

**The Spanish Royal Maritime Vaccination Expedition to the New World  
1803-1806  
Otherwise Known as the Balmis-Salvany Smallpox Vaccination Expedition**

**Chronology of Inoculation (Variolation) and Vaccination in Europe**

1718 Lady Mary Whortley Montegu introduced inoculation from Turkey into England.

1770s-1790s Edward Jenner and others observed and began experimentation with horse “grease” and cowpox.

1796 On May 14 Jenner vaccinated 8-year-old James Phipps with matter from a cow and then six weeks later inoculated him with smallpox. Phipps did not exhibit any smallpox symptoms.

1798 Jenner published his findings in *An Inquiry into the Causes and Effects of the Variolae Vaccinae*.

**Chronology of Inoculation and Balmis Vaccination expedition in Spanish Empire**

1779-1780 Inoculation introduced into New World Spanish Empire during an epidemic of smallpox in Viceroyalty of New Spain (Mexico); inoculation clinic set up in Mexico City to have parents voluntarily bring children to be inoculated, but it was not very successful. However, Dr. Jose Felipe Flores inoculated several thousand children in Guatemala and few died.

1797-1798 New Spain Viceroy Branciforte on August 31, 1797, urged local officials to organize a campaign to inoculate all children in the realm in the midst of a widespread smallpox epidemic and had officials send to Mexico City medical personnel to learn how to administer the inoculation and organize to keep track of children, inoculated and ill.

1803 March 14, Spain’s king, Carlos IV (who was interested in medical study and research), concerned about an outbreak of smallpox in northern South America ordered the Council of the Indies to investigate the possibility of introducing the vaccine to its empire. He had earlier had his children inoculated in the 1798 smallpox outbreak in Spain and in 1800 had received a copy of Jenner’s treatise on the vaccine.

1803 June, Francisco Javier de Balmis, having earlier translated into Spanish a French treatise about the vaccine, submitted to the Council of the Indies a plan to disseminate the vaccine and keep it active, and he volunteered to led the expedition. The Royal Treasury paid for the expedition’s costs, while local officials would bear responsibility for local distribution and maintenance of the vaccine.

1803, November 30 The Expedition leaves port of La Coruna in Spain and arrived, after first stopping in the Canaries, in Puerto Rico on February 9, 1804. One physician had already left for New Granada (upper South America). Some Spanish Caribbean islands had already obtained vaccine from British Caribbean islands or elsewhere.

1804 March 20 Expedition arrived in Puerto Cabello, Venezuela. From there Balmis took part of expedition to Cuba, New Spain, and the Philippines and Jose Salvany took another part to South America, where by 1809, Salvany still had not reached Buenos Aires. Along the way they acquired more children to maintain the vaccine and set up vaccination houses to maintain it locally.

1804 May Balmis arrived in Cuba and then in June arrived in the Yucatan. In July the expedition reached the port of Veracruz and reached Mexico City on August 8, 1804. The twenty original orphans from Spain were left in the care of Viceroy Jose Iturrigaray, at the expense of the viceregal treasury. From there he trained physicians and organized expeditions to other parts of the viceroyalty.

1804 November, Balmis arrives in Guanajuato, Mexico, after personally going to Puebla. He also went to Zacatecas and Durango, where for the first time he discovered a case of cowpox in cattle.

1805 January Balmis takes the expedition to Acapulco and leaves for the Philippines on February 9, 1805 with 26 boys to carry the vaccine on the five-week journey. While in Mexico, according to estimates, he vaccinated about 100,000 children, about 2 percent of the population

1805 April 15 the expedition arrived Manila Bay. After vaccinating about 9,000 children Balmis with 3 boys sailed for Macao and Canton in September 1805, while an assistant remained to continue to organize the maintenance of the vaccine in the Philippines and later take the 26 Mexican boys back to New Spain in June 1806 after vaccinating many thousands of children.

1805 October Balmis reached Canton, where ironically he sought the help of the British East India Company to sponsor vaccination, with little success, so he returned to Macao, after setting up a temporary vaccination clinic. Soon thereafter, a smallpox outbreak after his departure convinced the British East India company to sponsor and pay for vaccination clinic and many came to the clinic for help.

1806 February 18, Balmis returns to Spain via the British Island of St. Helena, where ironically the vaccination had not reached so he introduced it there. He reached Lisbon, Portugal, in mid-August and Madrid by September. On September 17 he was received by Carlos IV at his court at San Ildefonso.

1809-1811 Balmis returned to New Spain (Mexico) to evaluate the progress of the vaccine, which he found to be mixed.