



The WHO Collaborating Center for Smallpox and other Poxviruses at the Centers for Disease Control and Prevention Atlanta, GA: 2007 report on the variola collection

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The World Health Organization (WHO) Collaborating Center for Poxviruses in Atlanta, GA continues to maintain one of two consolidated, international collections of variola strains. The majority of these viruses were originally isolated on embryonated eggs and characterized during the final years of the intensification of the smallpox eradication campaign. The virus collection is maintained in two separate freezers, one of which is a back-up freezer which has remained largely untouched. Secure databases, which address WHO recommendations as well as U.S. Select Agent requirements have been implemented to track usage of variola virus. Annual reports on the status of these collections are provided to the WHO. No new variola virus seed pools were added to the inventory. WHO-approved research activities which have utilized variola virus from the inventory within the last year have focused on further development of non-human primate models for anti-viral therapy, in vitro analysis of promising anti-viral compounds with high orthopoxvirus specificity and efficacy, and analysis of potential variola-specific monoclonal antibodies for virus recognition. Work on the differential analysis of variola virus neutralization by human antisera induced by different potential smallpox vaccines was performed in 2006, but additional analyses of that dataset were performed in 2007.