Spring 2005

Public Health for Kids

An information newsletter for Childcare Providers

Opening Remarks

Our newsletter is evolving! The infectious diseases program is partnering with the child health programs to provide you more public health information related to childcare. The format will remain the same, but our range of topics will be expanded to include other health issues such as car seat safety, and sun safety etc.

Public Health for Kids will now be published **4 times** per year so that we can provide more timely and seasonally based information. Our new format will be introduced in the Fall of 2005, so stay tuned.

As always, we welcome your comments and suggestions, as well as concerns that you would like to see addressed.

Contents:

Enclosures:

- Brochure on Safety Tips on Using Personal Insect Repellents

New Vaccines Added to Childhood Schedule

Three new publicly funded vaccines have been added to the recommended schedule of routine childhood immunizations-vaccines for chickenpox, meningococcal meningitis and pneumoccal disease.

The Ontario Ministry of Health and Long-Term Care has expanded the eligibility criteria for the three new vaccines provided through the publicly funded immunization program. As more children are immunized against these diseases there will be less transmission of these diseases in the overall population.

The conjugate **pneumococcal vaccine** protects children against invasive pneumococcal infections such as pneumonia, bacteraemia (infection of the blood) and meningitis (infection of the brain). Invasive pneumococcal disease (IPD) is a bacterial infection caused by a type of bacteria called s*treptococcus pneumoniae* (or pneumococcus). This type of bacteria can cause any of the following:

- pneumonia (lung infection)
- bacteraemia (infection of the blood)
- meningitis (infection of the lining of the brain and spinal cord)

Public Health for Kids is published twice yearly by the Infectious Disease Team of the Grey Bruce Health Unit. We encourage you to contribute articles or submit questions that we can share with your colleagues. Contact us at: 920 1st Avenue West, Owen Sound, Ontario N4K 4K5 519-376-9420 or 1-800-263-3456. Fax: 519-376-0980. www.publichealthgreybruce.on.ca

Streptococcus pneumoniae is the most common cause of bacterial infection in children under 2 years of age. Pneumococcal infection is also a frequent cause of ear infections (otitis media).

Pneumonia, bacteraemia and meningitis can sometimes cause death or long lasting complications, such as deafness, especially in people with a high-risk medical condition. The bacteria that causes IPD can live at the back of the nose and throat without causing symptoms. People of all ages can be healthy carriers of pneumococci bacteria, but young children are the most frequent carriers of the bacteria. The bacteria are spread through droplets in the air from coughing or sneezing. Bacteria can also be spread through the saliva of an infected person when common items are shared, such as beverages (bottles and straws), eating utensils or toys that have been chewed on.

The **varicella (chickenpox) vaccine** is given to children after their first birthday. It will protect them from this common childhood disease and its potential for serious complications, such as bacterial skin infections. Chickenpox is caused by the *varicella-zoster virus.* About 90 per cent of chickenpox cases occur before the child turns 12 years of age. Chickenpox is extremely contagious. It spreads very quickly from person to person. In about five to ten percent of healthy children, chickenpox infection can lead to more serious problems. Chickenpox can be very severe or even life threatening to newborn babies and anyone with a weak immune system.

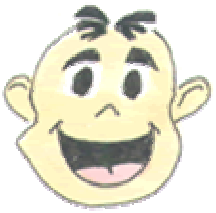
Babies have maternal antibodies until they are 12 months of age, which is why the vaccine is recommended for children 12 months of age and older. It is estimated that the varicella vaccine will offer 70 to 90 percent protection against chickenpox of any severity and over 95 percent protection against severe varicella for at least seven to ten years after vaccination.

The **meningococcal C-conjugate vaccine** provides long-lasting protection against invasive meningococcal disease (IMD). IMD is a serious disease caused by a specific strain of bacteria called *Neisseria meningitidis*. There are several strains (serogroups) of the bacteria that cause IMD: serogroups A, B, C, W-135, and Y are the most common. IMD often affects previously healthy people of all ages and they can become extremely ill rapidly. IMD can lead to serious infections of the blood (septicaemia) and the covering of the brain and spinal cord (meningitis). The bacteria that cause IMD can live in the body, in particular at the back of the nose and throat, without causing symptoms. Up to 10 percent of the population carry the bacteria at any time; however, most people never develop active disease. The bacteria are spread through droplets in the air from coughing or sneezing. Bacteria from the saliva of an infected person can be spread when common items are shared, such as beverages (bottles and straws), cigarettes, toothbrushes, and lipstick.

Serogroup C is a specific strain or serogroup of IMD (IMD-C) and can result in severe long-term health complications or death. Persons who have been infected with IMD-C disease may develop skin scars, hearing loss and kidney problems or may require limb amputations. Serogroup C has been almost exclusively responsible for localized clusters or outbreaks of IMD in schools and communities. In Ontario, many cases of IMD-C are in adolescents and young adults. This vaccine only provides protection against IMD caused by serogroup C *Neisseria meningitidis* bacteria. It will not protect against other serogroups of invasive meningococcal disease or other organisms that cause meningitis (infection of the brain or spinal cord) or septicaemia (infection of the blood).

Source: Ontario Ministry of Health and Long-Term Care

An adult laughs an average of 15 times a day. A child, however, laughs an average of 400 times a day.



Those Itchy Days of Summer

As summer approaches so does the increase in incidence of skin irritations due to insect bites and stings, plant exposures, water exposures, and heat and sunburn rashes. A rash is a term used to explain a skin condition; however, more detail is needed to actually describe a rash.

Terminology

- **Raised** - this means you can feel a bump when you rub your fingers over the rash.
- **Flat** - opposite of raised. The bumps are flush with the skin and can't be felt.
- **Lacy** - this looks as if someone placed a piece of fancy lacy material over the skin and then removed it, leaving a red imprint of the lace on the skin.
- **Pimply** - this refers to very small raised bumps with a tiny white head in the middle, just like a pimple.
- **Bumps** - this means exactly what it sounds like - a raised bump.
- **Spots** - this refers to flat spots that can't be felt.
- **Blister** - this refers to a bump with a clear fluid-filled middle.
- **Pustule** - a pus filled blister.
- **Welt** - this is a raised, part red and part skin-coloured area. It can be small or large. An example of a welt is hives.
- **Blotches** - like a welt, but flat and usually not a uniform colour - parts are red and parts are flesh toned.
- **Patch** - this refers to a flat area of the skin larger than just a little bump.
- **Trunk** - the chest, tummy and back.

Heat rash - this appears as tiny red pimples, bumps or spots. It usually appears on the back of the neck or lower back but can involve the entire trunk. It occurs due to a mix of sweat, heat and clothing. Treat this by cooling the child off, airing out the area, or applying a cool washcloth.

Contact rash - there are two types of contact rashes. The first type appears as red, raised bumps or patches, and can have a slight crusty surface. This is generally confined to one or two small areas on the body. It is caused by contact with an irritant such as poison ivy, other plants, and cleaners or other chemicals.

The second type appears as fine, red pimples or small spots. It can be caused by a huge variety of irritants such as new clothes, soaps, shampoos, bubble baths, detergents or fabric softeners, suntan or other lotions, bed sheets, grass, swimming pools or anything else that comes into contact with the child's skin.

Insect Bites

Spider bites - largest type of bite, often creating a large, raised, circular area with a visible pinpoint bite mark in the middle. They can grow in size and redness for several days and tend to be quite painful. They can number from just one to five or ten, often in a straight line or confined to one body area.

Flea bites - these usually occur in greater numbers than spider bites and mostly occur on the legs (and the diaper area for crawling and sitting infants). They often are not painful at the time of the bite and usually become increasingly itchy. Different people will react to flea bites to varying degrees. Some people are very sensitive to flea bites. Common places to get flea bites include houses with pets, beaches (sand fleas) and parks.

Mosquito bites - these usually occur in exposed areas, such as hands and forearms, ankles, and neck. They are usually quite obvious.

Irritating Plants

Poison ivy - the rash breaks out after about 12 - 72 hours but only on areas which directly contacted the plant sap. The rash is usually red, raised and often blistered at the center. The skin rash occurs a day or two after contact with the poisonous plant.

Poison Ivy

Irritating Water

Swimmer's Itch - a temporary skin infection acquired by bathers in some lakes when they accidently become involved in the life cycle of the trematode worm. Swimmer's Itch usually appears during warm weather in early June and reaches a peak in July. Red spots indicate where the tiny parasitic flatworms have burrowed into the skin. Areas mostly commonly affected are the chest, stomach, and backs of the legs. Several hours later, the bather will experience a distinct itching sensation and the red spot will enlarge to form separated bumps up to 1/4 inch in diameter. These lesions do not spread to other areas of the body and are not spread from person to person.

Daycare Workshop for Childcare Providers June 1, 2005

An educational event for childcare providers.

* Keynote Speaker - Dr. Marina Salvadori, MD, FRCP. Associate Professor at London Health Sciences Centre. Paediatrician and Infectious disease specialist.
* Jacque Smith, RN, BScN from Wyeth Pharmaceuticals will speak on the 3 new publicly funded vaccines.
* Presentations on infection control, outbreak management and pandemic influenza.
* Introduction of the new Kid's Health Manual.

Watch for a registration form and invitation soon.

Who Got the Flu?

The Public Health Unit tracks all laboratory confirmed cases of influenza in Grey and Bruce counties. These same statistics are tracked at the provincial level as well as the federal level. So who did get the flu this season in Grey and Bruce?

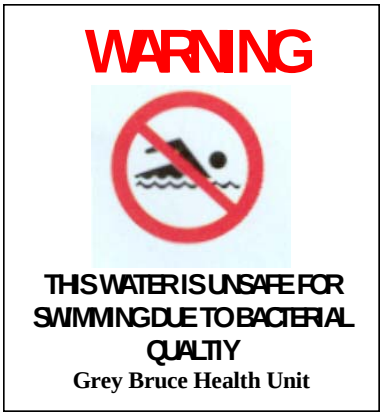
Grey Bruce Community Cases of Influenza

Age Range	December 2004	January 2005	February 2005	March 2005 *as of print date Mar 31/05
0-9		1	3	1
10-19	1	1	3	3
20-29		2	2	3
30-39		1	3	
40-49		4	6	5
50-59			1	5
60-69			5	2
70-79		3	0	
80-89			2	2
90-100		2	0	
Totals	1	14	25	21

Recreational Water Illness (RWIs)

RWIs are illnesses that are spread by swallowing, breathing or having contact with contaminated water from swimming pools, spas, lakes, rivers, or oceans. Recreational water illnesses can cause a wide variety of symptoms, such as skin, ear, respiratory, eye, and wound infections. The most commonly reported symptom of RWI is diarrhea. Germs, such as Cryptosporidium, Giardia, Shigella, and E.coli O157:H7, can cause diarrhea illnesses.

Many other RWIs (eye, skin, ear, and respiratory infections) are caused by germs that live naturally in the environment (water, soil). If someone swallows water that has been contaminated with faeces, he/she may become sick. Many of these diarrhea-causing germs do not have to be swallowed in large amounts to cause illness.



Public Bathing Beaches

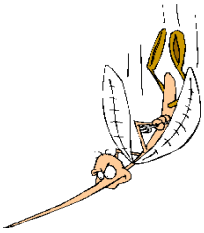
The official definition of a public bathing beach is a beach owned or operated by a municipality that has a supervised aquatics program or is staffed by a lifeguard.

- Beaches are monitored by the Grey Bruce Health Unit to determine pollution levels in the water at beach sites and to prevent illness in bathers. Water samples are collected from key areas of the beach water.
- Posting of a beach occurs when there is evidence that bathing beach water is potentially dangerous to the health of the bathers.
- Beaches are not closed by health units, instead, signs are posted advising the public that the water may be unsafe for bathing.
- Posting signs are displayed in prominent positions at the beach to warn bathers of the danger. The signs will normally remain posted at the beach until such a time as surveillance of water quality demonstrates that the risk to bathers is once again within acceptable limits.
- Results of the beach monitoring program and notices of "Posted" beaches are available on the Health Unit website: www.publichealthgreybruce.on.ca.

Precautions to Take if Swimming at a Beach

- Do not take children to the beach following periods of heavy rainfall. When rainfalls are heavy, surface water contaminated with faeces from deer, birds, pets, and water fowl will drain into the lake, river etc. Also, when municipal treatment plants reach capacity with storm water runoff, excess flows are discharged directly to lakes and rivers without proper treatment.
- If the water is not clear or has an odour, do not go swimming.
- Children with an infection or any open wounds or scrapes should not swim in surface water.
- Ensure children avoid putting their heads under water.
- Avoid warm, shallow pools of water that are not replenished by a flow of fresh water because such pools are breeding grounds for bacteria.

West Nile virus (WNv)



Warmer weather will soon be here and so will the mosquitoes. The Grey Bruce Health Unit is continuing with the WNv surveillance program for the 2005 season.

Mosquitoes that most commonly carry West Nile virus are generally more active during the early evening and early morning so children who attend childcare during the daytime are at minimal risk for exposure. As a precaution, schools and childcare centres are reminded to help protect children by removing breeding areas for mosquitoes, such as stagnant water in containers and on playgrounds, as well as lawn cuttings and other yard waste.

Mosquitoes breed in standing water, even very small amounts. You can reduce the number of breeding spots around your home or childcare centre by:

- Regularly draining standing water from items like toys, flower pots, cans, buckets, barrels, and pool covers.
- Filling areas on the playground that might collect water after a heavy rainfall.

- Overturning or putting away toys that may collect water in the event of a heavy rainfall on the weekend when the centre is closed.
- Removing items in which water can collect, such as old tires.
- Appropriately cleaning and changing the water in swimming pools, decorative pools, children's wading pools, and bird baths.
- Cleaning out clogged gutters.
- Ensuring all window screens are in good repair and intact.

Dead Bird Surveillance

An early indicator of the presence of WNv in our area is the reporting of dead crows and blue jays. These species of birds are very susceptible to WNv .

What if a dead crow or blue jay is found on our playground?

Call the Public Health Unit to report the sighting. The Public Health Unit will not pick up all dead birds; however, they are interested in the report. The bird should be removed from the playground as soon as possible. The carcass will attract insects and rodents that will present additional risks to children.

Dehydration

What are the symptoms of dehydration?

Dehydration is a loss of body fluids, which are made up of water and salts. When sick children vomit or have diarrhea, they can lose large amounts of salts and water from their bodies and can become dehydrated very quickly.

Dehydration can be very dangerous, especially for babies and toddlers. Children can even die if they are not treated.

What are the signs of dehydration?

- decreased urination (less than 4 wet diapers in 24 hours)
- no tears
- dry skin, mouth and tongue
- stringy saliva
- sunken eyes
- grayish skin
- sunken soft spot (fontanel) on infant's head

Sanitary Sand Play

Whether you use an outdoor sandbox or an indoor sand tray, keeping the sand area sanitized and clean is important for preventing the spread of germs.

- Both indoor and outdoor play sand should be discarded and replaced every two years.
- Do not attempt to disinfect sand; simply replace it as recommended.
- To prevent the spread of germs, children should wash their hands immediately before and after sand play.
- If a child has a diaper accident or diarrhea in a sandbox, replace the sand immediately
- Uncovered sand may be an inviting litter box for roaming cats and birds, and bees may be attracted to food or beverage particles that children leave behind.
- A window screen can be used as a sifter to remove any debris from the sand. If you find dangerous debris such as glass or animal waste in the sand area, do not allow children to play there.
- During indoor sand play, keep a broom and dustpan near the indoor sand table so spills can be easily cleaned up. Discard sand that falls on the floor or ground; do not place the contaminated sand back in the sandbox or table.
- After outdoor sand play, use a soft brush to remove any sand particles from children's clothes before they go back inside. Keep a mat by the door to reduce the amount of sand that is tracked indoors.

If your childcare program has an outdoor picnic area, locate the sandbox far enough away so that spilled beverages or food particles do not become an attraction for bees or other insects.

Source: Healthy Child Care *In Sickness and Health, Sand Sanitation and Safety* www.healthychild.net

Diaper Rash - Is it Spreading?

What is diaper rash? How did this child get diaper rash? How can I make it go away? Did I do something wrong?

These are some of the most commonly asked questions from parents and caregivers regarding a condition called "diaper rash," a skin irritation in the diaper area. Diaper rash is quite common and most infants will be affected by it at some time. Diaper rash is often found on children under the following conditions:

- Babies 8-10 months old.
- Babies with sensitive skin
- Babies whose bottoms are not kept clean and dry.
- Babies who have frequent stools (especially if left unchanged through the night).
- Babies who begin to eat solid food.
- Babies on antibiotics.

Diaper rash occurs when chemicals in the urine or stool begin irritating the skin, especially if the diaper is left on too long. Changes in the digestive system can lead to irritation as children begin to eat solid foods. Chemicals in the cloth diaper, such as leftover soap and fabric softener, or chemicals added to disposable diapers to increase absorbency, may also lead to skin irritation.

Recognizing diaper rash

According to the American Academy of Pediatrics, diaper rash usually begins as redness or small bumps on the lower abdomen, genitals, buttocks, and thigh folds. With care, this type of rash usually will clear in three to four days. Parents should contact the child's pediatrician if the rash persists after three days.

Rashes may indicate the presence of other conditions or diseases. For example, yeast infections also can cause a rash on the lower abdomen, genitals and thigh folds but rarely on the buttocks. If the rash could be a condition other than diaper rash, a physician should be contacted.

Treating diaper rash
The best treatment and preventive measures for diaper rash are frequent diaper changes and cleaning. Premoistened wipes can be used, but may cause further irritation. Soap and water is usually the best choice. If a barrier of cream is used, ensure the area is clean and dry before applying.

Air drying is a great healer. When possible, slip the diaper off and allow the child to be diaper free for a while to help heal the irritated area. A generation ago, talcum powder was a common treatment for diaper rash. Many health specialists do not recommend use of powders because they may be inhaled and cause respiratory distress.

Even with the best of care, babies may develop a diaper rash. Parents and caregivers should not feel at fault. Remember, the most important thing is to recognize diaper rash, treat it correctly and seek a physician's care if the rash persists or spreads.

Source: Amy S. Hood, Infant/Toddler Specialist & Janie Sailors, RN, Health Specialist, Region IV, Head Start Quality Improvement Centers Western Kentucky University Bowling Green, KY

Resources
The American Academy of Pediatrics, 141 Northwest Point Blvd., Elk Grove, IL 60007-1098; 847-228-5005; www.aap.org.

Health Canada

Products Containing DEET and Sunscreens
Some personal insect repellent products contain sunscreen compounds. These products were phased out as of December 31, 2003, because of incompatible label instructions regarding methods of application of each component, i.e., insect repellents should be applied sparingly while sunscreens should be applied liberally and frequently.

Lending Library

How Does The Lending Library Work?

Many books and resources can be borrowed from the Public Health Unit for a two week period. Contact the Infectious Diseases Program to make arrangements for pick-up and return. Please make sure you identify which facility you are calling from to ensure your call is transferred to the appropriate staff member.

Videos:

The Sneeze: How Germs Are Spread
3 minutes, The Canadian Learning Company

The ABC's of Safe & Healthy Child Care—Handwashing & Diapering
Centers for Disease Control

Pediculosis (Lead Lice)

Glitterbug™

Hand washing educational tool. The unit is supplied with GloGerm™ fluorescent simulated germs in powder and lotion forms. There is no need to have the room dark for demonstration since the viewing box is dark inside.