding for School Buildings

- School Board Repairs and Maintenance Grant
 - Based on 92 cents per sq.² of building space in the district (Approximately \$9.8 million in 2011-12).
 - Maintenance completed by school district staff.
- Major Capital Projects
 - Government funds the construction of new schools, extensions, and redevelopments within its fiscal capacity and provincial priorities.
- Department of Education Repairs and Maintenance Allocation.
 - \$34.3 million in 2011-12 which will fund over 200 projects.
 - Focus on issues related to indoor air quality and fire and life safety:
 - Window, siding and roofing replacements (stop and prevent leaks).
 - Electrical upgrades.
 - Hazardous materials audits are conducted prior to renovations and upgrades to ensure worker and occupant safety.



Promoting Physical Fitness

- No more gravel pit schools !
- Site selection
 - Additional green spaces for new schools.
- Increased the standards for gymnasium sizes.
- Fitness centres have been added to grades 7 to Level III schools.
 - Fitness equipment is also provided.
- Playgrounds
- Staff showers
 - Part of the LEED program.



Promoting Healthy Eating

- Commercial kitchens
 - Provides ability to store, prepare and serve healthy meal options
 - Do not include deep fryers
- Lunchrooms are also provided to discourage eating in classrooms and common areas.
- Healthier options are available in vending machines.

Promoting Healthy Eating

Below: A commercial kitchen in one of our recently constructed new schools



Building Standards for Safe and Caring Schools

- Safe and Caring Schools Policy
 - Address issues such as armed intruders and other related threats.
- Features incorporated into the design of new schools:
 - Corridors laid out to enhance supervision i.e. straight runs with no alcoves
 - Washrooms designed to help prevent bullying
 - Occupancy activated light fixtures
 - Airport style entrances i.e. no doors to the corridors
 - The General Office must be adjacent to the main entrance.
 - Amber light system on the exterior of the building to advise that the building is in a lockdown state.
 - All interior doors can be locked from the inside.
 - Video information display/monitors are provided to enable designated individuals to advise student and staff of armed intrusions.
 - Video surveillance system is provided throughout the building to enable the general office staff to monitor all areas.
 - Window dressings are incorporated to prevent an armed intruder's visibility into rooms.



Construction Standards

- Mechanical ventilation
- Low Volatile Organic Compounds (VOCs)
- Latex based products
- Mould resistant materials
- Carpets and chalkboards are no longer used in new schools
 - Whiteboards are now used in classrooms in place of chalkboards.
 - Hard surface flooring is now used in place of carpets.
 - Carpets and chalkboards have also been removed from instructional areas in existing schools.
- Leadership in Energy and Environmental Design (LEED) Program
 - Incorporated into all new major capital projects.
 - Features incorporated:
 - Materials and Resources: mould resistant materials, low VOC's, etc.
 - Indoor Environmental Quality: mechanical ventilation, controlled humidity, etc.
- Dust Control Policy



Occupational Health and Safety

- OH&S committees are established in all schools in accordance with the *Occupational Health and Safety Act*.
 - Training is provided with respect to inspection of schools on OH&S matters.
 - Department provides additional training to committees as required.
- OH&S training is provided to all school district staff (e.g. asbestos management, confined spaces, etc.).
- Assists districts in all matters relating to OH&S, as required, with its Industrial Hygienist and OH&S Officer.
 - Mercury spills
 - Stop work orders
 - Mould
 - Sensitivities to dust



Natural Ventilation Policy

- Approximately 55 of the provinces 268 schools have full mechanical ventilation.
- As such, the Department of Education has developed a natural ventilation policy for schools that do not have mechanical ventilation systems.
- This lets fresh air into a classroom which:
 - Provides air flow
 - Dilutes airborne contaminants
 - Helps maintain a comfortable temperature
 - Helps improve the learning environment (e.g. reduces “stuffiness” and odour, students feel less tired, etc.)



Inspection Processes

- Daily School Fire Inspection
 - Completed by school staff each day and submitted to the school district on a monthly basis (required under NFPA 101 Life Safety Code).
 - Checks that emergency exits are clear, exit/emergency lights are working, smoke barrier doors are closed, fire extinguishers are operable, etc.
- Fire Safety Inspections
 - Conducted by local fire department's, where available, or by trained school district staff.
 - Inspects schools to ensure compliance with applicable codes.
- Annual Department of Government Services Inspection
 - Checks for deficiencies associated with the school including ventilation, building condition, sanitation, safety, and general maintenance.




Inspection Processes

- Building Envelope Assessments
 - Assess windows, roofs and siding/brick with particular focus on water infiltration.
- Annual School District Inspection
 - Each school district is required to inspect all of its schools on an annual basis using a checklist developed by the Department of Education.
 - Checklists are required to be submitted to the department for review.
 - Checks for items such as building envelope (roof, siding, window) and maintenance issues as well as issues that can affect indoor air quality.
- Electrical Inspections
 - Inspections are conducted by engineering consultants or journeyperson electricians to identify requirements for electrical upgrades.
 - Oldest schools are inspected and upgraded first.



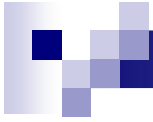
Inspection Processes

- Hazardous Materials Assessments
 - Schools constructed prior to mid-1980s.
 - Project specific assessments.
- Industrial Hygiene Inspections
 - Department's Certified Industrial Hygienist (CIH) or outside consultants under CIH oversight.
 - Responds to requests/complaints from school districts.
 - Proactive measures to identify issues, which include conducting:
 - Hazardous materials assessments prior to commencing projects
 - Asbestos assessments
 - Ventilation assessments (i.e. Skilled Trades Suites)
 - Mould / moisture / indoor air quality assessments



Site Inspection Enterprise Management System (SIEMS)

- Recommended by province's Auditor General in 2008 report.
- Monitor issues identified through the various inspection processes.
- Currently in operation in one of the province's five school districts
- In the process of being implemented in the remaining districts.
- Department of Education will have viewing rights to each district's data once fully implemented.



Thank You!
Questions or Comments?