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  - Janie Tyrrell, Capital Health-Community Sector
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ABBREVIATIONS

<table>
<thead>
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<th>Description</th>
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<tr>
<td>ACMI</td>
<td>Art &amp; Creative Materials Institute, Inc</td>
</tr>
<tr>
<td>AP</td>
<td>Approved Products</td>
</tr>
<tr>
<td>ASTM</td>
<td>American Society for Testing and Materials</td>
</tr>
<tr>
<td>C</td>
<td>Centigrade/Celsius</td>
</tr>
<tr>
<td>CL</td>
<td>Cautionary Label</td>
</tr>
<tr>
<td>cm</td>
<td>centimetre</td>
</tr>
<tr>
<td>CP</td>
<td>Certified Products</td>
</tr>
<tr>
<td>CSA</td>
<td>Canadian Standards Association</td>
</tr>
<tr>
<td>EHO</td>
<td>Environmental Health Officer</td>
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<tr>
<td>EPH</td>
<td>Environmental Public Health</td>
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<td>F</td>
<td>Fahrenheit</td>
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<td>ml</td>
<td>millilitre</td>
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<tr>
<td>mm</td>
<td>millimetre</td>
</tr>
<tr>
<td>ppm</td>
<td>parts-per-million</td>
</tr>
<tr>
<td>SPF</td>
<td>sun protection factor</td>
</tr>
<tr>
<td>UV</td>
<td>ultraviolet</td>
</tr>
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INTRODUCTION AND PURPOSE

This information manual was created by Capital Health-Environmental Public Health to help child care workers ensure a healthy and safe environment for the children to whom they provide care in their child care facility. “Environmental Public Health” includes food, water, air and anything in indoor or outdoor surroundings that might impact one’s health; selected topics within this aspect of health and safety are included in the manual.

This manual is:

- NOT a comprehensive Environmental Public Health manual. Contact your local Environmental Health Officer (contact information below) for additional information.

- NOT intended to replace any regulations or guidelines pertaining to child care facilities. Operators of child care facilities should be familiar with all regional regulations and guidelines pertaining to child care facilities.

- NOT intended to be a medical reference book or diagnostic tool.

- NOT intended to replace direct contact with Capital Health personnel including your local environmental health officer, public health nurse, public health centre or Capital Health LINK.

Note: Updated versions of this manual will be posted on Capital Health’s website.

Please contact Capital Health-Environmental Public Health, at (780) 413-5737 for more information.
Web Links in this manual:

Web site addresses in this manual were accessed at the time of printing, however, web addresses change frequently, and so some links may be broken. Linked sites are not under the control of Capital Health, and Capital Health is not responsible for the contents of any linked site, including without limitation any link contained in a linked site, or any changes or updates to a linked site.
ARTS, CRAFTS & PLAY ACTIVITIES
ARTS AND CRAFTS

Many different products are used to create arts and crafts in child care facilities. Below are some recommendations on common arts and crafts supplies and practices.

**General Recommendations:**

- Children should wash their hands thoroughly after arts and crafts sessions.
- Arts and crafts working surfaces must also be cleaned properly before they are used for other purposes, such as serving food.
- Eating and drinking should be avoided during arts and crafts activities.

**Recommended Arts and Crafts Products:**

- Only non-toxic arts and crafts products should be used in child care facilities. These products should bear at least one of the following labels:
  - CP (Certified Product) Seal.
  - AP (Approved Product) Seal.
  - Health Label (Non-Toxic) Seal of the Art & Creative Materials Institute, Inc.
  - Crayons should have "non-toxic" on the label.
  - Products bearing the CL (Cautionary Label) or Health Label (Caution Required)—may be used with supervision.
Foods and Food Containers Used For Arts And Crafts

- Cereal Grain Products:
  - Must be kept dry.
  - Replace the following foods used for arts and crafts every 4 weeks:
    - Macaroni,
    - Corn Meal, and
    - Rice
  - Grain: do not use treated wheat and barley products—these must be cleaned and free from dust and mites.

- Egg cartons
  - Visually inspect the cartons before use—avoid using cartons with visible dirt on them.
  - Clean egg cartons can be bought at craft stores or ask a local egg processor to donate unused egg cartons.
  - If the children are bringing products from home, styrofoam cartons are preferred over cardboard cartons.
  - Alternatively, mist styrofoam cartons with a 100 ppm chlorine solution (see “disinfectants (for surfaces)” section) and allow to air dry.

- Egg shells
  - Must be boiled for 10 minutes or heated for at least 10 minutes at 110°C (350°F) in the oven to remove any germs that may be found on egg shell before use in arts & crafts.

- Face painting
  - Only products designed for use on the body can be used for body art and face painting.
  - Crayola™ crayons, Sharpie™ markers and any other products not designed for skin contact SHOULD NOT be used for face painting.
• Consult your Environmental Health Officer or Health Canada for more information.

• Leaves
  o Avoid using leaves that may have chemicals from insecticide spraying on them.
  o Visually inspect the leaves for insects and larvae. These may still reside on the leaves, especially if the leaves are still soft and moist.
  o Be aware that bacteria, molds, dust and mites on the leaves may cause respiratory problems for children with allergies.

• Sand
  o Please refer to the section on "Sand Tables - Indoor".

• Scissors
  o Use safety scissors that can cut paper, cardboard and stiff plastic, but cannot cut hair, clothing or fingers.

• Snow
  o Although food colouring can make spectacular snow balls, snow may pose a health hazard. Snow may contain air pollutants, road salts and a variety of chemicals. Ensure that children do not eat snow used for arts & crafts.

• Plant Straw
  o Use of straw is not recommended as straw may contain insects, mites, and chemicals and may also pose a problem for children with allergies.

• Styrofoam
  o Care should be taken in the use of styrofoam. Young children may choke on small parts if swallowed. Fire prevention officials are concerned with the emission of toxic fumes if the material ignites.

• Toilet Paper or Paper Towel Rolls
  o Use is acceptable if not wet.
Other Arts & Crafts Materials

The following table summarizes some of the art materials that should be avoided and lists safe substitutes.

<table>
<thead>
<tr>
<th>AVOID</th>
<th>USE</th>
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<tr>
<td>Powdered clay. It is easily inhaled and contains silica and possibly asbestos. Do not sand dry clay pieces or engage in other dust-producing activities.</td>
<td>Talc-free, premixed clay. After using clay, wet mop or sponge surfaces thoroughly.</td>
</tr>
<tr>
<td>Ceramic glazes or copper enamels.</td>
<td>Water-based paints instead of glazes. Adults may water-proof pieces with shellac or varnish.</td>
</tr>
<tr>
<td>Cold water, fibre reactive dyes or other chemical based commercial dyes.</td>
<td>Vegetable and plant dyes (such as onion skins, or tea) as well as food dyes.</td>
</tr>
<tr>
<td>Instant papier maches (create inhalable dust and may contain lead or asbestos).</td>
<td>Make papier maches from newspapers and library or white paste.</td>
</tr>
<tr>
<td>Powdered tempera paints (create inhalable dust and may contain toxic pigments).</td>
<td>Liquid tempera paints.</td>
</tr>
<tr>
<td>Pastels, chalks or dry markers that create dust.</td>
<td>Oil pastels, crayons or dustless chalks.</td>
</tr>
<tr>
<td>Solvents such as turpentine, toluene and rubber cement thinner. Also avoid solvent-containing materials such as solvent-based inks, alkyd paints and rubber cement.</td>
<td>Water-based products only.</td>
</tr>
<tr>
<td>Aerosol spray paints.</td>
<td>Water-based paints.</td>
</tr>
<tr>
<td>Epoxy, instant glue, airplane glue or other solvent-based adhesives.</td>
<td>Water-based white glue or library paste.</td>
</tr>
<tr>
<td>Permanent felt tip markers (may contain toxic solvents).</td>
<td>Water-based markers.</td>
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DRESS-UP ACTIVITIES

Dress-up is a popular activity with children in childcare facilities; however, clothing and certain types of props may aid the spread of lice. Costume jewellery used in dress-up may contain lead. The following are recommended for clothing and jewellery used for dress-up activities.

General Recommendations:

- **DURING A LICE OUTBREAK, ALL DRESS-UP ACTIVITIES SHOULD BE DISCONTINUED.** Clothes used for the activity must be laundered and stored until the lice problem has been rectified for at least two weeks.

Recommendations for specific dress up items:

**Hats**

- Choose hats made of washable materials.
- Ensure hats are clean before use.
- Straw hats and felt hats are not recommended for use in dress-up or drama activities because they are difficult to clean.

**Wigs**

- Wigs should be shampooed, rinsed and then air dried when soiled and as needed.

**Clothing**

- Dress-up clothing should be washed when soiled and as needed.
Lead Jewellery—Health Concerns

Lead has been detected in inexpensive costume jewellery being sold in Canada. Lead is often used to make jewellery because it is inexpensive and easy to shape and mold. Wearing jewellery containing lead does not cause harm, but children sucking, chewing or swallowing this type of jewellery can cause damage to their bodies, especially to their nervous system. While some jewellery may have paint or a top coating, this does not make the jewellery safer for children because the coating can be chewed or worn off.

As a precaution:

• Throw out costume jewellery that may contain lead (see website below).
• Throw out costume jewellery that is peeling or broken.
• Do not give children adult jewellery to wear or play with, it may contain lead.
• Do not allow children to suck or chew on any jewellery.

Source: Children’s Jewellery Containing Lead, Health Canada 2007
http://www.hc-sc.gc.ca/cps-spc/pubs/cons/jewellery-bijoux_e.html
PLAYDOUGH

Playdough, whether “home made” or store-bought, is a fun activity in a child care facility, however, precautions should be taken to ensure that the activity doesn’t result in the spread of illness.

General Recommendations:

- Playdough should not be used during a diarrhea or vomiting outbreak in child care facilities (see “detecting and reporting outbreaks” section).
- Children should wash their hands before and after handling playdough.
- Toys used in conjunction with playdough should be cleaned and disinfected after the play activity (see section on Toys).

“Home-made” playdough must:

- Contain salt or other preservatives (borax or other plant extracts) to prevent the growth of bacteria (the salt acts as a preservative and to discourage children from eating playdough).
- Be stored in the refrigerator after use.
- Be stored in sealable containers (zipper style plastic bags or clean yogurt type containers with lid) and labeled, and
- Discarded after 1 week (or, after each use if the dough contains ingredients such as honey or peanut butter).
PLAY POOLS

Play pools can act as a source of infectious disease transmission. Because these pools do not have a disinfection system, the stagnant water can provide a perfect environment for bacteria to grow. Sprinklers, hoses, or individual water buckets are safer alternatives as cooling or play activities.

If play pools are to be used, it is recommended that:

- The pool be filled with clean potable water in the morning,
- The water be drained around noon and re-filled for afternoon play (no disinfectant is needed in water), and
- At the end of the day, drain water and then disinfect the pool surfaces and pool toys (see “disinfectants (for surfaces)” section).
SAND BOXES – OUTDOOR

Outdoor sand boxes and play areas can be a health concern. Sand can retain moisture and provide an environment suitable for the growth of bacteria. Parasites can also be transmitted when animals defecate in the sand boxes or play area.

**General Recommendations:**

- Supervise children using the sandbox to ensure as much as possible that they do not put their hands in their mouths while playing in the sand.
- Children and staff should wash their hands immediately after sand play activities.
- Children should clean sand from their footwear, socks, and fold in pant legs before entering the facility.
- Cover sand boxes when not in use. For larger sand boxes, roll-away plastic covers or folding plywood lids are recommended.
- An outdoor sand area that cannot be covered should be fenced.
- Child care facility operators should consider not allowing children to play in sand boxes that are not fenced.

**Sandbox Construction Guidelines:**

- Do not use white, powdery “artificial” sand made from crushed rock as it may contain asbestos.
- Sand that contains muscovite or biotite should not be used. These minerals will weather into small black or dark yellow/brown smooth flakes which may attach to a child’s eye.
**Sandbox Maintenance Guidelines:**

- Sand in play areas should be turned over to a depth of 460 mm (18 inches) annually.

- Child care facility operators should consider cleaning sand in child care facility sandboxes
  - Once yearly after spring thaw, and
  - If the sand was contaminated with fecal matter.

- Sand can be cleaned by the following method:
  - Measure sandbox area and determine depth of sand. Determine volume of sand (length x width x depth of sandbox),
  - For each 5 cubic meters (175 cubic feet), fill a 9.0 litre (2 gallon) watering-can with water and 110 ml (4 fluid ounces) of household bleach,
  - Distribute the solution over the sandbox area,
  - Hose down the area to allow solution to penetrate into the sand, then
  - Turn over the sand one shovelful deep (17 cm or 7.5 inches) before the children use it again.
SAND TABLES – INDOOR

Appropriate sand materials and practices should be used for indoor sand play tables to ensure that the activity does not cause a health concern.

General recommendations:

• Hands should be washed before and after playing in the sand tables.

• Spilled sand can lead to falls and injury. Keep a broom and dustpan near the table so spills can be cleaned up immediately (discard spilled sand).

• Indoor play sand should be discarded and replaced every two years.

Recommended Sand for Use in Sand Play Tables:

• Use sand that has ACMI, ASTM or AP (Approved Product) seals

• Sterilized play sand (found at building supply stores) is also generally acceptable.

• Unapproved sand products can contain asbestiform, tremolite or crystalline silica. These are harmful chemicals if breathed in, which makes them unsuitable for play sand.
TOYS—SAFETY AND CLEANING

Toys can be a safety concern in a child care facility as a result of choking hazards and chemical content. Toys can be a health concern because children share toys and toys are often not washed properly. Studies have shown that bacteria and viruses can be transmitted by toys and children between the ages of 6 to 30 months will put a hand, toy or other object in their mouths every one to two minutes. Viruses excreted by saliva can survive up to 30 minutes on toys and can survive on non-porous surfaces for several hours or even several days.

**Toy Safety**

General recommendations:

- Toys that are smooth, non-absorbent and easily cleanable are the safest in a child care facility, especially those used by diapered children.

- All toys used in the facility should be examined before and after use for safe construction, small parts, breaks and cleanliness (see Health Canada guidelines, below).

- Bringing toys from a child's home should be discouraged, unless the toys will not be shared by other children and stored in a locker if not in use.

- Books that cannot be cleaned should be stored in a dry area.

For more specific toy safety guidelines, please consult the following Health Canada website:

http://www.hc-sc.gc.ca/iyh-vsv/prod/toys-jouets_e.html
**Toy Cleaning and Disinfecting Recommendations:**

- **Stuffed toys** should be laundered at least once a week.

- Toys (other than stuffed toys) should be cleaned and disinfected using a diluted household chlorine bleach solution (100 parts-per-million) or other appropriate disinfectant (see “disinfectants (for surfaces)” section):
  - When soiled,
  - Daily if used by diapered children, and
  - Weekly, if used by non-diapered children.

- Using a dishwasher is not recommended for cleaning and disinfecting toys, because
  - Toys may not be heavy enough to be properly washed by water jets in the dishwasher, and
  - The shape of toys may prevent all toy surfaces from being thoroughly washed.

Contact your EHO with questions about cleaning toys in the dishwasher.

- If there is an outbreak in your facility (see “outbreak” section), contact your EHO for enhanced toy cleaning guidelines.
WATER PLAY TABLES

The improper use of water play tables can pose health risks. Studies by health regions in Alberta have found a very large bacteria count in water play tables. The presence of disease-causing bacteria can contribute to the spread of infectious diseases in child care facilities.

General Recommendations:

- Water play tables should not be used during a diarrhea or vomiting outbreak in child care facilities (see “detecting and reporting outbreaks” section).
- Children should wash their hands before and after using the water play table.
- The water table should have a drain, and connection to the water and sewage system if it is too large to be emptied manually.

Ensuring Play Table Water Is Safe

Day care operators can use either method listed below for their water play tables:

- **No Disinfectant Method:**
  - The play table should be filled with clean municipally treated tap water in the morning. The water should be drained around noon and re-filled again for afternoon play. No disinfectant is needed in water. At the end of the day, drain water, then, disinfect the table and toys (see “disinfectants (for surfaces)” section).

- **Disinfectant Method:**
  - Add enough household bleach to make the play water 100 ppm chlorine (see “disinfectants (for surfaces)” section). The disinfectant will remain effective for the whole day. At the end of the day, drain the water.
CHEMICAL HAZARDS
CHEMICAL STORAGE

All chemicals, including detergents, disinfectants, cleaning compounds and aerosol products must be stored away from the children, and separated from food, toys and medication.

**General Recommendations:**

- All chemicals must be stored in an area that the children do not have any access to (i.e. a locked cabinet), or at a height of at least 1.5 metres.

**Medical Supplies and Medications:**

- Medical supplies should be stored in locked cabinet(s) away from all other chemicals and food products.
- Medication that requires refrigeration should be locked in a container and then placed inside a refrigerator.

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The toll free number for Poison Control Centre is 1-800-332-1414
HERBICIDES AND PLAYGROUNDS

Herbicides are sometimes used in outdoor playgrounds to control weed growth. Such chemicals can enter a child's body through oral consumption, inhalation, or skin absorption. Single prolonged skin exposure to herbicides such as 2,4-D is not likely to result in harmful absorption. Care must be taken, however, to prevent skin exposure or ingestion.

General Recommendations:

- The use of any herbicide for cosmetic purposes should be minimized. Other methods should be considered first before the use of any chemical pesticides.

- Risks associated with the use of herbicides to control weeds around playgrounds can be minimized by doing the following:
  
  o Contact the building landlord or the Municipal Parks and Recreation Department to determine when herbicide spraying will be done. It is best if spraying is conducted when the child care facility is closed, such as late Friday or early Saturday.
  
  o Determine the type of chemical being used, as well as the extent and area of spraying. The applicator should be made aware of the location of the facilities playground to prevent over spraying and minimize wind drift. If the wind direction results in carrying aerosol and dust towards the facility, close all windows and furnace intake vents.
• Cover outdoor sand boxes with plastic. If possible, all play equipment and sand play areas should be covered. If it cannot be covered, the sand should be watered down to dilute the herbicide. On calm days cardboard can also be put around the perimeter of the play area to minimize drifting of chemicals into the sand area.

• After herbicides have been sprayed at a playground:
  o Do not use the outdoor play area for at least 24 hours,
  o Rinse all outdoor equipment with water, and wipe down with cloths,
  o Water the sand to dilute chemicals,
  o Supervise children playing to make sure they do not put dirt or sand in their mouths,
  o Ensure all children and staff wash their hands thoroughly upon returning into the facility, and
  o Remove all dirt and dust from clothing and footwear upon returning into the facility, and vacuum the floor immediately upon returning to the facility, to remove dirt and dust.
PLANTS – POISONOUS INDOOR

These indoor plants are poisonous, and not permitted in child care facilities:

<table>
<thead>
<tr>
<th>PLANT (common name)</th>
<th>POISONOUS PART(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amaryllis</td>
<td>Bulb</td>
</tr>
<tr>
<td>Australian Umbrella Tree</td>
<td>Leaves</td>
</tr>
<tr>
<td>Azalea</td>
<td>All parts</td>
</tr>
<tr>
<td>Bird of Paradise</td>
<td>3-angled capsule and seeds</td>
</tr>
<tr>
<td>Caladium</td>
<td>All parts</td>
</tr>
<tr>
<td>Calla Lily</td>
<td>Leaves and rhizome</td>
</tr>
<tr>
<td>Castor Bean</td>
<td>Seeds and leaves</td>
</tr>
<tr>
<td>Crown of Thorns</td>
<td>Sap</td>
</tr>
<tr>
<td>Cyclamen</td>
<td>Bulb</td>
</tr>
<tr>
<td>Donkeytail</td>
<td>All parts</td>
</tr>
<tr>
<td>Dumbcane</td>
<td>All parts</td>
</tr>
<tr>
<td>Elephant Ear</td>
<td>All parts</td>
</tr>
<tr>
<td>English Ivy</td>
<td>Leaves, berries</td>
</tr>
<tr>
<td>Flamingo Flower</td>
<td>All parts</td>
</tr>
<tr>
<td>Holly</td>
<td>Berries</td>
</tr>
<tr>
<td>Hyacinth</td>
<td>Bulb</td>
</tr>
<tr>
<td>Hydrangea</td>
<td>Leaves and buds</td>
</tr>
<tr>
<td>Jerusalem Cherry</td>
<td>All parts, fruit and leaves</td>
</tr>
<tr>
<td>Lantana</td>
<td>Green berries</td>
</tr>
<tr>
<td>Mistletoe</td>
<td>Berries, leaves and stems</td>
</tr>
<tr>
<td>Milk Bush</td>
<td>Sap</td>
</tr>
<tr>
<td>Narcissus</td>
<td>Bulb</td>
</tr>
<tr>
<td>Oleander</td>
<td>All parts, green or dry</td>
</tr>
<tr>
<td>Philodendron</td>
<td>Leaves</td>
</tr>
<tr>
<td>Poinsettia</td>
<td>Leaves</td>
</tr>
<tr>
<td>Sedum</td>
<td>All parts</td>
</tr>
<tr>
<td>Tulip</td>
<td>Bulb</td>
</tr>
</tbody>
</table>
PLANTS – POISONOUS OUTDOOR

These outdoor plants are poisonous. Children must be supervised and instructed not to pick or eat any vegetation outdoors.

<table>
<thead>
<tr>
<th>PLANT</th>
<th>POISONOUS PART(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alder Buckthorn</td>
<td>Bark and purple-black fruit</td>
</tr>
<tr>
<td>Aloe</td>
<td>All parts</td>
</tr>
<tr>
<td>Black Henbane</td>
<td>Flower</td>
</tr>
<tr>
<td>Black Nightshade</td>
<td>Berries</td>
</tr>
<tr>
<td>Bleeding Heart</td>
<td>Foliage, Roots</td>
</tr>
<tr>
<td>Blueweed</td>
<td>All parts</td>
</tr>
<tr>
<td>Bracken</td>
<td>All parts</td>
</tr>
<tr>
<td>Buttercups</td>
<td>All cups</td>
</tr>
<tr>
<td>California Bluebell</td>
<td>All parts</td>
</tr>
<tr>
<td>Caster Bean</td>
<td>Seeds</td>
</tr>
<tr>
<td>Chrysanthemum</td>
<td>All parts</td>
</tr>
<tr>
<td>Climbing Nightshade</td>
<td>Berries</td>
</tr>
<tr>
<td>Cocklebur</td>
<td>All parts</td>
</tr>
<tr>
<td>Common Comfrey</td>
<td>All parts</td>
</tr>
<tr>
<td>Common Groundsel</td>
<td>All parts</td>
</tr>
<tr>
<td>Daffodil</td>
<td>All parts</td>
</tr>
<tr>
<td>Daphne</td>
<td>Berries</td>
</tr>
<tr>
<td>Death Camas</td>
<td>Bulbs</td>
</tr>
<tr>
<td>Elderberry</td>
<td>All parts but berry</td>
</tr>
<tr>
<td>False Hellebore</td>
<td>All parts</td>
</tr>
<tr>
<td>False Ragweed</td>
<td>Leaves</td>
</tr>
<tr>
<td>Foxgloves</td>
<td>Leaves</td>
</tr>
<tr>
<td>Iris</td>
<td>Underground stems</td>
</tr>
<tr>
<td>Jack-in-the-pulpit</td>
<td>All parts</td>
</tr>
<tr>
<td>Jimsonweed</td>
<td>All parts</td>
</tr>
<tr>
<td>Lamb’s Quarters</td>
<td>All parts</td>
</tr>
<tr>
<td>Plant Name</td>
<td>Part(s)</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Laurels Rhododendron Azaleas</td>
<td>All parts</td>
</tr>
<tr>
<td>Leafy Spurge</td>
<td>All parts</td>
</tr>
<tr>
<td>Lily-of-the-Valley</td>
<td>Leaves, flowers</td>
</tr>
<tr>
<td>Mistletoe</td>
<td>Berries</td>
</tr>
<tr>
<td>Northern Water-hemlock</td>
<td>All parts</td>
</tr>
<tr>
<td>Pink Lady’s Slipper</td>
<td>Leaves</td>
</tr>
<tr>
<td>Poison Ivy</td>
<td>All parts</td>
</tr>
<tr>
<td>Poinsettia</td>
<td>Leaves</td>
</tr>
<tr>
<td>Purple Cockle</td>
<td>Seed</td>
</tr>
<tr>
<td>Red Chokecherry</td>
<td>Berries</td>
</tr>
<tr>
<td>Rhubarb</td>
<td>Leaf</td>
</tr>
<tr>
<td>Scarlet Pimpernel</td>
<td>All parts</td>
</tr>
<tr>
<td>Silky Lupine</td>
<td>All parts</td>
</tr>
<tr>
<td>Sneezeweed</td>
<td>All parts</td>
</tr>
<tr>
<td>Stinging Nettle</td>
<td>All parts</td>
</tr>
<tr>
<td>Tartarian Honeysuckle</td>
<td>All parts</td>
</tr>
<tr>
<td>Thin-leaved Snowberry</td>
<td>Berries</td>
</tr>
<tr>
<td>White Camas</td>
<td>All parts</td>
</tr>
<tr>
<td>Wild Calla</td>
<td>All parts</td>
</tr>
<tr>
<td>Wild and cultivated cherries</td>
<td>Twigs, foliage</td>
</tr>
<tr>
<td>Wild Parsnip</td>
<td>All parts</td>
</tr>
<tr>
<td>Wisteria</td>
<td>Seeds, pods</td>
</tr>
<tr>
<td>Yellow Lady’s Slipper</td>
<td>All parts</td>
</tr>
</tbody>
</table>
CONSUMER PRODUCTS
COOKWARE

Cookware varies in durability and ability to conduct heat. Leaching of metals and chemicals, however, can occur.

Child care facility operators should refer to Health Canada “It's Your Health” information series on the Safe Use of Cookware at the following link:

http://www.hc-sc.gc.ca/iyh-vsv/prod/cook-cuisinier_e.html
INDOOR AIR QUALITY—DEVICES & PRODUCTS

There are several devices and products that are designed to improve indoor air quality, including humidifiers, air purifiers, air fresheners, scented candles or incense. Below are recommendations for use of these products in child care facilities.

Humidifiers

Humidifiers can help to keep a room comfortable especially during the cold and dry winter months. There are, however, some potential health concerns that must be addressed. Bacteria and mould growth is the major health concern with humidifiers. Water left standing for a few days will allow the growth of bacteria and mould. The growth of these microbes in humidifiers is a major cause of indoor air quality problems.

General Recommendations:

- Follow manufacturers’ suggestions in the cleaning of all humidifiers.
- Humidifiers should be drained and cleaned daily.
- Humidifiers should be disinfected once per week using a diluted bleach solution (100 ppm—see “disinfectants (for surfaces)” section). Rinse off all bleach solution thoroughly after the process.
- Scale or mineral deposits can be removed by vinegar solution (one part vinegar to one part water).
- If the humidifier has a filter, it should be changed promptly and regularly according to manufacturers’ suggestions.
• It is best to use distilled or demineralized water in humidifiers, especially if it is an "ultrasonic humidifier" in order to prevent mineral and scale deposits.

• Care should be taken to control the amount of moisture in the air to less than 40% relative humidity.

• Keep the area around the humidifier dry.

**Ozonators (Ozone-Generating Air Purifiers)**

Ozone is produced by these purifiers and can hurt your lungs. Health Canada considers these products to be dangerous and does not recommend their use. The Canadian Standards Association (CSA) no longer approves ozone generators for use by the public.

**Air Purifiers**

There are many other types of ‘air purifiers’ on the market, including ionization units, HEPA filters, electrostatic precipitators and UV air purifiers. Except for some ionization units that also generate ozone (not recommended in child care facilities), the use of air purifiers usually does not pose a health concern.

**Air Fresheners**

Air fresheners, including plug-in, spray or stand-alone liquid and gel air fresheners emit fragrances that are usually made up of chemicals and may pose a health concern to some children, and are not recommended in child care facilities.
Candles and Incense

The use of scented candles and incense is not recommended in child care facilities. The burning of candles or incense can produce small particles that can be inhaled. Some candle wicks have been recalled by Health Canada because they contain high lead content. The use of candles and incense also pose a fire hazard.

Consult with your Environmental Health Officer for information with questions about indoor air quality devices and products.
MICROWAVE OVENS – USAGE AND SAFETY

If a microwave oven is used in your child care facility, care must be taken to ensure that food is thoroughly cooked, that heated food doesn’t cause burns in those eating the food and that chemicals in containers and food wrap do not leach into the food.

**Cooking Temperatures:**

An internal temperature of at least 74°C (165°F) is required to kill harmful bacteria in food to prevent food poisoning. Heating in a microwave oven can be uneven, resulting in "cold spots" inside or on the surface of the food. The uneven cooking can result in the survival of bacteria, leading to possible food poisoning outbreaks.

As a precaution, it is recommended that:

- Probe thermometers are used to check internal temperatures after cooking. Different parts of the food should be tested to ensure the internal temperature reaches at least 74°C (165°F),
- Rotation trays be used to ensure a more even cooking and stir food, if possible, several times during cooking,
- Meat and poultry be arranged uniformly in a covered dish so that steam can help kill bacteria and promote uniform heating,
- After cooking a large roast or turkey, cover and let stand for 5 minutes (standing time) to allow for even heat migration, and
- Cooking times be adjusted for lower powered microwave ovens. Microwave ovens with lower power will take longer to cook food to the required temperature.
Plastic Food Wrap

Migration of plastic and other chemicals is possible from food grade plastic wraps. This also applies to wraps that are "microwavable". Although the migration quantity may be small, it is recommended that:

- Plastic wraps not be used to wrap foods or line dishes in microwave ovens.
- Wrap should not be in contact with foods with high fat content, such as cheese.
- Wraps should only be used to cover bowls in microwave ovens, to retain moisture, provide even cooking during reheating and prevent food from splattering.

Cookware for Microwave Ovens

Most plastic and heat resistant cookware can be used in microwave ovens. Inappropriate containers may melt or warp which can increase the likelihood of spills and burns. A quick test to ensure cookware is microwave-safe: put the empty container in microwave and heat for one minute. The utensil is unsafe for the microwave if it is warm. The utensil is acceptable for reheating if it is lukewarm and acceptable for actual cooking if it is cool.

Do not use the following in microwave ovens:

- Dishes and cookware with metallic trim, metal caps of infant food jars,
- Delicate glassware that may crack,
- Ceramic dishes with handles that may come off with frequent use,
- Carry-out containers from restaurants, styrofoam containers and trays (these products may melt and/or burst into flames),
- Supermarket plastic bags,
• Foil-lined containers, such as tetra juice packs,
• Paper towels,
• Mercury-type or glass-tube thermometers,
• Plastic food containers (such as those for soft margarine, yogurt),
• Trays and containers provided with microwave meals that have been used to cook food previously (these containers are not designed to be used as everyday dishes but intended for one-time use only with a specific kind of food), and
• Aluminium foil, tin, twist ties and other materials containing metal—this can result in sparks forming (“arching”) which could damage the oven.

**Heating Infant Bottles in Microwave Ovens**

Heating infant feeding bottles in microwave ovens can be a health and safety concern. Uneven heating by the microwave oven can result in part of the liquid becoming extremely hot while the bottle may remain cold. Burns and scalds to children under seven months old from food have increased with the use of microwaves. A better method of heating bottles is a hot water bath or commercial bottle warmer. Test the temperature of the warmed bottle on the back of your hand to ensure that it is merely tepid.

The following are recommended if using the microwave to heat infant bottles:

• Consult with the manufacturer to ensure the bottles are microwave safe.
• Avoid heating bottles with disposable liners. Bottles with liners are prone to developing hot spots and can “explode” or burst when shaken due to pressure build up, spilling hot milk or formula on the baby.
• Avoid heating glass baby bottles. These bottles absorb microwave energy rapidly, which may result in the bottle cracking or exploding.
• Stand the bottle upright in the microwave and remove caps or nipples to allow heat to escape.

• For a 4-ounce bottle, heat for no more than 30 seconds.

• For an 8-ounce bottle, heat for no more than 45 seconds.

• Invert the bottle 10 times after heating to get rid of all hot spots. Vigorous shaking is not needed.

Formula should be cool to the touch; formula warm to the touch may be too hot to serve. **ALWAYS TEST THE TEMPERATURE OF THE FOOD OR LIQUID** before serving to children.

**Additional Microwave Oven Recommendations:**

• Repair or discard microwave ovens if the door or door seals are damaged.

• Keep the microwave oven clean (including the interior and area around door seals).

• Children in the child care facilities:
  o Should not stand in front of the microwave door while cooking food,
  o Should not be permitted to open the door of the microwave, and
  o Should not eat food from the microwave until the temperature has been tested by an adult.
MOSQUITO REPELLENTS

The use of mosquito repellents is recommended to prevent mosquito bites and infections spread by mosquito bites such as West Nile Virus. However, repellents must be used safely and the following are recommended:

Buying Mosquito Repellent:

- Health Canada has approved three active ingredients for use in mosquito repellents- DEET, p-methane 3,8-diol and soybean oil. While DEET is the most common agent, they are all equally safe.

- Check to make sure the product is approved for use in Canada.

- Look for a registration number granted under the Pest Control Products Act and make sure the product is labelled as an insect repellent for use on humans.

- A product labelled as an “insecticide” should never be used on your body.

- Some repellent products contain a sunscreen or skin lotion. It is recommended that such combination products be used solely as insect repellents, and be applied according to the safe practices listed under “Use of DEET and Other Repellents”, i.e., not spread liberally as one might a sunscreen or skin lotion.

- Read the entire label before using and follow the directions carefully. Use only the amount directed and for the purpose listed.

- Store insect repellents away from children’s reach, in a locked utility cabinet or garden shed.
Use of DEET and Other Repellents:

- Always supervise the application on children.
- When applied and used according to label directions:
  - 30% DEET products give 6 hours of protection
  - 15% DEET products give 5 hours of protection
  - 10% DEET products give 3 hours of protection
  - 5% DEET products give 2 hours of protection
- Apply repellent sparingly and only to exposed skin and/or clothing. Do not apply DEET under clothing.
- Never use repellents on cuts, wounds, inflamed, irritated or sunburned skin, or skin affected by eczema.
- Apply repellent to clothing as mosquitoes easily bite through thin clothing such as a cotton T-Shirt.
- Do not apply to eyes and mouth, and apply sparingly around ears. When using sprays, do not spray directly onto face. Spray on hands first and then apply to face. If someone gets repellent in their eye, rinse the eye immediately with water.
- Do not apply to children’s hands because they are likely to put them in their mouths.
- Do not spray in enclosed areas such as a tent.
- Avoid breathing in a repellent spray.
- Do not spray repellent near food.
- Avoid over application of the product. Use just enough repellent to lightly cover the skin. Do not saturate the skin. Heavy application and saturation are unnecessary for effectiveness. Repeat applications only as necessary according to label directions.
• After applying, wipe or wash the repellent from the palms to prevent inadvertent contact with eyes, mouth or genitals.

• After returning indoors, wash treated skin with soap and water or bathe. This is particularly important when repellents are used repeatedly in a day or on consecutive days.

• If a reaction to insect repellent is suspected, wash treated skin and seek medical attention. Severe reactions are uncommon, although, worldwide there have been 14 reported cases of seizures over 30 years in individuals that used DEET improperly (over application).

• DEET can damage plastics, synthetic fabrics, leather and painted or varnished materials. Be careful not to get it on eyeglass frames, watch crystals, walls or furniture. DEET does not damage natural fibres, such as cotton or wool, and has no effect on nylon.

Restrictions For Insect Repellents:

• For children under 6 months of age:
  o Use of personal insect repellents containing DEET is not recommended.

• For children aged 6 months to 2 years of age:
  o In areas where diseases such as West Nile Virus may be spread by mosquitoes (including the Edmonton area), the use of one application per day of DEET may be considered for this age group. The least concentrated product (10% DEET or less) should be used. Prolonged use should be avoided.
• **For children between 2 – 12 years of age:**
  - The least concentrated product (10% DEET or less) should be used. Do not apply more than 3 times per day. Prolonged use should be avoided.

• **For adults and individuals 12 years of age or older:**
  - Do not apply more than 3 times per day. Avoid prolonged use.

**Other Repellents and Devices:**

• Citronella and Lavender-based products have not been approved for use in Canada and are being phased out of the market. There is uncertainty regarding the safety of these products.

• Soybean-Oil: Registered products containing soybean oil have been approved for use in Canada. These products can provide between 1 to 3.5 hours of protection.

• P-methane 3,8-diol: Registered products containing this ingredient have been approved to provide up to 2 hours of protection. This product, however, is not recommended for use on children under the age of 3 years. In general, this product should not be used for more than two applications.

• “Mosquito plants” (Garden Lily or Citrosa plants) are not effective for mosquito control. These plants contain citronella oil, but leaves must be crushed before the oil can be extracted. Skin-so-soft™ contains 1% citronella oil.

• Mosquitoes are attracted to electronic systems that use propane gas to emit dioxide. The mosquitoes are then captured by a fan system and destroyed. These units can be effective, but effectiveness is limited by wind dispersion. The amount of carbon dioxide emitted from these machines must also be greater than human emissions via breathing in order to be effective.
- Ultra-sonic devices that emit high frequency sound may mimic the sound of a dragonfly or other insects. Studies have shown these devices do not reduce the mosquito population.

- Ultraviolet bug-zappers will destroy many more beneficial insects than mosquitoes and are generally not effective for mosquito control.
SUN SAFETY

Too much summer sun can be harmful. To keep the children safe when outside in the sun, the following should be carried out:

• **COVER UP:** Wear long sleeves and a hat with a wide brim. Use long sleeves and long pants to protect children from the sun.

• **WEAR PROPER SUNGLASSES:** Overexposure to ultraviolet radiation from the sun can cause sunburn and skin damage and can also damage the eye. Cumulative exposure to UV rays can damage the cornea, lens and retina of the eye resulting in cataracts. Recommended sunglasses should have lenses that:
  - Have dark, even shading, and
  - Block 99 to 100 per cent of UV-A and UV-B rays. Check the label that lists the type and amount of protection.

• **STAY IN THE SHADE:** When your shadow is shorter than you, the sun is very strong. Look for places with lots of shade. If possible, keep children out of the sun between 11 a.m. and 4 p.m. when the sun’s UV rays are strongest.

• **USE SUNSCREEN:**
  - Choose a broad spectrum sunscreen with SPF factor of 15 or higher and use according to label directions. SPF means "Sun Protection Factor”.
  - Put sunscreen on the children 20 minutes before they go out and reapply some 20 minutes after being out in the sun to ensure more even application of the product and better protection.
  - **DO NOT** apply sunscreen on babies less than 6 months old.

Health Canada website on sunglasses:
www.hc-sc.gc.ca/iyh-vsv/prod/glasses-lunettes_e.html
DRINKING WATER
DRINKING WATER CONTAINERS

The following are the recommendations for drinking water bottles in your facility.

**Personal Water Bottles**

- Sharing water bottles is NOT recommended because of increased risk of infection transmission.

**Personal Water Bottles With a Hard Outer Shell**

Water bottles that have a hard outer shell (Nalgene type bottles) are designed for reuse. These bottles have wider openings that allow for proper cleaning. It is recommended that personal water bottles with a hard outer shell are cleaned daily after use, as follows:

- Scrub with dish detergent and rinse with clean water,
- Sanitize the inside of the bottle by pouring boiling hot water from a kettle inside, and
- Air-dry after cleaning.

**Note:** Hard plastic water bottles may contain the chemical Bisphenol A which could leak into water held in the bottle. Health Canada has stated that the amount of leakage is low and is therefore not a health concern. Consult the website below for more information.

Personal Water Bottles With a Thin Outer Shell

Water bottles that have thin outer shell used for commercial bottled water are not designed for reuse. There is an increased risk of chemical migrating into the water with prolonged use. These bottles also usually have very narrow openings making cleaning very difficult. Tests have found that after opening, water stored in these bottles can have high bacteria counts.
DRINKING WATER - TASTE AND ODOUR

Taste and odour problems in municipal water may occur during spring run-off periods, or as a result of corrosion in hot water tanks.

**Spring Run Off**

During spring time, the break down of natural compounds collected over the winter under ice cover produces an excess of taste and odour forming chemicals in drinking water. These chemicals are not of health concern. To minimize the “off” taste and odour, water can be boiled, cooled and refrigerated. During periods of “off” taste and odour, bottled water may also be used.

**Corroded Hot Water Tanks**

In private water supplies, there may be a characteristic "rotten egg" smell. The smell is from the presence of hydrogen sulphide gas which can also corrode piping, giving slightly blackish water. Hydrogen sulphide may be present in a water supply naturally (formed by iron bacteria), or as a product formed by electro-chemical reactions between sulphates in the water and the magnesium rod in the hot water heater (the rod is used in the water heater to prevent corrosion). If the smell is present only in the hot water, the latter is most likely the cause.

- To remove the hydrogen sulphide present naturally in well water, iron filter and chlorination are usually effective.
- Removal of the magnesium rod is the only solution that will eliminate the smell from hot water tanks.
DRINKING WATER SUPPLY AND TESTING

Safe drinking water is one of the most important aspects of Public Health. Canada has among the safest drinking water in the world. Below is information on how drinking water can be made even safer.

Flushing:

- On Monday morning before the children arrive, turn on all taps in the facility and let the water run for 30 seconds or until the water temperature changes. Water sitting in water lines over the weekend may have a higher concentration of lead that may leach out of the lines. Flushing removes this water.

For facilities that obtain water from an approved municipal treatment system (e.g. those in the EPCOR distribution grid in the Edmonton area):

- The water is tested and monitored on a regular basis. There is no need for additional microbial testing.
- Lead levels should be monitored. Contact your Environmental Health Officer for more information.
- Do not drink hot water from the tap as hot water is not designed for drinking.
For facilities that obtain water from a well or from a water hauler and cistern system:

- There is a need for regular water testing and cleaning of systems. Wells and cisterns should be disinfected on a regular basis by using household bleach. Please contact your local Environmental Health Officer for the proper disinfection method and suggested cleaning frequency.

- Well water should also be tested for both microbial and chemical safety on a regular basis. Please contact your local Environmental Health Officer for the suggested testing frequency and the needed water sampling bottles for testing.

- There may also be a need to further treat well water to make it more acceptable in terms of odour and taste. First have the water tested to for water quality, then consult with the local Environmental Health Officer regarding the appropriate type of treatment to use.
EMERGENCY DRINKING WATER SUPPLIES

Child care facilities should be closed if there is no potable water supply. A facility may remain open if the operator has obtained approval from the Environmental Health Officer on its contingency plan. Failure to inform your Environmental Health Officer may result in immediate closure of the facility.

Contact your Environmental Health Officer on how to store water for emergency use.
HOT WATER TEMPERATURE

Hot tap water scalds account for about 10% of all paediatric hospital admissions. The relationship between water temperature and skin exposure time required for development of a first or second degree burns is listed below.

<table>
<thead>
<tr>
<th>WATER TEMPERATURE °C(°F)</th>
<th>TIME OF EXPOSURE (SECONDS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>52 (125.6)</td>
<td>70</td>
</tr>
<tr>
<td>54 (129.2)</td>
<td>30</td>
</tr>
<tr>
<td>56 (132.8)</td>
<td>14</td>
</tr>
<tr>
<td>58 (136.4)</td>
<td>6</td>
</tr>
<tr>
<td>60 (140)</td>
<td>3</td>
</tr>
<tr>
<td>62 (143.6)</td>
<td>1.6</td>
</tr>
<tr>
<td>64 (147.2)</td>
<td>1</td>
</tr>
</tbody>
</table>

To prevent hot water scalds in young children, the Canadian Medical Association recommends that the hot water temperature at the tap not exceed 49°C (120°F).

http://www.cma.ca/multimedia/HealthyLiving/english/documents/physicianResources_toddlers_SMA.pdf

Additional recommendations to prevent hot water scalds:

- Supervise and/or teach children to turn on the cold water before the hot when washing hands.

- If the hot water tank temperature cannot be adjusted to meet Alberta Building Code Requirements, mixing valves should be installed. Safety valve devices on the market may offer some protection. The safety valve can be fitted on the faucet, and contains a temperature-sensitive spring. The valve will automatically turn off the water when the temperature reaches a set limit. Consult with your Environmental Health Officer to discuss these methods.
WATER COOLERS

Drinking water coolers may be used in your child care facility to store and dispense bottled water. The following are recommended for water coolers:

Water Cooler Location

Water coolers should be located:

- In a well ventilated area, away from air vents, doorways and other dusty environments,
- With at least 5 cm (2 inches) of clearance around the back of the cooler to allow for ventilation of the wire grid,
- Within reach of a suitable grounded electrical outlet, and
- Out of direct sunlight and away from heating vents (this will help prevent algae growth).

Water Cooler Cleaning

- It is recommended that water coolers be thoroughly cleaned and disinfected with every bottle change. Contact the water cooler company or your local Environmental Health Officer for cleaning information.
EMERGENCY INFORMATION
ALLERGY KITS

Children may be allergic to a variety of substances, including bee stings, yellow jacket stings, nuts and seafood. Allergy kits are available with a doctor's prescription and can be useful in emergency situations.

It is recommended that parents of children with severe allergies:

- Supply an allergy kit to the childcare facility operator as a precaution,
- Ensure that staff know how and when to administer the kits, and
- Replace the emergency kit when it expires.

Childcare facility staff must:

- Recognize the symptoms of allergic reactions,
- Be familiar with the use of allergy kits,
- Be aware of every child at the facility with a life-threatening allergy,
- Ensure that allergy kits are clearly identified and stored safely out of the reach of the children, and
- Bring the allergy kits along on all field trip and outside activities.
EMERGENCY NUMBERS

Please fill in appropriate numbers and keep the list close to the telephone.

<table>
<thead>
<tr>
<th>EMERGENCY for Fire, Police, Ambulance</th>
</tr>
</thead>
<tbody>
<tr>
<td>911</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POISON CONTROL CENTRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-800-332-1414</td>
</tr>
</tbody>
</table>

Alternate access:

- Police:______________________________
- Fire:_______________________________
- Child Abuse Hot Line:________________
- Hospital(s)________________________
- Emergency Staff Contact________________
- Medical Clinic(s)_____________________
- Physician____________________________

Local Health Authority/Health unit

- Environmental Health Officer_____________________
- Public Health Nurse____________________________
- Health Link 1-866-408-5465
FIRST AID KITS

The Public Health Act requires all child care facilities have a first aid kit in the facility.

Requirements:

- It is recommended that an inventory list of first aid supplies be maintained and checked monthly.
- A No. 1 kit is recommended for facilities with 2-9 workers.
- A No. 2 kit is recommended for facilities with 10–49 workers.

No. 1 Kit Contents

- 10 antiseptic cleansing towelettes, individually packaged
- 25 sterile adhesive dressings, individually packaged
- 10 10 cm X 10 cm sterile gauze pads, individually packaged
- 2 10 cm X 10 cm sterile compress dressings, with ties, individually packaged
- 2 15 cm X 15 cm sterile compress dressings, with ties, individually packaged
- 2 conform gauze bandages – 7.5 mm wide
- 3 cotton triangular bandages
- 5 safety pins – assorted sizes
- 1 pair of scissors
- 1 pair of tweezers
- 1 125 mm X 4.5 m of adhesive tape
- 1 crepe tension bandage – 7.5 mm
- 1 artificial resuscitation barrier device with one-way valve
- 4 pairs of disposable surgical gloves
- 1 first aid instruction manual (condensed)
- 1 inventory of kit contents
- 1 waterproof waste bag
### No. 2 Kit Contents

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Antiseptic cleansing towelettes, individually packaged</td>
</tr>
<tr>
<td>50</td>
<td>Sterile adhesive dressings, individually packaged</td>
</tr>
<tr>
<td>20</td>
<td>10 cm X 10 cm sterile gauze pads, individually packaged</td>
</tr>
<tr>
<td>3</td>
<td>10 cm X 10 cm sterile compress dressings, with ties, individually packaged</td>
</tr>
<tr>
<td>3</td>
<td>15 cm X 15 cm sterile compress dressings, with ties, individually packaged</td>
</tr>
<tr>
<td>1</td>
<td>120 cm X 25 cm sterile abdominal dressing</td>
</tr>
<tr>
<td>2</td>
<td>Conform gauze bandages – 7.5 mm wide</td>
</tr>
<tr>
<td>4</td>
<td>Cotton triangular bandages</td>
</tr>
<tr>
<td>8</td>
<td>Safety pins – assorted sizes</td>
</tr>
<tr>
<td>1</td>
<td>Pair of scissors</td>
</tr>
<tr>
<td>1</td>
<td>Pair of tweezers</td>
</tr>
<tr>
<td>1</td>
<td>125 mm X 4.5 m of adhesive tape</td>
</tr>
<tr>
<td>2</td>
<td>Crepe tension bandages – 7.5 mm wide</td>
</tr>
<tr>
<td>1</td>
<td>Artificial resuscitation barrier device with one-way valve</td>
</tr>
<tr>
<td>6</td>
<td>Pairs of disposable surgical gloves</td>
</tr>
<tr>
<td>1</td>
<td>Sterile, dry eye dressing</td>
</tr>
<tr>
<td>1</td>
<td>First aid instruction manual (condensed)</td>
</tr>
<tr>
<td>1</td>
<td>Inventory of kit contents</td>
</tr>
<tr>
<td>1</td>
<td>Waterproof waste bag</td>
</tr>
</tbody>
</table>

When travelling outside/away from the facility:

- No. 2 first aid kit.
- An allergy kit.
- A cellular phone
- An incident report booklet is also recommended.


POISON CONTROL

The toll free number for the Alberta Poison Control Centre is:

1-800-332-1414.
POWER AND GAS FAILURE

There may be occasions when the facility has lost its power and/or gas supply. Your primary concern during these times is to keep the children safe and comfortable.

During the winter months any disruption to the power or gas supply for an extended period of time could result in the need for the facility to close. In these situations:

- The parents must be contacted to pick up their children, and,
- If necessary, the emergency procedures plan should be initiated.

There are also some concerns with the safety of the food products stored in the refrigerator or freezer. Any questions regarding the safety of the stored food products should be referred to your local Environmental Health Officer.

http://www.capitalhealth.ca/AboutUs/OurOrganization/PublicHealthDivision/EnvironmentalHealth/EnvironmentalHealthEnforcement/FactSheetsandForms/default

FACILITIES & EQUIPMENT
Furniture in your child care facility should be safe, in good repair and easily cleanable. Below are some recommendations regarding furniture in your facility.

**Upholstered Furniture:**

- There are some concerns regarding upholstered furniture as cleaning and disinfection is difficult. The fabric provides a safe haven for bacteria, mites and insects.
- The use of upholstered furniture is NOT recommended in child care facilities.
- However, if upholstered furniture is used, it is recommended that a slip cover or blanket be placed over it, and the cover be washed when it becomes visibly soiled.

**Donated Furniture:**

- Donated or used furniture must be thoroughly inspected upon receipt.
- An operator should refuse any donated or previously used furniture that is in poor condition.
- Wash donated or used furniture brought into the facility before use.

**Damaged Furniture:**

- Any damaged furniture is to be repaired or replaced.
- Painted furniture must be maintained.
- Chipped or peeling paint finishes must be properly repaired.


http://www.hc-sc.gc.ca/cps-spc/child-enfant/index_e.html
GARBAGE

Proper garbage disposal and collection are keys to maintaining your facility in a sanitary condition. Many pests are attracted to the odours from garbage areas and may then find their way into food storage and toy storage areas. It is recommended that childcare facilities carry out the following procedures:

- Keep garbage containers out of the reach of infants and toddlers.
- Use garbage containers of a suitable size made of durable plastic or metal. Outdoor containers should have tight fitting lids to prevent fly and odour problems.
- Obtain a sufficient number of containers to store all garbage generated between collections.
- Line containers with plastic garbage bags.
- Empty garbage containers daily or when full.
- Wash containers as frequently as needed to avoid dirt and moisture build-up and to minimize odour. Containers can also be disinfected (see “disinfectants (for surfaces)” section) to help control odours.
- Outdoor garbage storage areas should be kept clean and dry and free from debris. The contents of garbage receptacles should be protected to prevent insects and other pests from gaining access to the contents.

http://www.pmra-arla.gc.ca/english/consum/householdpests-e.html
LAUNDRY

The following are recommended for safe use of clothes washers and dryers in child care facilities:

- Clothes washers and dryers should be located in an area that is physically separated from any area where food is stored, processed or served.
- Children should not have access to laundry rooms.
- Dryers should not be placed in washrooms as fecal organisms from the toilet may become airborne and may contaminate clean laundry.
- Dryers need to be vented to the outside.
- Detergent, bleach, and other chemicals must be stored in locked cabinets, or in an area not accessible by the children (see section on Chemicals – storage).
- Fabric softeners are not recommended in dryers since children are often allergic to the products.
LOCKER DESIGN

Lockers keep children’s personal items separate from the belongings of other children. The design should include a separate area for shoes, clothing and other items the child brings to the facility.

Lockers should:

- Be easy to clean and maintain,
- Pose no risk of falling onto the children, and
- Have no protruding nails and there must be no risk of strangulation.

*Suggested Locker Design*
MATS AND COT STORAGE

Mats and cots used by children must be stored properly to prevent the bottom of the mats/cots from coming into contact with the bedding. Mats should be stored using one of the following methods:

**MATS**

- Vertical Storage:

```
  Hooks
  W O O D  M A T  W O O D  M A T  W O O D  M A T  W O O D  M A T
```

The storage unit can be installed 4 feet above ground to maximize usable space securely and safely.

- Horizontal Storage:

```
  Indoor Shoes
  Mat
  Mat
  Mat
  Mat

  Outdoor Shoes
```

The storage unit can be installed 4 feet above the ground but must not exceed a height of six feet.

- Folding:

```
  Mat
  Blanket
```

Blanket folded and placed in centre of mat. Mats can be stacked on top of each other if there is a barrier to keep the mats separate from each other. Blankets can be stored in separate bags with the child's name.
**Mat cleaning**

Mat surfaces should be:

- Washed as needed, and
- Disinfected if contaminated with a urine, vomit or feces “accident”.

**COTS**

- Pockets:

  A bag can be sewn or strapped to bottom of cot for blanket to be placed inside.
  A blanket may also be folded and placed in the centre of the cot.

- Folding:

  Similar to mats, blankets can be folded inwards, covering the bedding. The folded blanket can be placed in the centre of the cot, and then be stacked.

**LINENS FOR MATS & COTS**

- Linens (e.g. sheets, blankets, pillowcases) for mats and cots should be washed in hot water
  - Weekly, if linens are designated for one particular child, or,
  - After each use, if a different child will be using the linens next.
PLAY EQUIPMENT – DESIGN

Children can increase physical strength and gain skills, abilities and knowledge through playing. Play equipment (e.g. playground play sets) should be appropriate to the children's size, development and play needs. While designing play equipment, it is important to keep the children’s safety in mind.

The following play equipment safety issues have been identified in guidelines from the Canadian Standards Association (CSA).

Children must be protected from cuts, abrasions, falls and choking caused by:

- Sharp or rough edges,
- Projections,
- Shear, pinch, or crush points,
- Suspended or protruding hazards,
- Head and neck entrapment:
  a) Head entrapment openings
  b) Neck entrapment openings
  c) Angles, and
- Masses of solid screening.

In addition, obstacles in the line of vision should be avoided to maintain visual surveillance and security of the child at all times.

Child care facility operators should ensure all existing equipment and new installations do not pose any potential hazard to the children and conforms to the CSA guidelines.
Playground Safety Checklist

- Is the play space away from dangerous activities or areas?
- Is the space between equipment sufficient to prevent children from colliding into equipment (generally six feet)?
- Have foreign objects or obstructions been removed from fall zones under and around fixed equipment?
- Is equipment smoothly finished and generally in good repair (no sharp edges, loose or broken parts)?
- Have all worn S-hooks, chains and bolts been replaced on swings? Are all S-hooks tightly closed?
- Is the end portion of the slide at least 11 inches long?
- Do slides have large decks and handrails at the top and no small spaces that can catch drawstrings or cords?
- Do play structures with closed spaces allow air to circulate sufficiently to control temperature?
- Does the play space have varied and appropriate surface materials? For example, is satisfactory shock-absorbing surface material located beneath raised equipment?
- Is the sand or ground cover under equipment 8 to 10 inches deep?
- Is most of the play area and equipment in deep shade between 11:00 a.m. and 2:00 p.m.?
- Are health hazards from animal contamination minimized (sandbox sand raked or sterilized, hands washed after outdoor play?)
- Is the playground free of areas where standing water or other debris can collect?
• Are wooden play structures preserved with non-toxic materials?

• Are children closely supervised?

• Are climbing areas where children could fall less than six feet high?

• Could a child get caught anywhere? For example, are there any openings 3.5 inches to 9 inches wide that could entrap a child’s head?

For further information consult the following site:

http://www.csa-intl.org/onlinestore/GetCatalogItemDetails.asp?mat=00000000002019468
PAINTS AND RENOVATIONS

Paint

For the health and safety of children in your facility, all painted surfaces in the facility must be:

- In good repair,
- Painted with lead–free paints (older facilities and equipment (pre 1980) may have lead or mercury in the paints),
- Repaired if chipping or otherwise in disrepair (proper procedures must be followed if the paint is chipping and there is a possibility of lead contamination), and
- Repainted when children are not in the facility (e.g. evenings/weekends), if possible.

Renovations

- Renovations in the facility should take place when children are not at the facility (e.g. during weekends) so that the children are not in the building and the area can be thoroughly cleaned and dusted prior to re-opening.

For further information:

TOILETS AND POTTY CHAIRS

Flushing toilets are preferred to any type of device that exposes staff to having contact with feces or urine. Child-sized toilets or safe and cleanable step-aids with child seat inserts are recommended.

When potty chairs are used the following procedures are recommended:

- Keep the potty chair in the bathroom area.
- Choose potty chairs that are made of smooth, non-absorbent easy-to-clean material with a removable waste container.
- Empty potty contents into toilet after use.
- Wash and disinfect the potty chair (see “disinfectants (for surfaces)” section).
- Wash your hands and the child's hands with warm, soapy water after each use.
FIELD TRIPS
BUS SAFETY

The majority of school bus injuries occur while riders are getting on and off the bus. Injuries occur as a result of slipping or tripping on the stairs, falls from being pushed or tripped, and failure to use the handrail when boarding the bus. Other bus-related injuries involve children being struck while boarding or exiting the school bus. Injuries while riding the bus are often the result of “horseplay” and not staying seated while the bus is in motion.

Bus Safety Checklist:

- Stand in a group while waiting for the bus. No pushing or shoving.
- Stay out of the DANGER ZONE (three feet around the front, back and sides of the bus) until the bus driver lets you know it’s safe to get on. If you can touch the bus, you’re too close.
- Once the bus arrives, line the children up with the smaller children in the front.
- Children and adults should
  - Get on the bus one-at-a-time,
  - Use the handrail when getting on or off the bus,
  - Take their seat right and stay seated until leaving the bus,
  - Face forward and don’t throw things inside the bus or out of the bus windows,
  - Talk quietly and keep head and arms inside the bus,
  - Wait until the bus stops before standing. Move away from the DANGER ZONE after leaving the bus, and
  - Always listen to school bus drivers – they’re in charge and they may have additional rules.

http://www.tc.gc.ca/roadsafety/childsafety/menu.htm
FARM & PETTING ZOO VISITS

Field trips to farms or petting zoos are common. However, many organisms, such as *Campylobacter*, *Salmonella*, *Cryptosporidium* and *Giardia* are commonly found in animals and can cause infectious diarrhea in humans.

The benefits of these visits should be weighed against the possible risk, especially if the children will be in direct contact with the animals. Children are often encouraged to touch animals, and help bottle-feed baby animals. Children may be exposed to animal feces and fecal dust, animal coughs, sneezes and mucous or saliva and may even be scratched or bitten by the animals.

To minimize the risk during farm or petting zoo visits the following are recommended:

- Children should be closely supervised if there is direct contact with animals.
- Children with allergies should be kept away from the animals.
- Do not allow the animals to lick the children's' hands and fingers.
- Do not allow the children to put their fingers in their mouths.
- Drink only water that has been deemed safe for drinking.
- Children and caregivers must **WASH HANDS WITH SOAP AND WARM WATER** before eating or handling food, after hands are visibly soiled, and before leaving the animal area.
- If sinks and running water are not available, then, disposable wipes (moist towelettes) and hand sanitizer lotion must be provided. Children can use the disposable wipes before they eat and whenever hands become soiled.
- Children must not enter milking parlours when milking is in progress.
- Children must not taste raw (unpasteurized) milk.
• Children must not taste any other dairy products, animal feed or water.

• A separate clean area, away from animal areas, should be set aside for eating purposes.

Check with your Environmental Health Officer if you require more information on farm or petting zoo field trip guidelines.

http://www.capitalhealth.ca/nr/rdonlyres/evixhiifudgjinzh3kleawtxpgaimk3uwzy5uanrg4j4dgam5 dznksfp2sjwwx46vlmqu26pqt44jrmhbkd/healthandsafetyinformationforoperatorsofpettingzoosandfar ms.pdf
FIELD TRIPS - FOOD AND WATER

The following are recommended to ensure that food and water for field trips is safe:

- Drinking water used must be from an approved source; if unsure of the water source then water should be brought from the childcare facility in clean, covered containers. The containers must be properly washed and sanitized before use. Contact the Environmental Health Officer for information on sanitizing methods.

- Parents are encouraged to supply only non-perishable foods for their child’s field trip. Bacteria can grow at an alarming rate if perishable foods are kept at “danger zone” temperatures, between 4°C (40°F) and 60°C (140°F). Improper storage of perishable food at these temperatures is a leading cause of food poisoning.

- If lunch consists of perishable foods, such as meats, chicken, seafood or dairy products, keep the lunch cold by using an insulated lunch box with freezer packs.

- If possible, provide coolers with freezer packs to store and transport all lunches.

- Throw out fresh food leftovers after lunch. Throw out food where the storage temperature has not been kept below 4°C (40°F).

- Provide disposable wipes (moist towelettes) and hand sanitizer lotion in case clean water is not available. Children can use the disposable wipes before they eat and whenever hands become soiled.

- The water used for drinking must be safe. If the water source is questionable an alternate supply should be acquired.

- Children should be closely supervised so that they don’t drink water from unsafe sources such as a river or stream.
TRIPS TO THE SWIMMING POOL AND RECREATIONAL WATER PARKS

Trips to a water facility can be an excellent activity for the child both for a field trip as well as for exercise. There are concerns that need to be followed to ensure the children's health and safety.

Check the pool area for safety:

- The water must clear and the pool bottom visible.
- There must be life-saving equipment easily available.
- Find out if Life-guards will be present.

Water can be a source of organisms which when ingested can result in illness. If children are visiting the pool (facility), please follow these guidelines:

- Do not allow children who are ill into the pool. Any child who has been ill with diarrhea or vomiting or any child who has had diarrhea in the previous two weeks must not be allowed into the pool (water).
- It is recommended that diapered children not enter the pool water. If the child is going to enter the pool then swimming diapers must be used.
- Discourage the children from swallowing pool water.
- Wash your hands and the child’s hands after using the toilet or after changing diapers.
- Shower before entering the water.
- Take children on bathroom breaks and check diapers often.
- Change diapers in the washroom, not at the poolside.
TRIPS TO THE LAKE

During the warm summer months the children may be taken out on a field trip to a nearby lake. Following the following precautions will help ensure that the children’s safety and health are protected.

**Water Safety:**

- Provide enough adult supervision.
- Ensure that the children have properly fitted life jackets (personal floatation devices) while in or near the water.
- Ensure that children do not play in storm water ponds.
- Provide adequate sun/insect protection.
- Ensure that there is adequate safe water for drinking.
- Ensure that food/snacks are safe (see “Field Trips – Food and Water”).

**Preventing “Swimmers Itch”**

Most lakes in Alberta contain the fluke larvae that cause a rash called “swimmer’s itch”. Swimmer’s itch is a skin reaction (dermatitis) to small parasites found in the water when they try to enter the skin. The parasite is called a “Schistosome” and is found in lakes throughout Alberta particularly during warm weather. If children play in lakes during field trips, it is possible that they may contract “swimmers itch”.

After children have been in the water, the following steps can be taken to reduce the chance of contacting swimmers itch.

- Avoid swimming in areas where swimmer’s itch is a problem.
- Avoid swimming for long periods of time in shallow water.
• Briskly rub the skin with a towel immediately after leaving the water.
• If possible, shower after leaving the water using soap and clean water.
• Calamine lotion can be used to reduce itchy skin.

Preventing Other Water Borne Infections

There are also concerns that some water may contain bacteria or the protozoa that, when ingested, may cause the disease. One illness is commonly known as Beaver Fever (Giardia). The symptoms include diarrhea, abdominal cramps and fatigue.

When swimming in lakes children should:

• Be reminded to not drink the water, and
• Wash their hands before eating.

http://www.capitalhealth.ca/hr/rdonlyres/ee3zmrwn6k5e7alhvuu7gboddw7glic6cuogpiwdxjcu43oclvhmz4pav7c2kcxy3e6xckt4xatru4vd27eswfigvc/swimmersitch.pdf
PREVENTING ILLNESS IN CHILD CARE FACILITIES
A. MANAGING AND REPORTING ILLNESS
SICK CHILD EXCLUSION GUIDELINES

When a child at your facility has symptoms of an illness that might be spread to others, it is important that the child be sent home as soon as possible, to prevent illness in other children and staff.

**If any of the following are observed in a child at your facility, the child should be sent home:**

- Illness that prevents the child from participating comfortably in program activities.
- Illness that results in a need for care that is greater than the staff can provide without compromising the health and safety of other children.
- Any of the following conditions suggesting possible severe illness:
  - Fever,
  - Lethargy,
  - Irritability,
  - Persistent crying,
  - Difficult breathing,
  - Quickly spreading rash, and
  - Other manifestations of possible severe illness.
- New cough with fever.
- Persistent abdominal pain.
- Vomiting 2 or more times during the previous 24 hours.
- Diarrhea.
- Stools that contain blood or mucus.
• Mouth sores associated with drooling, unless the child’s physician or Public Health states that the child is noninfectious.

• Rash with fever or behavioral change, until a physician has determined the illness is not a communicable disease.

• Varicella (“chicken pox”): call Public Health for exclusion guidelines.

• Purulent conjunctivitis (defined as pink or red conjunctiva with white or yellow eye discharge, often with matted eyelids after sleep and eye pain or redness of the eyelids or skin surrounding the eye), until examined by a physician and approved to come back to the child care facility.

• Impetigo, until 24 hours after treatment has been initiated.

• Head lice (Pediculosis): exclude (at the end of the day) until after the first treatment.

• Scabies: exclude (at the end of the day) until after treatment has been given.

• Public Health advises the director of the facility that a particular child must be sent home.

This is not a comprehensive list. Contact Capital Health-Public Health Division for more information about ill child exclusion recommendations.

SICK STAFF EXCLUSION GUIDELINES

When a staff member at your facility has symptoms of an illness that might be spread to others, it is important that the staff member be sent home as soon as possible, to prevent illness in children and other staff.

Generally, staff should be sent home if they have any of the symptoms listed in the “sick child exclusion guidelines” section of this manual.

Note: If multiple staff are ill at the same time, the manager of the facility will need to assess whether the required child/staff ratios can be safely maintained.
DETECTING AND REPORTING OUTBREAKS

Child care workers have an important role in helping control the spread of illness in their child care facility. Carefully watching the children for the first signs of an illness is called “disease surveillance” and is the first step in illness management.

**Symptoms to watch for are:**

- Cough
- Vomiting
- Rash
- Fever
- Diarrhea

**When children are sick—write it down**

To help with controlling illness in the facility, staff should keep a log of sick kids using a log sheet (see “Child Illness/Injury Log Sheet”, Appendix A)

**What is an outbreak?**

An outbreak of illness is when two or more children at the child care facility have similar symptoms over a short period of time such as on the same day or within a day or two of each other. This could be the start of an outbreak where the illness spreads quickly to others.

**What should I do if I suspect an outbreak?**

When you see children in your facility getting sick with what appears to be the same illness within a short time of each other, call the Public Health Department.
If an outbreak is suspected in your facility:
You must immediately call your Public Health Department to report it.

In the Capital Health region:

- Monday to Friday, 8:30 a.m. until 5:00 p.m., call 780 413 - 7940
- After hours or weekends, including statutory holidays, call 780 433 – 3940

What will the Public Health Department do if an outbreak is identified?

When an outbreak is identified, Public Health staff will help child care workers prevent further illness in the facility in a variety of ways. Depending on the type of outbreak, Public Health staff will:

- Provide child care workers with the best information to prevent the spread of illness in the facility.
- Provide a letter to parents signed by the Medical Officer of Health to let them know about the outbreak, to remind them that children must not attend any child care facility while they are sick, and to give parents information on how to prevent the spread of the illness in their own home.
- In some cases, assist with testing of sick children to find out what is causing the outbreak.
CHILD ILLNESS LOG SHEET

Each time a child in your facility is ill or is injured, it’s a good idea to record this information. Recording the information on a log sheet can help identify outbreaks of illness (see “identifying and reporting outbreaks”), and is useful if more information is needed in the future regarding a particular child’s illness or injury.

A sample child illness log sheet is found in Appendix A.
B. PRACTICES TO HELP PREVENT ILLNESS TRANSMISSION IN CHILD CARE FACILITIES
HAND WASHING

Hand washing is the single most important way to prevent spread of illness in child care facilities. It is important that hands are washed frequently, and properly.

**When should children and staff wash their hands?**

- At the start of the day and before going home.
- After going to the washroom.
- After a diaper change (both children and staff, see “diaper changing procedure”).
- Before preparing food.
- Before eating.
- After getting hands dirty.
- After wiping nose or handling dirty tissues.
- Often!

**What is the best way to wash hands?**

- Push your watch up away from your wrist,
- Turn on taps and moisten hands with warm water,
- Add liquid soap from dispenser (this is preferable to bar soap), and
- Thoroughly wash both hands, including:
  - Flat surfaces,
  - Between the fingers and the sides of the fingers,
  - Across knuckles,
  - Around the bases of nails,
- Under the fingernails,
- Fingertips,
- Thumbs, and
- Wrists.

- Rinse well under running water.
- Dry hands with paper towels (or re-useable towels, if the towel is washed after each time one person uses it to dry hands).
- Turn off taps with used paper towels and throw away the towels.

WATERLESS HAND WASHING AGENTS

The best method for washing hands is with soap under warm running water, with friction to help remove contamination. Waterless hand washing agents (sometimes called "sani-gel", “hand sanitizer”, etc.) are an acceptable alternative to hand washing in a child care facility, if used according to the manufacturer's directions.

The following should be considered when using waterless hand wash agents.

- If hands are visibly soiled or feel “tacky”, waterless hand wash agents may not be effective, and soap/running water should be used to wash hands.

- Use a “dime-sized” amount of waterless hand wash agent, rub over hands and forearms, and allow the skin to air dry.

- These products contain alcohol at a high concentration; ensure that children to not ingest the product nor allow the product to come into contact with eyes.
CLEANING AND DISINFECTING PROCEDURES

Illness-causing micro-organisms can sometimes be found on surfaces in child care facilities. It is important that surfaces in child care facilities be cleaned and disinfected regularly.

“High touch” surfaces (such as those listed below) are the surfaces that are most likely to be contaminated, and should be cleaned and disinfected daily, and when visibly soiled:

- Tabletops,
- Light switches,
- Door knobs,
- Sink taps,
- Toilet handles,
- Kitchen counter tops, and
- Other surfaces that are touched frequently.

To properly clean and disinfect high touch surfaces in a child care facility, a “wipe twice” 2-step process should be used.

Wipe-Twice Process:

Step 1. Clean

- Wipe the surface firmly (creating friction) and thoroughly once with a cloth wet (not dripping) with an appropriate disinfectant (see “disinfectants (for surfaces)” section). Note: if the surface is heavily soiled, you may wish to use a new cloth for Step 2 below.
Step 2. Disinfect

- Turn the cloth wet with disinfectant over and wipe the surface again.

DISINFECTANTS (FOR SURFACES)

As discussed in this manual, there are many situations when it is recommended that surfaces in child care facilities be disinfected. There are many types of disinfectants available on the market. Health Canada evaluates and monitors the safety, effectiveness and quality of disinfection products available to Canadians. Health Canada must approve public health claims for a product before it can be labeled "disinfectant", "fungicide", "sanitize" or "kills germs". If there is no Health Canada approval (confirmed with a DIN number), then the government has not reviewed & approved the label claims. These products should only be relied on for cleaning, not killing germs.

Three approved disinfectants recommended by Public Health are:

1. Diluted household bleach solution

   Preparation instructions: Prepare fresh each day. Add 15 ml (one tablespoon) of household bleach (5%) to 4 litres (one gallon) of water.

2. Quaternary ammonium compound ("quats") solution

   Preparation instructions: Prepare using the instructions on the product label.

3. Accelerated hydrogen peroxide (0.5%)

   Preparation instructions: Prepare using the instructions on the product label.

Note: Ensure that disinfectant containers have a label showing the contents.
“Natural” Disinfectants

“Natural” products (such as vinegar, undiluted ammonia and baking soda) are sometimes thought of as being disinfectants. However, these products may not be completely effective against all harmful germs. Using these products as disinfectants is not recommended.

Consult your Environmental Health Officer with any questions about disinfectants.
DIAPER CHANGING PROCEDURE

Diaper changing can result in the contamination of the environment and worker hands with disease-causing microorganisms found in feces. To prevent the spread of illness in your child care facility, diapers should be changed as discussed below.

- Wash hands and organize needed supplies.
- Place a disposable covering (paper towel) on the diapering change table.
- Prevent falls by fastening child with safety belt or ensuring that an appropriate guard is in place on the table.
- If using gloves, put them on now (ensure they are single use gloves).
- Hold the child away from your body and lay the child on the paper towel.
- Remove the soiled diaper (and soiled clothes if necessary) and discard disposable diaper in a plastic-lined receptacle.
- Put soiled re-usable diapers and/or soiled clothes, without rinsing, in a plastic bag to be given to parents.
- Clean child’s bottom with a pre-moistened disposable towelette or a dampened, single-use disposable towel. Discard soiled towelette or towel in a plastic-lined receptacle.
- If the child needs a more thorough washing, use soap, warm running water, and paper towels.
• If applying ointment, use a disposable wooden applicator or Q-tip™.

• Remove the disposable covering (paper towel) from beneath the child. Discard it in a plastic-lined receptacle.

• If you are wearing gloves, remove and dispose of them now in the plastic-lined receptacle.

• Wash your hands.

• Diaper and dress the child.

• Wash the child’s hands with soap, warm running water and use paper towels to dry.

• Return the child to the activity area.

• Clean and disinfect the diapering area, all equipment or supplies that were touched and soiled (including crib or cot if needed.)

• Wash your hands using soap, warm running water and paper towels.

Source: Environmental Public Health Services, Capital Health-Public Health Division. Diaper Changing Procedure For Child Care Providers. Resource EPHB-00-009.
CLEANING OF BLOOD AND BODY FLUID (E.G. VOMIT, FECES) SPILLS

All body fluids, including blood, vomit and feces, must be treated as infectious and handled cautiously. Only knowledgeable individuals should perform the clean-up procedure. If in doubt, please contact your local Environmental Health Officer.

Clean-Up Procedure:

- Restrict access to the affected area and do not leave the contaminated area unattended. A hazard remains until the entire contaminated area and the soiled cleaning equipment have been disinfected or disposed of safely.
- Wear gloves (preferably disposable) made with impervious material to protect your hands. Torn gloves should not be used, and avoid tearing your gloves on equipment or sharp objects.
- Use additional personal protection equipment if there might be any body fluid splashes, to protect personal clothing (e.g. disposable gowns), lips (e.g. disposable masks) and eyes (e.g. goggles).
- Blot excess fluid using paper towels or disposable rags/cloths. Mops are not recommended because they are difficult to clean and mop use could put contaminants into the air.
• Flood the affected area generously with a household bleach solution (1 part bleach to 9 parts water) and let sit for a minimum of 10 minutes.

**NOTE:** absorbent surfaces such as carpets are difficult to clean and disinfect. If the spill is heavy, you may wish to remove and replace the affected carpet. Test the surface to be cleaned to ensure there will not be discoloration from the disinfectant. Contact your Environmental Health Officer with any questions.

• Blot up the bleach solution with fresh paper towels or disposable rags/cloths.

• Place all used paper towels and rags/cloths in a sturdy leak-proof garbage bag. If disposable gloves are used, remove and discard the gloves at this point. Dispose the plastic bag into the regular trash.

• After cleaning the area, wash hands thoroughly with soap and water.

COMBS AND BRUSHES

The use of shared combs and brushes is not recommended in child care facilities. It is preferred that each child brings his or her own comb, and stores it in their locker. Storage of combs in pouches is not recommended as the pouches are hard to clean. Should a child care facility provide combs to children, the following storage and cleaning procedures should be followed:

- There must be enough combs for use throughout the day;
- The combs can only be used once, then sanitized after each use; and
- Dirty combs must be placed in labelled covered containers. These combs should be taken out at the end of each day, washed and sanitized with an approved disinfectant, and placed in a container labelled clean for use the next day.

Schematic Diagram of Combs Cleaning Procedure:
FACE CLOTHS

Personal face cloths must be identified as belonging to each child. The face cloths must be hung on racks to keep the cloth from touching each other (see below for recommended design). These face cloths must be laundered regularly (after each use or at the end of each day).
TOOTHBRUSHES

The recommended method for storing toothbrushes in child care facilities is summarized below:

- Toothbrushes should be hung on brass or plastic hooks. The hooks should be 2.5 to 4 cm (1 to 1.5 inches) apart in a straight line, and positioned at least 1.2 m (4 feet) above ground. The hooks must be located away from toilets.

- Toothbrushes should be stored so that they do not drip onto other toothbrushes.

- Toothpaste should be placed on ledges.

- Toothbrushes should be identified with the name of the child on each hook/holder and toothbrush.

- Toothbrushes should be rinsed before and after use.

- Disposable cups are recommended (if re-useable cups are to be used, discuss with your Environmental Health Officer).

- Tooth brushing must be supervised. The operator must ensure toothbrushes are kept clean and replaced on a regular interval or when bristles have lost their tone.

- For children who bring their own toothbrushes, the toothbrushes should be kept in sealed bags/containers until used.
C. SAFE FOOD HANDLING IN CHILD CARE FACILITIES
INTRODUCTION—SAFE FOOD HANDLING TRAINING REQUIREMENTS

Safe food handling is an important issue in child care facilities. The following section is not a comprehensive guide to safe food handling. Alberta regulations require that one or more employees of a child care facility (depending on the number of staff) that serves food must complete a food safety course approved by the Alberta government. It is also recommended that all child care facility staff complete a safe food handling course, such as those offered by Capital Health. Contact your local Environmental Health Officer for more information about safe food handling courses.
FOOD POISONING

Food poisoning usually results from eating foods containing large numbers of harmful bacteria or viruses that infect the lining of the digestive tract. It can also result from eating foods in which bacteria have previously produced toxins (poisonous substances) in the food or when bacteria in the food release toxins in the digestive tract.

If you can recall experiencing symptoms such as nausea and vomiting, accompanied by cramps and diarrhea, then you may have been a victim of food poisoning. At one time or another, most of us have had such an experience. People usually recover from food poisoning without treatment. However, some types of food poisoning (e.g. E. coli O157:H7 infection) can cause permanent complications and death, especially in children.

Bacteria and viruses, commonly known as germs or microbes, are tiny organisms that can be seen only with the aid of a good microscope. Rodents, insects, dust particles, droplets of moisture from coughs and sneezes, unclean hands and pieces of clothing can transfer germs from one place to another.

Most bacteria are harmless and many are even beneficial. However, some are potentially dangerous organisms that are responsible for serious symptoms, illness and even death.
Ninety-five percent of all food-borne illnesses are caused by only a few such pathogens. These bacteria are commonly found in feces, in the soil, in the digestive tract of humans and animals and on raw meat, poultry and fish as well as fruits and vegetables. The nose of healthy individuals may harbour bacteria called Staphylococcus, which through sneezing, may contaminate otherwise wholesome food. As a result of continuing research, the number of organisms recognized to cause food poisoning is increasing.

Because bacteria are living organisms, they take in food, give off wastes, and multiply. They thrive in warm, moist foods and can double their number every 20 minutes when the temperature is between 35°C - 45°C. At this rate one bacterium can multiply to more than 2 million in 7 hours.

**NOTE:** If you suspect children at your child care facility have food poisoning, it is important that you notify Public Health, to help ensure that no one else becomes sick. See “Detecting and Reporting Outbreaks”.
PREVENTING FOOD POISONING

Food poisoning is prevented in three ways (“pathogens” are germs that cause illness):

• Preventing pathogens from getting into food (contamination),
• Preventing growth of pathogens in food, and
• Destroying pathogens in food before the food is eaten.

A. Preventing Contamination

Proper sanitary practices are important in the preparation, cooking and storage of foods:

• Ensure that child care facility staff that are ill with vomiting or diarrhea stay home until the symptoms have disappeared (see “Sick Staff Exclusion Guidelines”). Those ill with these symptoms can easily contaminate food with the same pathogen that made them sick, which can result in those eating the food becoming sick as well.

• Ensure that hands are well-scrubbed to prevent the spread of bacteria to foods or from one food to another.

• Make sure kitchen utensils, containers and work surfaces are thoroughly cleaned, especially those that have been in contact with raw meat and poultry. This will help stop cross contamination.

• Keep a separate cutting board for raw meat and poultry and a different cutting board for cooked and ready-to-eat foods if possible.
• Wash fruits and vegetables before eating if they are to be eaten raw.
• Ensure that all cups, dishes, utensils and food equipment are washed in an appropriate dishwasher, or, in sinks using approved methods (contact your local Environmental Health Officer for more information on proper dishwashing equipment/methods).

B. Preventing growth of pathogens

Pathogens grow in warm, moist foods and can double their number every 20 minutes when the temperature is between 35°C - 45°C. At this rate one bacterium can multiply to more than 2 million in 7 hours. Pathogens are usually prevented from multiplying in hot and cold temperatures. Temperatures between 4°C and 60°C are considered to be within the DANGER ZONE.

• Cold foods should be kept cold at 4°C or below and hot foods should be kept hot at 60°C or above after cooking or reheating, even if the food will be cooked again.

C. Destroying pathogens in food before the food is eaten

• A good general rule is to cook foods to a temperature of 74°C/165°F. This is especially important for foods containing meat and poultry, as these foods are often contaminated with pathogens. Cooking food to high enough temperatures will kill any pathogens that might be in the food.
• Use a thermometer to ensure that food has reached a high enough temperature—color of food is not usually a reliable way to ensure food has been properly cooked.
FOOD ALLERGIES

A food allergy is an abnormal response of the body's immune system to specific food proteins or food additives. An allergic reaction to food can range from mild to serious.

Symptoms of an allergic reaction may begin to develop within minutes or within about an hour after eating the food. In general, the more serious the allergy, the faster the body reacts.

The most common symptoms of an allergic reaction to food include:

- Itchy lips or tongue,
- Swelling of the throat,
- Hives,
- Trouble breathing,
- Eczema, and/or
- Swelling

The most serious reactions can lead to shock, which involves multiple systems of the body. Shock may lead to trouble breathing, coma, and even death if not treated.

The substance in food that causes the allergic reaction is called an Allergen. When a person has an allergic reaction to food, the immune system releases antibodies in response to the allergen. The body's reaction to the allergen can cause swelling and irritation or other problems in certain parts of the body.
What is a food intolerance?

Unlike a food allergy, a food intolerance does not involve the immune system. Food intolerance is a term that describes many types of reactions to food or food additives. For example, the lactose in milk products may cause an upset stomach or diarrhea. The symptoms of food intolerance can range from mild to serious. Depending on the food, there may be different symptoms such as gas, abdominal cramps and diarrhea, or symptoms like chronic headaches.


What is the role of child care facility staff in food allergy/intolerance?

Child care facility staff may find that reviewing food allergy management guidelines, such as those produced by the Food Allergy & Anaphylaxis Network, may assist in developing policies and procedures for their child care facility.

**Child care facility staff must ensure that:**

- Policies and procedures for food allergy issues are in place in their child care facility,
- They are aware of any food allergy/intolerance in children attending their facility,
- Take appropriate action to prevent exposure of children to these foods, and
- Have appropriate knowledge of what to do if a child experiences an allergic reaction while at the child care facility.

Website: [http://www.foodallergy.org/school.html#](http://www.foodallergy.org/school.html#)
HONEY AND INFANT BOTULISM

Infant botulism is a rare disease that can affect otherwise healthy children who are less than a year old. The only food linked to cases of infant botulism in Canada is honey.

Most honey produced in Canada is not contaminated with the bacteria that can cause infant botulism. Random sampling shows that less than 5 percent of honey produced in Canada contains the botulism spores. When the spores are found in honey, the numbers are usually low. However, it doesn't take a lot of spores to cause infant botulism in a baby who is less than one year old.

Health Canada advises parents and caregivers of the following:

- Do not feed honey to infants,
- Never add honey to baby food, and
- Do not use honey on a soother.

Health Canada, It’s Your Health: Infant Botulism, updated Dec 08, 2006
http://www.hc-sc.gc.ca/iyh-vsv/diseases-maladies/botu_e.html
INFANT FORMULA

Although bacterial infections from formula milk are rare, the risk can be reduced by following guidelines on preparation and storage. Caregivers should remember the importance of good hygiene practices in preparing and storing formula.

Hand Washing

- Always wash your hands thoroughly before preparing formula.

Preparing Infant Formula

- Follow label directions and consult with Alberta Health & Wellness guidelines (link below).


Storing Prepared Infant Formula

- If parents provide prepared formula, request that only enough formula for that day is brought to the childcare facility.
- Ensure the child’s name is on his/her bottle.
- Refrigerate prepared formula.
- Discard unused portion of prepared formula at the end of each day.
Plastic Baby Bottles

Baby bottles that have a hard outer shell ("polycarbonate bottles") may contain the chemical "bisphenol A" (considered toxic by Health Canada). There is a risk of the chemical leaking into the liquid in the bottle. Therefore, the following are recommended:

- If you decide to use polycarbonate baby bottles, it is recommended that caregivers not put boiling water in them, as very hot water causes bisphenol A to migrate out of the bottle at a much higher rate.

- Water should be boiled and then allowed to cool to lukewarm in a non-polycarbonate container before transferring it to baby bottles. Published information indicates that leaving boiled water to cool for 30 minutes is sufficient. This advice is consistent with proper instructions for the preparation of infant formula.

- If caregivers are concerned about polycarbonate baby bottles, there are a number of alternative options. Consult the websites below for more information.

http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/bisphenol-a_fs-fr_e.html

http://www.safefood.eu/article.asp?article=2246
**BREAST MILK**

Parents may request that expressed breast milk be fed to their child while at the child care facility.

**Recommendations for storage of expressed breast milk:**

- Request that only enough breast milk for that day is brought to the childcare facility.
- Ensure the child’s name is on his/her bottle.
- Refrigerate expressed breast milk.
- Discard unused portion of breast milk at the end of each day.
- For more information, consult Alberta Health & Wellness guidelines (link below).


**Note:** Baby bottles that have a hard outer shell (“polycarbonate bottles”) may contain the chemical “Bisphenol A” (considered toxic by Health Canada). If concerned about polycarbonate baby bottles, there are a number of alternative options. Consult the website below for more information.

D. PEST CONTROL
PEST CONTROL

Pests such as mice and insects sometimes find their way into child care facilities. This is a concern, as pests sometimes carry diseases and can cause allergic reactions. To help prevent pests in your facility, having a pest control plan is recommended—contact your Environmental Health Officer for more information.

Call your Environmental Health Officer if you suspect there is a pest infestation in your child care facility, or, if you have any other questions about pest control.

Source: Environmental Public Health Facts Sheets and Forms, Capital Health http://www.capitalhealth.ca/AboutUs/OurOrganization/PublicHealthDivision/EnvironmentalHealth/EnvironmentalHealthEnforcement/FactSheetsandForms/default.htm
E. PETS
PETS

Pets can contribute to a child’s positive development. However, there are health and injury risks to keep in mind when considering keeping a pet within a child care facility. Below are some general recommendations regarding pets in child care facilities. These are not comprehensive guidelines; please contact your Environmental Health Officer for additional information.

**Parent Notification:**

- Parents should be advised if there are to be any animals in the child care facility, so that allergies and other potential concerns can be discussed.

**Suitable Animals:**

- Reptiles (e.g. iguanas, turtles, snakes) and amphibians (e.g. newts, salamanders) are NOT recommended in daycares; they often carry *Salmonella* bacteria which can cause serious illness in humans.
- Animals that may be suitable in a daycare include fish, female rabbits, guinea pigs, gerbils, hamsters, and birds, so long as they are kept in appropriate enclosures (e.g. cages, aquariums).
- Animals should be of appropriate temperament for interaction with children.
Other recommendations:

- Children’s interaction with animals must be supervised.
- It is particularly important that children and adults wash their hands after contact with animals or with animal food.
- All animals must be in good health, have access to clean drinking water, must be suitably housed and kept in clean condition.
- Animal enclosures (e.g. aquariums, cages) must be kept in clean condition, and should be cleaned only by staff.
- Staff must wash hands after cleaning animal areas (e.g. aquariums, cages).
- Animals must be kept away from food preparation, eating and child sleeping areas.
- All animal food, litter trays and drinking water must be inaccessible to children. Keep animal food in sealed containers.
- Animals must be prevented from contaminating play areas with feces and urine (e.g. sandbox).
- There may be municipal bylaws governing the types of animals allowed, and should be consulted prior to allowing animals in the daycare.
- If animals are being brought to the facility for “special visits”, contact your Environmental Health Officer for information.

Contact your Environmental Health Officer for more information about animals in child care facility.
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WEB LINKS

The following are web links you might find useful in finding additional information on topics presented in this manual. The web site addresses were accessed at the time of printing, however, web addresses change frequently, and so some of the links may be broken. Linked sites are not under the control of Capital Health, and Capital Health is not responsible for the contents of any linked site, including without limitation any link contained in a linked site, or any changes or updates to a linked site.

**Clothing and Dress-Up**
*Page 18*

*Source: Children’s Jewelry Containing Lead, Health Canada 2007*

**Toy Safety**
*Page 24*

*Source: Toy Safety, Health Canada 2006*
[http://www.hc-sc.gc.ca/iyh-vsv/prod/toys-jouets_e.html](http://www.hc-sc.gc.ca/iyh-vsv/prod/toys-jouets_e.html)

**Cook Ware**
*Page 37*

*Source: The safe use of cookware, Health Canada 2007*

**Sun Safety**
*Page 50*

*Source: Sunglasses, Health Canada 2006*
[www.hc-sc.gc.ca/iyh-vsv/prod/glasses-lunettes_e.html](http://www.hc-sc.gc.ca/iyh-vsv/prod/glasses-lunettes_e.html)
Drinking Water Containers
Page 53

Source: Chemical Substances, Government of Canada
http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/bisphenol-a_fs-fr_e.html

Hot Water Temperatures
Page 59

Source: Keeping Toddlers Safe, Canadian Medical Association
http://www.cma.ca/multimedia/HealthyLiving/english/documents/physicianResources_toddlers_SMA.pdf

First Aid Kits
Page 66

Source: Your health Magazine, Capital Health

Source: Queen’s Printer, Government of Alberta 2008
  Occupational Health and Safety Code

Power and Gas failure
Page 68

Source: Environmental Public Health Fact Sheets and Forms, Capital Health
http://www.capitalhealth.ca/AboutUs/OurOrganization/PublicHealthDivision/EnvironmentalHealth/EnvironmentalHealthEnforcement/FactSheetsandForms/default

Source: CMHC for Consumers, Canada Mortgage and Housing Corporation 2008
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Page 71

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Page 72

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Page 79

Source: Children’s Play spaces and Equipment, Canadian Standards Association
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Page 80

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Page 85

Source: Child Safety, Transport Canada Road Safety 2008
http://www.tc.gc.ca/roadsafety/childsafety/menu.htm
Farm and Petting Zoo Visits
Page 87

Source: Health and Safety Information for Operators of Petting Zoos and Farms, Capital Health 2006
http://www.capitalhealth.ca/nr/rdonlyres/evixhiifudgdjinzojhr3kleawxtpgqaimk3uwzy5auanrq4i4dgam5driznksfp2sjwwx46vlmq26pff4ijmbhkdd/healthandsafetyinformationforoperatorsofpettingzoosandfarms.pdf

Trips to the Lake
Page 91

Source: Swimmer’s Itch, Capital Health 2006
http://www.capitalhealth.ca/nr/rdonlyres/ee3zmrwln6k5e7alhvuu7gboddw7glc6cuogpiwdxjcu43oclvyhmz4pav7c2kcxxy3e6xckt4xatru4vd27eswfigvc/swimmersitch.pdf

Food Allergies
Page 127

Source: School and Camps, The Food Allergy & Anaphylaxis Network 2006
http://www.foodallergy.org/school.html#

Source: Food Allergies, Capital Health
www.capitalhealth.ca/YourHealth/BrowseByAlpha/content.asp?guid=251CE9C3-61DF-4B4E-BC93-285155528BD1

Honey And Infant Botulism
Page 128

Source: Infant Botulism, Health Canada 2006
http://www hc-sc gc.ca/lyh-vsv/diseases-maladies/botu_e.html

Infant Formula
Page 129

Source: Health Information, Alberta Health and Wellness 2008

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Source: Chemical Substances, Government of Canada
http://www.chemicalsubstanceschimiques.gc.ca/challenge-def/bisphenol-a_fs-fr_e.html

Source: Safe Food, The Food Safety Promotion Board
http://www.safefood.eu/article.asp?article=2246
Breast Milk
Page 131

Source: Breastfeeding Your Baby, Health Canada

Source: Chemical Substances, Government of Canada
http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/bisphenol-a_fs-fr_e.html

Pest Control
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Source: Environmental Public Health Facts Sheets and Forms, Capital Health
http://www.capitalhealth.ca/AboutUs/OurOrganization/PublicHealthDivision/EnvironmentalHealth/EnvironmentalHealthEnforcement/FactSheetsandForms/default.htm
APPENDIX A: CHILD CARE FACILITY ILLNESS INCIDENT LOG SHEET
## Child Care Facility Illness Incident Log Sheet

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<tr>
<th>Ill child’s name</th>
<th>Date illness first observed by or reported to staff</th>
<th>Date of first symptom (if illness first started at home)</th>
<th>Illness symptoms*</th>
<th>Action taken</th>
<th>Name of person documenting incident</th>
<th>Date incident documented</th>
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<table>
<thead>
<tr>
<th>Ill staff member name</th>
<th>Date illness first observed by or reported to manager/director</th>
<th>Date of first symptom (if illness first started at home)</th>
<th>Illness symptoms*</th>
<th>Action taken</th>
<th>Name of person documenting incident</th>
<th>Date incident documented</th>
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*Include all symptoms reported. For fever, include temperature if known.*