



3 November 2009

## H1N1 vaccines and their ingredients

The purpose of this fact sheet is to address key questions pertaining to the chemical content of the H1N1 vaccine and to identify any potential risks for pregnant women and/or their foetus.

### **MERCURY/THIMEROSAL**

Thimerosal is a form of mercury used in the H1N1 flu vaccine to stabilize it and maintain its quality during storage. Thimerosal is a different form of mercury than the mercury known to cause health problems. The non-adjuvanted H1N1 vaccine contains 50 ug (micrograms) of thimerosal while the adjuvanted vaccine has only 5 ug of thimerosal (equivalent to 2.5 ug of mercury) in each 0.5 millilitre dose. Both amounts are much lower than the daily limit recommended for environmental exposure to mercury. For example, there is significantly less mercury in the vaccine than you would find in a can of tuna fish. **The mercury content of both the adjuvanted and non-adjuvanted H1N1 vaccines is considered to be safe for pregnant women and their foetus.**

### **POLYSORBATE 80**

The adjuvant (a substance that helps stimulate the body's immune response and ability to fight a virus) contains polysorbate 80 (Tween 80), an emulsifier also used in other vaccines. An emulsifier is a substance used to stabilize and maintain the quality of the vaccine. **This substance presents no risk to the mother or the foetus.**

### **SQUALENE**

The adjuvant contained in the H1N1 vaccine is a natural product that consists of an oil-in-water emulsion composed of squalene – a naturally occurring substance found in plants, animals, and humans that is highly purified for use in the vaccine. **This substance presents no risk to the mother or the foetus.**

### **TOCOPHEROL**

The adjuvant contained in the H1N1 vaccine is a natural product that includes tocopherol – vitamin E oil. **This substance presents no risk to the mother or the foetus.**

### **ALUM**

The H1N1 vaccine **does not contain alum.**

### **EGGS**

The development of the H1N1 vaccine **involves exposure to egg culture.** While hypersensitivity to eggs, (e.g. hives, swelling of mouth and/or throat, breathing difficulty) is very rare, pregnant women with this hypersensitivity should not receive the vaccine. If you have a mild egg allergy, consult a health-care provider before immunization. You may be able to be immunized with some additional precautions.

### **PREGNANT WOMEN SHOULD NOT RECEIVE THE H1N1 FLU VACCINE IF:**

- they have had a previous anaphylactic (severe allergic) reaction to any element of another vaccine; OR
- they have a hypersensitivity to eggs ( e.g. hives, swelling of mouth and/or throat, breathing difficulty); OR
- they are experiencing a high fever; OR
- have previously experienced Guillan-Barré Syndrome within 8 weeks of receiving a seasonal flu vaccine.