



## INFECTIOUS DISEASES

The Thunder Bay District Health Unit ensures that infection control programs are in place in all day nurseries that are licensed for more than 5 children. Staff from the Thunder Bay District Health Unit:

- ✓ Provide consultation on the development of infection control policies and procedures such as hand washing, daily observation of children, immunization, health evaluation of children and staff and communication with parents.
- ✓ Provide inspection of the premises at least once per year to include diaper routines and general housekeeping practices and to ensure the existence of safe drinking water, safe food and sanitary facilities.
- ✓ Ensure the creation of a written policy on the management of infectious communicable diseases, exclusion of sick children and the reporting of designated diseases to the medical officer of health as required under the provisions of the **Health Protection and Promotion Act, R.S.O. 1990.**
- ✓ Provide annual in-service education in basic infection control for all staff providing direct care (as requested by day nursery).

The *Infectious Disease* section includes the following topics:

### INFECTIOUS DISEASE CONTROL

- Routine Practices
- Toys/Mouthed Toys
- Sleep Equipment
- Toothbrush Storage Guidelines
- Sandboxes
- Water Play Safety
- Pets & Childcare Centres
- Potty Chairs
- Diapering Procedure

### CLEANING and DISINFECTION in CHILDCARE SETTINGS

- Cleaning and Disinfection
- Chemical Sanitizers and Disinfectants
- Chemical Sanitizers and Disinfectants – Food Areas
- Occupational Health and Safety Concerns

\*\*\*Refer also to the **Common Childhood Infections Booklet – A Guide for Principals, Teachers and Child Care Providers** for additional information on the following topics:

How Infection Spreads  
The Basics of Infection Control  
Guidelines for Exclusion  
Reportable Disease List  
Reporting Communicable Disease  
Common Childhood Infections Chart  
Hand washing Procedure  
Guidelines for Handling of Blood or Body Fluids  
Communicable Disease Outbreaks



## **INFECTION CONTROL**

### **Routine Practices**

Routine practices are to be practiced within the day care. Ensure that all body fluids, excretions, and secretions are treated as potentially infectious.

An effective infection control program will include; but is not limited to: written policies and procedures for managing child and employee illness, hand hygiene, diaper changing, environmental sanitation, immunization, and communicable disease management.

- Always wear disposable gloves if there is any risk of coming in contact with blood or body fluids.
- During first aid, ensure clean/sterile and disposable materials are used.
- Remove and discard contaminated items.
- Wash hands.

Refer to the included resources and the **Guidelines for Handling Blood or Body Fluids** fact sheet.

### **Toys/ Mouthed Toys**

It is recommended that all frequently touched toys that are in rooms with toddlers and infants are cleaned and disinfected daily. Toys that are used by nondiapered children should be cleaned and disinfected at least weekly or as required. Clean and then disinfect all larger toys, activity centres and toy storage shelves on a weekly basis or as required.

Please note: Toys that can withstand heat can be effectively cleaned and then sanitized (disinfected) by using a mechanical dishwasher.

Toys that have been mouthed by a child or otherwise contaminated by body secretions must be cleaned and disinfected to prevent the spread of communicable diseases. It may be beneficial to limit the amount of toys the infant/toddlers have access to at one time. Avoid small toys with the age group that frequently mouths.

- Remove the toy from the child.
- Place it in a bin set aside specifically for mouthed toys.
- Ensure the bin is labeled to prevent the toy being given to another child.
- Clean and disinfect the mouthed/contaminated toys daily.

### **Sleep Equipment**

Sleep equipment must be used by only a single child. It also should be cleaned and disinfected before being assigned to another child. Sleeping mats should be stored in a manner that will prevent contact with one another. In addition, the mats must be labeled or numbered to ensure they are used only by the child assigned.



### **Toothbrush Storage Guidelines**

- Toothbrushes must be stored out of reach of the children.
- Toothbrushes must be labeled with the child's' name.
- To prevent cross contamination, toothbrushes must NOT be in contact with one another.
- Toothbrushes must be allowed to air dry between brushings.
- Freestanding storage is preferred, however; they can be placed against surfaces that are smooth and impervious. These surfaces should be cleaned and disinfected daily.
- If toothbrushes happen to contact each other or if ownership is in question, discard immediately.

### **Sandboxes**

The sand found outdoors is very likely to contain harmful microorganisms. These harmful microorganisms may include: toxocariasis and toxoplasmosis. Toxocariasis is an infection due to a nematode (worm) frequently found in dogs and cats. Toxoplasmosis can originate from the feces of cats and dogs and is a protozoan infection. Infections are usually unapparent or mild, but may occasionally be significant.

Sand used indoors must come from an approved source. It is recommended that it is pre-washed. This type of sand is available from most hardware stores.

#### **Outdoor Sandboxes:**

- Outdoor sandboxes must be covered when not in use. This will prevent contamination from animals and persons.
- Check the box regularly for the presence of animal feces and other undesirable materials.
- Remove the sand and replace regularly.
- The box itself should be cleaned and disinfected at the time the sand is being replaced.
- Exclude children with a cold, cough or skin infection from play.
- Children and staff must wash their hands before and after play.

#### **Indoor Sandboxes:**

- Keep covered when not in use.
- Only use sand that is purchased from an approved source.
- Clean and sanitize regularly.
- Exclude children with a cold, cough or skin infection from play.
- Children and staff must wash their hands before and after play.

### **Sensory Tables**

- Keep covered when not in use.
- Only use products approved by your Public Health Inspector (e.g. dried rice, dried beans, dried noodles)
- Empty and replace regularly - clean and sanitize tables at this time.
- Exclude children with a cold, cough or skin infection from play.
- Children and staff must wash their hands before and after play.



## Water Play Safety

Water tables are at high risk for the potential spread of communicable diseases. Water tables can harbour harmful microorganisms that can be spread from person to person.

- Water must be filled immediately before use.
- Water must be drained and the water container disinfected after each use.
- Clean and disinfect the toys after each use. Do not use sponge toys.
- Exclude infants, toddlers and diapered children from group water play. These children can play individually or in individual containers.
- Exclude children with a cold, cough or skin infection from play.
- Children and staff must wash their hands before and after play.
- During an outbreak of illness STOP all water play.

## Pets and Childcare Centres

Generally, pets in childcare centres are not recommended because they can expose children and staff to possible infections, injuries or allergens. If an animal is included in the centre, the living quarters of the pets should be enclosed and maintained to ensure that the risk of human contact with wastes is decreased. Refer to the included resources and the **Pets in Childcare Centres** fact sheet.

## Potty Chairs

Choose potty chairs made of smooth, impervious, easy to clean material that have a removable waste container. Keep potty chairs in the bathroom, not in playrooms or hallways. Use potty chairs in a location where children cannot reach contaminated surfaces (e.g. toilets, etc.).

- Ensure the child washes their hands after use.
- Ensure after each use it is emptied into the toilet.
- Clean and sanitize the potty chair after each use.
- Ensure that the chemical is used according to manufacturers' instructions. Wash hands.

## Diapering Procedure

Diaper changing procedures should be posted at each changing area. Never leave a child unattended on the change table. Make sure everything you need is within easy reach.

This procedure must be followed for each child in order to prevent the spread of communicable diseases.

1. Assemble supplies before getting started.
2. **Wash hands with soap and water before each change.** The use of gloves is acceptable, however; they are **not a substitute** for hand washing (be aware of possible latex allergies due to gloves).
3. Remove the soiled diaper and fold inwards. NEVER leave a child unattended!
4. Clean child's skin with a moist disposable cloth, wiping from front to back.



5. If wearing gloves, discard them now. If the application of ointment/creams are required, use a clean, disposable applicator or put on a new pair of gloves to obtain ointment from its container (don't double dip).
6. **Wash your hands** and then diaper and dress the child.
7. **Wash the child's hands** and return him/her to play or sleep area.
8. Discard soiled diaper into a plastic-lined receptacle. Soiled clothing and cloth diapers should be double-bagged and sent home with parents. Do not rinse soiled clothing or cloth diapers.
9. Sanitize/disinfect diaper change surface after each child, making sure that the entire surface remains wet for the required contact time. Follow manufacturer's instructions for all solutions. Note: A visibly soiled surface must first be cleaned with soap and water, rinsed and then sanitized/disinfected.
10. Allow diaper change surface to air dry or wipe dry with a clean paper towel then discard.
11. **Wash your hands again.**

Please note: The above content has been adapted with permission from Durham Region Health Department.

## **CLEANING AND DISINFECTION IN CHILDCARE SETTINGS**

### **Cleaning and Disinfection**

#### **Cleaning:**

Cleaning is the physical removal of visible dirt and organic matter from objects using **detergent, warm water and friction**. The rubbing action creates friction, which is required to remove any surface dirt/organic matter from the surface. Cleaning will physically remove some microorganisms (germs such as bacteria, viruses, parasites, molds), however; it does not kill those that may remain on the surface.

Cleaning is an important **first step** in removing disease-causing microorganisms from your childcare environment. If surfaces are not "clean", persistent dirt and organic matter can coat and protect germs and may cause further heat or chemical disinfection processes to be ineffective.

#### **Sanitizing/Disinfection:**

Sanitizing/disinfection will greatly reduce the number of microorganisms from any surface. This process will destroy (kill) and reduce the number of microorganisms to an acceptable level. These processes do NOT sterilize items and all germs will never be removed. This process can be achieved by using either high temperature water (e.g. dishwashers at greater than 82°C/180°F) or chemical solutions.



## **Chemical Sanitizers and Disinfectants in the Day Nursery Setting**

### **Commercial Chemical Sanitizers/Disinfectants:**

Chemical solutions (other than household bleach) must be used in **STRICT accordance** with manufacturer's directions on product labels.

Information required on commercial chemical product labels by Federal legislation includes:

- Chemicals approved for use as "disinfectants" in Canada must either have a Drug Identification Number (DIN) or a Pest Control Product (PCP) number on their labels.
- Name of Product
- Name and Address of Manufacturer
- List of Active Ingredients
- Intended Use (e.g. floors, walls, sinks, toilets or **food contact surfaces\*** - **see below**)
- Directions for Use (examples):
  - Directions for proper dilution and application
  - Contact time required (e.g. time to achieve disinfection), generally 10 minutes
  - Requirements for cleaning prior to disinfection
  - Statement as to stability of product once diluted (e.g. prepare solution fresh daily)
  - Statement as to rinse requirements (e.g. for **food contact surfaces\*** "rinse with potable water")
  - Directions for disposal of cleaning materials and waste
- Precautionary Statements (examples):
  - Keep out of reach of children
  - Use in ventilated area
  - Avoid contact with skin or eyes
  - Personal Protective equipment requirements

**To ensure sufficient chemical strength ensure solutions are prepared fresh daily (UNLESS otherwise specified on the label).**

### **Household bleach:**

- Solutions of household bleach must be prepared fresh daily.
- Store in a dark container, out of the light and away from children.
- Diapering Areas/ Restrooms
  - Mix 50mL of bleach to 5L of water (1/4 cup bleach in 1 gallon water).
  - For a smaller quantity mix 5mL of bleach in 500mL of water (1tsp bleach in 2 cups water)
  - This concentration is recommended in diapering areas and bathrooms.
- General Cleaning (not including diapering area/bathrooms)
  - Mix 1 Tbsp in 1 gallon (approx 15mL in 4L)
- Blood Spills
  - Refer to the Guidelines for Handling Blood or Body Fluids found in the Common Childhood Infections booklet

The above concentrations are recommended by the Canadian Pediatric Society.



## Chemical Sanitizers and Disinfectants in the Food Areas

### \*Food Contact Surfaces:

The Ontario Food Premises Regulation 562 defines the following terms:

A “food contact surface” is any surface that food comes in contact with (e.g. kitchen surfaces, tables in day nursery used for eating, etc).

A “utensil” means any article or equipment used in the manufacture, processing, preparation, storage, handling, display, distribution, sale or offer for sale of food except a single-service article.

**Sanitizers/disinfectants in the food areas** of your day nursery **must meet specific chemical concentrations** outlined in the above mentioned regulation. Your public health inspector is able to assist you in confirming if the product used in the food areas is compliant with the legislation.

In addition, **test strips are also required** to check that the concentration of your solution is correct. The type of test strip needed will be dependant on the type of chemical you choose to use in your day nursery.

**Remember! No one chemical sanitizer/disinfectant may be ideal for every purpose - most have particular limitations and/or drawbacks.**

### Occupational Health and Safety Concerns

Ensure that all products are purchased/used/stored according to the Occupational Health and Safety Act.

Contact the Ministry of Labour with any questions or concerns specific to employee/employer requirements.

#### DID YOU KNOW?

**Your public health inspector may be able to assist you in interpreting product labels. However, if you require clarification regarding appropriate applications, dilutions, etc. contact the chemical manufacturer and request specific instructions in writing.**

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