

Statement from the International Symposium on Smallpox Eradication After 30 Years: Lessons, Legacies and Innovations

We, the 260 scientists, public health workers, historians and other professionals from 34 countries who participated in the August 24-27, 2010 Smallpox Eradication Symposium at the Oswaldo Cruz Foundation in Rio de Janeiro, offer the following observations on smallpox eradication:

First, smallpox eradication removed from the human population a virus that killed an estimated 300 million people in the twentieth century.

Second, after 1980 smallpox vaccination was stopped saving the great costs of vaccination programs and eliminating the sometimes severe complications of smallpox vaccination.

Third, the smallpox eradication program inspired a generation of public health practitioners and several major programs such as:

- *A wider program of vaccination (The Expanded Program on Immunizations) that has helped achieve high levels of immunization around the world preventing large numbers of deaths of children and adults.*
- *Wide-spread use of epidemiological surveillance as a key tool in disease control.*
- *Programs that have made great progress toward the global eradication of polio and Guinea Worm and the elimination of measles and rubella from the Americas.*

Fourth, it demonstrated that international cooperation and solidarity can contribute to major public health improvements around the world.

Finally, since the end of smallpox vaccination an increasing proportion of the population of the world is susceptible to smallpox. Given the current limited supplies of smallpox vaccine, release of smallpox into the environment could cause a catastrophic global epidemic. Further, smallpox virus is known to be held by only two laboratories in the world as authorized by WHO. Although these two laboratories maintain extensive precautions against release of the virus, no containment system is risk-free. In addition, it cannot be ascertained that there are no unauthorized stores of smallpox virus.

More than 15 years have elapsed since the World Health Assembly agreed to postpone the destruction of the smallpox virus. Therefore, in the interest of global security, consideration should now be given to early destruction of existing laboratory stocks of smallpox virus when on-going WHO-sanctioned research is completed on improved vaccines and diagnostics, effective anti-virals, and reliable animal model.

Finally, possession or deployment of the smallpox virus outside the WHO-sanctioned facilities should be designated a crime against humanity.