

## INFLUENZA VACCINE FOR CHILDREN WITH DIABETES

### ABOUT INFLUENZA

Influenza, commonly called "the flu", is caused by a highly contagious virus of the same name. It spreads through every community every fall/winter causing severe head and chest colds. Unlike common colds, influenza interrupts people's lives. Most flu sufferers are sick in bed for several days, missing school or work.

Children with influenza commonly have:

- high fever (more than 39.0°C or 102.2°F), for several days
- cough, that lasts several weeks
- stuffy nose and sore throat
- headaches, muscle aches and tiredness
- vomiting, poor appetite and diarrhea, sometimes resulting in dehydration.

Complications are common: 1 in every 10 children will develop an ear infection and 1 in every 14 will develop pneumonia or bronchitis.

### INFLUENZA AND DIABETES

Children with metabolic diseases such as diabetes mellitus more often develop problems during influenza infection. The combination of fever, vomiting and poor appetite makes insulin dosing difficult and may lead to ketoacidosis (should this occur, see our handout *Managing Sick Days and Preventing Ketoacidosis*). Low blood glucose may develop when your child is vomiting and not eating (should this occur, see our handout *Hypoglycemia*). High blood glucose levels can weaken the immune system just when it is needed most, increasing chances of ear infection, sinus infection and pneumonia as well as prolonging difficulties with insulin dosing.

### ABOUT THE VACCINE

#### *What are the benefits of the vaccine?*

Vaccination is the best way to protect against influenza. The vaccine protects 8 out of every 10 children who get it. The others get partial protection, decreasing the chance of severe illness or complications. Protection is more certain when all members of a household get the influenza vaccine because most infections are caught from family members.

#### *When should you get the influenza vaccine?*

Vaccine should be taken every year in the early autumn, before influenza season begins. Children younger than 9 years who are being vaccinated for the first time need 2 doses, given one month apart. Otherwise only a single dose is needed each fall.

## VACCINE SAFETY

The influenza vaccine has proved to be safe and effective in children. The vaccine contains only parts of killed virus, so it cannot cause influenza. Children over age 2 have minimal side effects. Younger children and first time users of any age may occasionally have mild side-effects that begin 6 to 12 hours after vaccination and can include:

- fever, that is seldom high (1 in every 20)
- mild muscle aches (occasional)
- mild injection spot tenderness (1 in every 5)

The problems go away in a day or two and are relieved by treatment with acetaminophen (eg Tylenol®).

Receiving the influenza vaccine every year does not increase side effects. Children who are allergic to eggs may react to the vaccine (which is produced in eggs) and should only receive it in a controlled hospital setting by an allergy specialist.

### *How safe is the influenza vaccine in children with diabetes?*

Studies have shown that the influenza vaccine does not upset the insulin needs of diabetic children.

## COMMON QUESTIONS

### *Do children really get influenza?*

Influenza virus infects persons of all ages in all parts of the world. Studies show that 50% of school aged children and 30% of pre-schoolers are infected each winter. Most children recover in 1-2 weeks but those with other health problems are more likely to have complications and need hospitalization.

### *Why does my child need the vaccine every year?*

The influenza virus is always changing. Each year the vaccine is updated to include the most current virus. Also the protection that is given from the vaccine starts to wear off and may not be enough to prevent infection the next year.

### *Can one still get "the flu" despite vaccination?*

There are many different viruses in addition to influenza that cause bad colds. The influenza vaccine can only protect against true influenza infection. Getting the vaccine does not ensure a winter free of colds and coughs but it does ward off one of the most serious germs and the true cause of the "Flu". Not all children who receive their annual influenza shot develop total protection but these children tend to have milder influenza illness and are less likely to be hospitalized with complications.

### *Is it okay for healthy family members to take the influenza vaccine?*

Everyone can benefit from taking the influenza vaccine in terms of avoiding missed days at school or work. Protecting the whole family helps prevent the child with diabetes from getting the flu. The Province of BC supplies influenza vaccine for free to at-risk children and their immediate family members.

### *Where do I get the influenza vaccine?*

Vaccine is provided free of charge by your local Health Unit. Some family physicians carry the vaccine too. Your family will not be charged for the vaccine if the physician knows there is someone with diabetes in the family. If you have further questions about the influenza vaccine, please contact your family physician or local Health Unit.

See also our handout [Immunizations for Children with Diabetes](#)