



## **POLIO – THE FACTS**

### **What is Polio?**

Poliomyelitis (polio) is a highly contagious disease caused by a virus and has demonstrated a capacity to reinvade areas where gaps in immunization occur.

It invades the nervous system, and can cause total paralysis in a matter of hours. Initial symptoms are fever, fatigue, headache, vomiting, stiffness in the neck, and pain in the limbs.

### **Who is most at risk of polio?**

It can strike at any age, but affects mainly children under three (over 50% of all cases). Immune and or partially immune adults and children can still be infected with poliovirus and carry the virus for long enough to take the virus from one country to another, infecting close contacts and contaminating sanitation systems. This could facilitate transmission in countries with sub-standard sanitation systems.

### **How is polio spread?**

In polio-endemic countries like India, Pakistan, Afghanistan and Nigeria, the poliovirus is mainly passed through person-to-person contact.

### **How can polio be prevented?**

There is no cure for polio; it can only be prevented through immunization.

### **Polio in endemic countries**

As of March 2008, 139 new cases were reported in India, Pakistan, Afghanistan and Nigeria – 106 of them in India alone. Last year, 1307 new cases were reported.

### **Polio in Canada and other developed countries**

The last major polio epidemic occurred in 1959. In Canada, the immunization rate against polio is at 89%; leaving nearly four million Canadians (11%) vulnerable. According to WHO, the rate of immunization is presently low enough to put Canada at risk for at least localized outbreaks. Small outbreaks of wild poliovirus occurred in 1978 and 1979 in British Columbia, Ontario, and Alberta among closed communities that do not accept immunization for religious reasons. In 1993, another outbreak resulting from imported virus from the Netherlands occurred in the same communities.

In July 2007, a positive case of polio was confirmed in Australia, as was the case in 2006 in Singapore. Wild poliovirus (wpv) was also isolated in the sewer water of the city of Geneva in August 2007.

### **Some things to think about...**

International travel can expose Canadians to infectious diseases, like polio, that are not frequently seen in North America. Our high standard of sanitation and childhood immunization programs may lead many adult Canadians to become complacent about keeping their routine immunizations up to date. All travelers are advised to review their immunization history with a physician well in advance of departure to confirm whether they have been properly immunized against polio.

### **Useful websites:**

**Global Polio Eradication Initiative (GPEI)** [www.polioeradication.org](http://www.polioeradication.org)

**Rotary International** [www.rotary.org](http://www.rotary.org)

**Public Health Agency of Canada** [http://www.phac-aspc.gc.ca/tmp-pmv/info/polio\\_e.html](http://www.phac-aspc.gc.ca/tmp-pmv/info/polio_e.html)

**Canadian International Immunization Initiative - phase 2 (CIII -2)** <http://cii.cpha.ca>

**Ontario Ministry of Health and Long-Term Care:** [www.health.gov.on.ca](http://www.health.gov.on.ca)