Canadian Safety Requirements for Children’s Toys

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Canadian Safety Requirements for Children’s Toys
Presentation Overview

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Canadian Safety Requirements for Children’s Toys

Canada Consumer Product Safety Act (CCPSA)

- Canada’s mandatory toy safety regime is in effect under the Canada Consumer Product Safety Act (CCPSA)

  http://laws-lois.justice.gc.ca/eng/acts/C-1.68/index.html

- **Important Definitions**
  - *Consumer Product* - “a product, including its components, parts or accessories, that may reasonably be expected to be obtained by an individual to be used for non-commercial purposes, … and includes its packaging”. (section 2)
  - *Danger to Human Health or Safety* - “any unreasonable hazard – existing or potential – that is posed by a consumer product during or as a result of its normal or foreseeable use and that may reasonably be expected to cause [death or adverse health effect]…”. (section 2)
Canadian Safety Requirements for Children’s Toys
Canada Consumer Product Safety Act (CCPSA)

• General Prohibition
  - The CCPSA prohibits the manufacture, import, advertisement or sale of any consumer product that is a “danger to human health or safety” (sections 7(a) and 8(a))

• Specific Requirements
  - Any person who manufactures, imports, advertises or sells a consumer product in Canada must comply with all applicable requirements of the CCPSA and its regulations (section 6)
Canadian Safety Requirements for Children’s Toys
Canada Consumer Product Safety Act (CCPSA)

Key Industry Responsibilities:
A. Mandatory reporting of health or safety related incidents with consumer products.
B. Mandatory record keeping for traceability of products throughout the supply chain.
C. Health Canada may request tests, studies and other information necessary to verify compliance or prevent non-compliance.
D. Personal information & confidential business information.
E. Compliance with regulations, prohibitions.
Canadian Safety Requirements for Children’s Toys
Toys Regulations (SOR/ 2011-17)

- There are several regulations under the CCPSA that address specific hazards with children’s toys.

- The main regulation is the *Toys Regulations* (SOR/2011-17)
  
  - *The Toys Regulations* is the new title for the previous *Hazardous Products (Toys)* Regulations that were in place from 1970 to 2011 under the *Hazardous Products Act*.

- The *Toys Regulations* set out mandatory safety requirements that address a wide range of mechanical, flammability, toxicological, electrical, thermal and other hazards associated with children’s toys.

Canadian Safety Requirements for Children’s Toys
Other Regulations

Several other regulations under the CCPSA may also apply to a specific toy, depending on how the toy is designed, marketed, constructed or what it is made of:

- Asbestos Products Regulations (SOR/2007-260)
- Consumer Products Containing Lead (Contact with Mouth) Regulations (SOR/2010-273)
- Glazed Ceramics and Glassware Regulations (SOR/98-176)
- Hazardous Products (Tents) Regulations (SOR/90-245)
- Phthalates Regulations (SOR/2010-298)
- Science Education Sets Regulations (C.R.C., c. 934)
- Surface Coating Materials Regulations (SOR/2005-109)
- Textile Flammability Regulations (SOR/2011-22)
Canadian Safety Requirements for Children’s Toys
Structure of the Toys Regulations

• There are 43 sections of the *Toys Regulations*
  - these define specific requirements to protect children from a variety of hazards:
    - mechanical (such as, choking, strangulation, suffocation, lacerations and punctures)
    - flammability (such as, fire and burns)
    - toxicological (such as, poisoning)
    - electrical (such as, electrocution and shock)
    - thermal (burns)

• There are 9 schedules of the *Toys Regulations*
  - set out specific test methods
Toys Regulations - 1. Interpretation

- Section 1 defines a toy as:
  “a product that is intended for use by a child in learning or play”

- Health Canada considers toys intended for use by children under 14 years of age to be captured by this definition
Toys Regulations - 1. Interpretation

Toy VS Non-toy
Section 4 addresses suffocation hazards with flexible film bags used to package toys:

- Film must be \( \geq 0.019 \text{ mm thick (single layer)} \)
- Must have warning in English and French if bag opening is \( > 356 \text{ mm (14 inches)} \):

**PLASTIC BAGS CAN BE DANGEROUS. TO AVOID DANGER OF SUFFOCATION, KEEP THIS BAG AWAY FROM BABIES AND CHILDREN.**
Toys Regulations - 7. Small Parts

• Section 7 protects young children from choking, ingestion and inhalation hazards with toys

• Applies to toys likely to be used by children <3 years of age

• Requires that no part or component that can separate with reasonably foreseeable use (RFU) be small enough to be totally enclosed in the small parts cylinder (Schedule 1)

Exception - small parts made entirely of soft textile fibre material (for example, cotton doll socks)
Toys Regulations - 7. Small Parts Test

• Canada mandates a **4.45 N force** as an element of the small parts test

• *Toys Regulations*, Schedule 1: a small part is an item that can be totally enclosed in the small parts cylinder, **using a force of no more than 4.45 N**
  
  – *Method M-00.1: Small Components (2011-12-02)*
Toys Regulations - 7. Reasonably Foreseeable Use (RFU)

- Section 7 requires that small parts must not separate with reasonably foreseeable use (RFU)
- The *Toys Regulations* do not specify standard tests for RFU
- Health Canada’s Product Safety Laboratory has developed a standard drop test and a standard push/pull test procedure
  - *Method M-01.1: Test Procedures to Determine the Mechanical Hazards of Toys - Reasonable Foreseeable Use (2011-12-05)*

<table>
<thead>
<tr>
<th>Age</th>
<th>Drop</th>
<th>Push / Pull</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;3 years</td>
<td>1.37 m, 4 x</td>
<td>44.5 N, 10 s</td>
</tr>
<tr>
<td>3+ years</td>
<td>0.91 m, 4 x</td>
<td>44.5 N, 10 s</td>
</tr>
</tbody>
</table>

- Other tests for RFU may be used for compliance assessments depending on how a toy is intended or likely to be used
Toys Regulations - 7. Toy Age Classification

• The *Toys Regulations* do not provide age classification guidance
• Health Canada has developed a guidance document: *Toys: Age Classification Guidelines*
• The Guidelines provide the criteria used to determine if a toy is likely to be used by a child under 3 years of age (<3 years) or 3 years of age and older (3+ years)
• The Guidelines represent a consolidation of hundreds of toy age classification decisions made by the Department since 1970
Toys Regulations - 7. Toy Age Classification

• Many types of toys are likely to be used primarily by children <3 years
  - ex. activity mats, bath toys, crib toys, shape sorters, push/pull toys, stuffed toys, squeeze toys, stacking/nesting toys, sand toys, pop-up toys, teethers, rattles

• Health Canada considers many factors when age classifying a toy, including:
  - static physical characteristics
  - dynamic physical characteristics
  - intended use relative to the physical and cognitive capabilities of children
  - the likes, dislikes and play preferences of children
  - the accepted perceptions of parents and caregivers ("customary" use of toy type)
  - how and where the toy is marketed

• For verification of toy age classification for a specific toy, contact Health Canada
Toys Regulations - 17. Enclosures

• Section 17 protects against suffocation
• Applies to any toy that is large enough for a child to enter or be placed inside and that can be closed by a door or lid
  - Some examples: toy box, play house, toy workbench cabinet, toy fridge
  - Policy: “large enough” = internal volume is > 0.03 m³ and all internal dimensions are > 150 mm
• Requires ventilation holes or openings of sufficient size on two or more sides
  - Policy: unrestricted ventilation space considered “sufficient size” is ≥ 1300 mm² in total
  - Policy: recommend to protect ventilation space from obstruction (position and/or design)
Toys Regulations - 19. Auditory Hazards

• Section 19 protects against noise-induced hearing loss
  - Applies to sound-emitting toys for children of all ages
  - Sound must be ≤ 100 dB at the distance from the ear that the toy would ordinarily be used
  - Toy pistol caps are regulated for sound under Canada’s Explosives Act

• No tests are specified in the Toys Regulations

• Health Canada’s Product Safety Laboratory has developed a test procedure
  - Method M-04: Test Method to Determine the Noise Level of Toys (2012-08-03)
Toys Regulations - 22. Toxicological Hazards - Specific Substances

- Section 22 protects children from specific toxic substances
  - Applies to substances accessible under reasonably foreseeable circumstances
  - Applies to substances used as fillings where the substance could be released if the container breaks or leaks

- Applicable toys must not contain:
  - carbon tetrachloride or any substance that contains it
  - methyl alcohol or substance with > 1 % w/v methyl alcohol
  - petroleum distillate or substance with > 10 % w/v petroleum distillates
  - benzene
  - turpentine or substance with > 10 % w/v turpentine
  - boric acid or salts of boric acid
  - ethyl ether

- There are no legislated tests for the substances prohibited in Section 22
Toys Regulations - 23. Toxicological Hazards - Specific Elements in Surface Coatings

- The surface coatings, such as paint, varnish and stickers on toys must not contain total lead or mercury, or soluble antimony, arsenic, cadmium, selenium or barium, in excess of prescribed limits
  - The total lead content in the coating must be $\leq 90$ mg/kg
  - The soluble antimony, arsenic, cadmium, selenium and barium content in the coating must each be $\leq 0.1\%$ (after 10 minutes stirring in 5% HCl at 20°C)
  - There must be no mercury present in the coating
    - No limit for total mercury in legislation
    - Policy: action level is 10 mg/kg
Toys Regulations - 24. Toxicological Hazards - Organic Solvents and Balloon Blowing Kits

- Section 24 prohibits toys that are used to blow balloons where the toy contains any aromatic, aliphatic or other organic solvent.

- These toys usually consist of a tube of solvent and a straw - the plastic balloons are made by dipping the straw into small masses of the solvent and then blowing air through.

- Any organic solvent is prohibited in the toy if the solvent, or its vapours, can be released during use.

- A specific Health Canada method is not available.

- Use Good Laboratory Practices.
Toys Regulations - 25. Toxicological Hazards - General Toxicity

• Section 25 sets requirements for toys that contain a toxic substance
  - No specific toxic substances are identified
• At least one of the following requirements must be met:
  - The substance must be inaccessible - no ingestion, no inhalation, no absorption possible
  - The total quantity of substance available must be ≤ 1 % of the oral or dermal median lethal dose (whichever is lower) calculated for a child with 10 kg body weight
  - The toxicity must not exceed the limits set out in Schedule 2 (ie. must not be excessively toxic)
Toys Regulations - 26. Toxicological Hazards - Corrosives, Irritants and Sensitizers

• Section 26 sets requirements for toys that contain a corrosive substance, an irritant or a sensitizer
  - No specific substances are identified
• At least one of the following requirements must be met:
  - The substance must not be capable of coming in contact with the skin
  - The substance must not be excessively corrosive, the irritant must not be excessively irritant, and the sensitizer must not be excessively strong when tested according to Schedule 3
Toys Regulations - 27. Toxicological Hazards - Substances in Plastic Toys for Children <3 Years of Age

- Section 27 refers to substances acceptable for use in the manufacture of plastic food packaging materials and food containers
- An appropriate list of acceptable substances does not exist
- Toys likely to be used by children <3 years of age must:
  - Comply with the Phthalates Regulations
  - Comply with the Hazardous Products Containing Lead (Contact with Mouth) Requirements
- Health Canada intends to clarify section 27 in a future amendment to the Toys Regulations
Toys Regulations – Specific Products
Dolls, Plush Toys and Soft Toys

• Section 1 - “plush toy” definition
  “means a toy with a raised fibre surface that is intended for use by a child in play”

• Section 1 - “soft toy” definition
  “includes a toy that is stuffed or made of pliable rubber or pliable plastic and that is intended for use by a child in play”
Toys Regulations - Specific Products
30. Dolls, Plush Toys and Soft Toys

• Section 30 requires that any squeaker, reed, valve or similar device of a doll, plush or soft toy must:
  - Not be separable with RFU if it can be totally enclosed in the small parts cylinder (Schedule 1)
  - Health Canada *Method M01.1 Reasonably Foreseeable Use - Toys (2011-12-05)*
31. Dolls, Plush Toys and Soft Toys

Eyes and Noses

- Section 31 requires that any eye or nose that is 32 millimetres (1.25 inches) or less in its greatest dimension must be securely attached.

- Schedule 4 Test: Where such a component can be grasped, it is tested by freely suspending a 9 kg weight from it for a period of 5 minutes.

  - Health Canada *Method M01.2 Test Procedures to Determine the Mechanical Hazards of Toys – Reasonably Foreseeable Use of Dolls and Plush Toys* (2010-04-30)
Toys Regulations - Specific Products 32, 33, 34. Dolls, Plush Toys and Soft Toys Flammability

• Flammability requirements for dolls, plush toys and soft toys
  • Section 32 - applies to coverings including clothing
  • Section 33 - applies to exposed surfaces made of yarn
  • Section 34 - applies to hair, mane or similar (not yarn)

Toys Regulations – Specific Products
35, 36. Plant Seeds

• Plant seeds are restricted from use in certain children’s toys
• Objective is to protect children from variety of hazards: toxicity, allergens, impaction, aspiration and exposure to vermin

• Section 35 – a toy likely to be used by a child <3 years of age must not contain plant seeds for making noise (visual examination)
• Section 36 – regardless of intended age, a stuffed toy must not contain plant seeds as stuffing material (visual examination)
• Restriction applies whether or not seed has been treated in any way
Section 40 sets requirements that address impaction hazards for rattles:

- A rattle is a toy that is intended to be held in the hand of an infant and to make noise when it is shaken.
- An impaction gauge test is specified to test rattles parts that could become impacted in an infant’s throat and block airflow.
- The impaction gauge test is also used on parts that can be removed from a rattle with either a 50 N force or a 1 N-m torque.
- Health Canada *Method M-05 Test Method for Rattles (2010-10-12)*
Toys Regulations - Specific Products
42. Yo-yo Type Balls

- Section 42 sets requirements that address strangulation hazards for yo-yo type balls
  - yo-yo type balls must not have a cord (tether) that can stretch to $\geq 500$ mm
  - Policy Exception: yo-yo type balls with a ball end weighing $< 20$ g are not considered “yo-yo type balls and similar products” (aligns with international standards)
Toy Safety – Microbiological Hazards
CCPSA, Schedule 2 (4). Teethers

• Item 4 of Schedule 2 to the CCPSA – prohibited products list
• Identifies as prohibited any products for babies that are put in the mouth when used (teethers, pacifiers, baby bottle nipples) that have a filling that contains a living microorganism
• Products are tested against current official edition of the United States Pharmacopeia (USP) Sterility Test (currently, USP, General Chapter <71>)
Other Regulations - Surface Coatings Materials Regulations

- The *Surface Coating Materials Regulations* limit total lead to ≤ 90 mg/kg and total mercury to ≤ 10 mg/kg in surface coating materials (paints, varnishes and similar products).

- Limits apply to a variety of surface coating materials of all forms, for example: liquids, gels, aerosols, waxes, dried pellets, powders.

- Limits apply to materials for children, for example paints for arts, crafts and hobbies (including finger paints which are also covered in S. 39 of the *Toys Regulations*).

- Articles with a surface coating material: furniture and other articles for children (s. 7.2) and pencils and artist’s brushes (s.7.3) must not have a surface coating material that contains more than 90 mg/kg of total lead.
Other Regulations - Phthalates Regulations

- The Phthalates Regulations restrict the allowable concentrations of six phthalates in vinyl toys and childcare articles
  - \( \leq 1,000 \text{ mg/kg (0.1\%)} \) of each of DEHP, DBP and BBP is allowed in the soft vinyl of toys
  - \( \leq 1,000 \text{ mg/kg (0.1\%)} \) of each of DINP, DIDP and DNOP is allowed in the soft vinyl of toys that can be sucked or chewed and where one of their dimensions is \( < 5 \text{ cm} \)
    - Inflatable toy dimensions are determined when the toy is deflated
Other Regulations – Consumer Products Containing Lead (Contact with Mouth) Regulations

• The Consumer Products Containing Lead (Contact with Mouth) Regulations restrict total lead to $\leq 90$ mg/kg in all accessible product components.

• Total lead limit applies to:
  - toys for children $<$3 years of age
  - products, other than kitchen utensils, that are brought into contact with the user's mouth in the course of normal use

Examples:
  - sport mouthpieces, drinking straws
  - toys for children 3+ years that are brought to the mouth during normal use, such as a toy harmonica
  - children's crayons, chalk, modelling clays and similar products
Testing Toys for Safety

• In Canada, electric toys must bear a compliance certification mark (CSA or equivalent)
  - shows that toy has been tested & meets all requirements of CSA electrical standard
• No other test or certification requirements are mandatory for toys
• However, testing a toy against the requirements under the *CCPSA* is the only way to verify that it meets the law
• Health Canada urges industry members to complete compliance testing before a toy is placed on the market in Canada
• Instructions for obtaining Health Canada’s test methods:  
Toy Safety – Health Canada Enforcement

- Health Canada frequently collects toy samples from the Canadian market and at border entry points, and tests the toys to verify that they meet the mandatory requirements.
- Health Canada investigates complaints and incident reports related to toy safety.
- If a toy is found unsafe, or if a toy is found to violate a requirement, then Health Canada will take enforcement action to protect the public.
- The enforcement action will vary with the hazard and risk:
  - It can include product recall, seizure and prosecution.
Toy Safety – Health Canada Enforcement

Toy Recalls in Canada

- In the last few years, the majority of toy recalls in Canada have been due to small part choking hazards
- Common problem toys include:
  - Simple puzzles – pieces are too small, small pegs break off
  - Simple cars and trucks – small wheels separate
  - Dolls, plush toys – eyes and other small parts separate
  - Bath toys – squeakers separate
  - Rattles – made of brittle plastic that breaks when dropped
  - Toys with batteries – batteries separate
- Healthy Canadians Consumer Product Recalls web-page
What’s in the Future? Toys Regulations Modernization Project

• Health Canada is working to amend and improve its toy safety regime
• Amendments to the *Toys Regulations* are being undertaken to address new toy hazards and to align requirements and tests with existing international standards
• In November 2009, Health Canada published a proposal for changes to the *Toys Regulations* on five subjects:
  • toys with magnets or magnetic components
  • sound-emitting toys
  • the size and shape of certain toys
  • plastic film or plastic bags
  • toy labelling for age use and specific warnings
Cautions

• This presentation is an unofficial summary of Canada’s safety requirements for children’s toys

• It is not intended to substitute for, supersede or limit the requirements under Canada’s laws

• In case of any discrepancy between the information in this presentation and the law, the law will prevail
Resources and Contact Information

Industry Guide to Health Canada’s Safety Requirements for Children’s Toys and Related Products, 2012

Toys: Age Classification Guidelines, 1998 (Hardcopy available)

Consumer Product Recalls web-page

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Health Canada, Product Safety Laboratory, Test Methods
Resources and Contact Information

For more information:
http://www.healthycanadians.gc.ca

Contact information:
Cps-spc@hc-sc.gc.ca
1-866-662-0666 (from US and Canada)
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Thank you!

Questions