THE GREATEST ENEMY? SMALLPOX, ELIMINATION, AND POLITICS IN MEXICO, 1942-1970

by

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ABSTRACT

MARISSA L. NICHOLS. The greatest enemy: smallpox elimination and vaccination in Mexico, 1942-1970. (Under the direction of DR. JÜRGEN BUCHENAU)

In the 1940s, the Secretaría de Salubridad y Asistencia (SSA- Secretariat of Health and Welfare) hoped to unify Mexico to eliminate smallpox from within its borders. In 1952, Mexico had achieved that goal, but the year marked a significant shift in their smallpox campaigns. A unified front broke down as a focus on national elimination shifted to an international emphasis on disease prevention and control across borders after 1952. International and local interests competed for the SSA's attention. This thesis argues that smallpox vaccination no longer acted as a centralizing force after 1952. Instead, conflicting goals encouraged national and international disputes which slowed efforts to centralize Mexico's federal government in the 1950s and 1960s. That challenge to centralization after 1952 contradicts existing scholarship that sees the Ruiz Cortines and López Matos administrations as the apex of the central, dominant PRIísta state.

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LIST OF ABBREVIATIONS

CNV Campaña Nacional contra la Viruela (National Smallpox

Campaign)

PAHO Pan American Health Organization

PASO Pan American Sanitary Organization, renamed PAHO in 1958

OMS, WHO Organización Mundial de Salud, World Health Organization

SEP Smallpox Eradication Program (WHO)

SSA Secretaría de Salubridad y Asistencia (Secretariat of Health and

Welfare)

CHAPTER 1: INTRODUCTION

On June 13, 1952, President Miguel Alemán Valdés declared that Mexico was finally liberated from smallpox, one of its greatest enemies. Smallpox had plagued the Americas since the first Spanish ships arrived in 1492. Almost five centuries later, the disease still claimed inhabitants' lives and remained a detriment to the nation's health. By the mid- twentieth century, federal officials longed to eliminate the colonial disease. When President Alemán announced its elimination at last, he claimed the victory for the entire nation. He applauded doctors, scientific researchers, vaccine producers, sanitary brigades, state officials, and nurses for their collaborated efforts. In his public announcement, Alemán prided officials' success in executing a uniform, national campaign against smallpox. The campaign sought to unite state and federal officials. A focus on national unity in health campaigns mirrored many of Alemán's broader political goals. His agenda emphasized modernization, centralization, and development. He saw smallpox elimination as a step towards achieving each of those goals.

In 1952, Alemán's speech portrayed a sense of uniformity, coordination, and centralization in health campaigns and state power, but that same year brought a significant shift in policy. National campaigns had eliminated the threat of smallpox from

 ¹ Lic. Miguel Alemán Valdés, June 16, 1952, Archivo Histórico de la Secretaría de Salubridad y Asistencia (AHSSA), fondo: Secretaría de Salubridad y Asistencia (SSA), sección: Secretaría Particular (SPr), Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

² Ryan Alexander, "Fortunate Sons of the Mexican Revolution: Miguel Alemán and his Generation, 1920-1952," PhD diss., the University of Arizona, 2011, 16.

within the nation, but danger loomed outside its borders. Mexico could easily import a case from South America, South Asia, or Africa where smallpox remained endemic. In contrast to the 1940s when policies centered on elimination, Mexico's smallpox campaigns emphasized prevention in order to halt the disease from re-entry after 1952. In those years, the Adolfo Ruiz Cortines administration cooperated with international organizations such as the Pan American Sanitary Organization (PASO) and the World Health Organization (WHO) to contain the spread of smallpox. A national focus on smallpox in the 1940s shifted to an international one after 1952. In the second period, Mexico required that foreign travelers carry smallpox vaccination certificates through the 1960s; however, many local Mexican businesses, travel agencies, and U.S. tourists protested those vaccine requirements. I argue that smallpox vaccination no longer acted as a centralizing force after 1952. Instead, conflicting goals encouraged national and international disputes which slowed efforts to centralize Mexico's federal government in the 1950s and 1960s. My challenge to centralization after 1952 contradicts existing scholarship that sees the Ruiz Cortines and López Matos administrations as the apex of the central, dominant PRIísta state.

My argument builds on existing historiography that examines Mexico's smallpox campaigns in the twentieth century. ³ Claudia Agostoni has demonstrated that smallpox

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³ On smallpox campaigns in Mexico, see Ana María Carrillo "Los díficiles caminos de la campaña antivariolosa en México," *Ciencias* 55-56 (July-December 1999): 18-25; Claudia Agostoni, "Control, contención y educación higiénica en las campañas de vacunación contra la viruela en México durante la década de 1940," *História, Ciências, Saúde-Manguinhos* 22, no. 2 (April-June 2015): 355-370; idem, "Médicos rurales y brigadas de vacunación en la lucha contra la viruela en el México posrevolucionario, 1920-1940," *Canadian Journal of Latin American and Caribbean Studies* 35, no. 69 (2010): 67-91; idem, "Entre la persuasión, la compulsión y el temor: la vacuna contra la viruela en México, 1920-1940," in *Los miedos en la historia*, Elisa Speckman Guerra, Claudia Agostoni, Pilar Gonzalbo Aizpuru (Mexico, D.F.: El Colegio de Mexico, Centro de Estudios Históricos: UNAM, Instituto de Investigaciones Históricas, 2009); and idem, *Médicos, campañas y vacunas: la viruela y la cultura de su prevención hasta 1952* (Mexico City: UNAM, in press).

vaccination campaigns of the 1920s-1940s became key instruments for the expansion and consolidation of the post-revolutionary state. Additionally, she was one of the first historians to challenge Alemán's account of a uniform, coordinated national smallpox campaign. Instead, she argued that vaccine application was incomplete or non-existent in many rural areas in the 1940s. Agostoni shifted our understanding of the smallpox campaigns away from reiterations of doctors and politicians' accounts from the 1940s and 1950s; however, historians have neglected to study the smallpox campaigns after 1952. In fact, because most histories end with its national elimination, readers might sense that the campaigns ended in that year. However, I show that the state continued to fund smallpox vaccinations and increased awareness to prevent its re-entry in the 1950s and 1960s. Smallpox campaigns continued in Mexico after 1952, but conflicting goals dissolved any semblance of unity and hindered centralization at the national level.

In the last half century, histories of public health and state power have evolved rapidly. Dorothy Porter wrote that historians of the 1950s saw how "the growth of public health paralleled the rise of centralized government." Since that time, scholars such as Michel Foucault have suggested that state-sponsored medicine and increased surveillance through clinics and teaching hospitals could be politically repressive. Historians continue to analyze public health as indicative of state progress, power, and oftentimes repression. However, in recent years scholars have used public health programs to

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⁴ Claudia Agostoni, "Médicos rurales y brigadas de vacunación en la lucha contra la viruela en el México posrevolucionario, 1920-1940," *Canadian Journal of Latin American and Caribbean Studies* 35:69 (May 2014), 70.

⁵ Dorothy Porter, "Introduction" in *The History of Public Health and the Modern State*, ed. Dorothy Porter (Amsterdam: Editions Rodopi D. V., 1994), 1.

⁶ Porter, *The History of Public Health and the Modern State*, 3 and Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception* (New York, Random House, Inc., 1973).

examine state formation as a contested, negotiated, varied, and contradictory process.⁷ Smallpox campaigns in Mexico before and after 1952 reiterate those claims. In the 1940s, doctors and politicians portrayed the Campaña Nacional Contra la Viruela (CNV-National Smallpox Campaign) as a modernizing, progressive, centralizing force that drove Mexico towards eliminating the disease. Increased surveillance, sometimes repressive, helped the nation achieve that goal.⁸ But after 1952, various actors within and outside the nation contested smallpox vaccination; that illustrates the limited power of the central government.

Though limited in the 1950s, Mexico's federal government funneled an enormous amount of power into the Secretaría de Salubridad y Asistencia (SSA) in 1943. On paper, the SSA's reach extended to almost anything that affected public health. In 1943, President Manuel Avila Camacho's executive order merged the Secretaría de Salubridad with the Secretaría de Asistencia. He charged the new, semi-autonomous institution with the "health of the nation." That included, but was not limited to, the planning of a health system, coordination and control of private or public sites, evaluation of existing services, programs, and politics, the protection of patients, maintenance of public sites (hospitals, clinics, and doctors' offices), and controlling epidemics. The Department of Public Health's elevation to cabinet level confirmed the institutionalization of public health.

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⁷ See Katherine E. Bliss, Compromised Positions: Prostitution, Public Health, and Gender Politics in Revolutionary Mexico City (University Park: Pennsylvania State University Press, 2001); Porter, The History of Public Health and the Modern State; James C. Scott, Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed (New Haven: Yale University Press, 1998).

⁸ See Claudia Agostoni, "Entre la persuasión, la compulsión y el temor: la vacuna contra la viruela en México, 1920-1940," in *Los miedos en la historia*, eds. Elisa Speckman Guerra, Claudia Agostoni, Pilar Gonzalbo Aizpuru (México, D.F.: El Colegio de México, Centro de Estudios Históricos: UNAM, Instituto de Investigaciones Históricas, 2009).

⁹ Ana Cecilia Rodríguez de Romo and Martha Eugenia Rodríguez Pérez, "Historia de la Salud Pública en México: Siglos XIX y XX," *História, Ciências, Saúde-Manguinhos* 5, no. 2 (July-Oct. 1998), 295.

Previously stumbling campaigns, like that against smallpox, now found solid ground.¹⁰ However, a limited budget, natural obstacles to ground transportation, patient resistance, and few personnel all hindered the SSA's ability to fulfill its mission completely. It achieved few goals in the early years. For that reason, the nation took great pride in its successful elimination of smallpox.

The federal government unified in effort to eliminate smallpox in the 1940s. In those years, the CNV promoted a strong sense of nationalism and did not credit success to international influences. Instead, Mexico promoted health campaigns without the intervention of the Rockefeller Foundation (RF) who had supported Mexico's single disease campaigns in the 1920s and 1930s. In fact, the RF's direct oversight and funding had all but disappeared from Mexico's smallpox campaign in the 1940s. Larger international health organizations such as PASO and WHO oversaw various initiatives in Mexico or the Americas more broadly. However, in the 1940s, neither organization formulated a coordinated effort to eliminate smallpox on an international or global scale. Instead, international cooperation became a focus after 1952. That contributed to the shift in Mexico's approach to promoting smallpox vaccinations in those years.

International organizations eventually centered their efforts on coordinated campaigns to eliminate smallpox, but only after Mexico's CNV had achieved its goal. For example, the League of Nation's International Office of Public Health had collected information on smallpox cases before the 1940s. However, incomplete reports suggest

¹⁰Anne-Emanuelle Birn, *Marriage of Convenience*: *Rockefeller International Health and Revolutionary Mexico* (Rochester: University of Rochester Press, 2006), 247.

the office lacked effective surveillance methods.¹¹ Only in 1950 did PASO declare a hemispheric goal to smallpox elimination. The newly formed WHO began a study on smallpox in 1948, but did not pool sufficient funding and personnel to undertake its Smallpox Eradication Program (SEP) until 1966.¹² Thus, in the 1940s, many countries and organizations around the world focused their attentions elsewhere, especially during World War II. Those actors diverted their attention to smallpox eradication only in the 1950s.

By the time WHO and PASO coordinated a program to achieve global eradication, Mexico had already eliminated smallpox from within national borders. In fact, countries such as Mexico, the United States, Hungary, Austria, Greece, France, Australia, etc. did not undergo international certification through the SEP; they simply provided statements attesting to their freedom from smallpox. That experience contrasted with those of countries in South America, Africa, and South Asia where smallpox remained endemic until the 1960s and 1970s. In those countries, international and global commissions surveyed and reviewed nations' health and provided international certificates confirming freedom from smallpox. Because international and global organizations increased their focus smallpox in the 1950s, 1952 marked a shift for Mexico. After that year, the SSA promoted growing collaboration with PASO and WHO by requiring vaccination certificates for foreign travelers. The SSA's position on

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¹¹ The Global Eradication of Smallpox: Final Report of the Global Commission for the Certification of Smallpox Eradication, Geneva, December 1979, World Health Organization Archives, http://apps.who.int/iris/bitstream/10665/39253/1/a41438.pdf, 23.

¹² Ibid, 24

¹³ For a comprehensive list of all countries who self-reported smallpox free status before WHO's SEP began, see Annex 11 in The Global Eradication of Smallpox: Final Report of the Global Commission for the Certification of Smallpox Eradication, Geneva, December 1979, World Health Organization Archives, http://apps.who.int/iris/bitstream/10665/39253/1/a41438.pdf, 99.

smallpox certificates soon conflicted with the interests of international tourists and local Mexican businesses. Those conflicts over smallpox vaccination limited the state's centralization efforts in the 1950s.

Long before the conflicts of the 1950s, smallpox plagued Mexico. The first chapter briefly traces the disease's long trajectory and discusses changes in smallpox campaigns throughout the nineteenth and early twentieth centuries. That chapter provides readers with a short historiography of smallpox in Mexico. Though historians have studied smallpox in Mexico, they have not studied the policy shift after 1952.

Additionally, I explore how historians have analyzed other health campaigns in relation to the broader history of Mexico. In other words, I include historians who have tied health campaigns to shifting political and cultural ideologies in addition to exploring technical aspects of health campaigns. Finally, I discuss the historiography on politics in Mexico after 1940.

The second chapter of my thesis delves into the national smallpox campaigns of the 1940s. I seek to understand why the Secretaría de Salubridad y Asistencia (SSA-Secretariat of Health and Welfare) undertook the CNV when other diseases such as tuberculosis, typhus, and intestinal ailments affected more people. I discuss how and to what extent the CNV advanced and expressed federal power. The chapter begins with the final epidemics of 1943 and analyzes the SSA's National Smallpox Campaign. In the 1940s, the SSA undertook the CNV because it was an attainable goal which could extend control over national health. Efforts to reach rural areas through culture, education, and radio indicated attempts to strengthen authoritarian rule through public works projects. I argue that smallpox vaccinations and the goal of elimination unified Mexico in the 1940s.

The final chapter shows how after elimination, conflicting goals encouraged national and international disputes over smallpox vaccination in Mexico. The chapter places Mexico's elimination of smallpox in a broader, global context. Building on the work of Nancy Leys Stepan, I discuss how global eradication was in the best interests of smallpox free countries like Mexico. ¹⁴ To lower costs incurred through routine vaccinations, the SSA cooperated with PASO and WHO to prevent imported cases and eradicate the disease worldwide. I suggest an increase in the SSA's international cooperation during those years that successfully prevented any imported cases in Mexico after 1952. Though international certificates and vaccine requirements protected Mexico from the disease's re-introduction, its local businesses, travel agencies, and U.S. tourists protested those policies. They cited the dangers of smallpox vaccines and hoped the SSA would eliminate vaccine requirements for foreign travelers. Emerging conflicts contribute to my argument that smallpox campaigns no longer unified Mexico after 1952. Instead, smallpox vaccines became a point of contention that prevented the SSA from formulating and executing a widely supported, uniform national campaign in the 1950s and 1960s.

My thesis examines a single disease to expose broader political processes, namely the expansion or diffusion of federal and state power and "official" notions of modernity. A number of scholars have studied Mexican health campaigns during the revolution in a similar manner. Others have argued for a re-periodization of Mexican politics, though not in regards to health campaigns during this period. I combine the two approaches to understand the intersection of politics, power, and modernity in the smallpox campaigns

¹⁴ Nancy Leys Stepan, *Eradication: Ridding the World of Diseases Forever?* (Ithaca: Cornell University Press, 2011), 193.

before and after 1952. To inform those approaches, my thesis relies on mainly stategenerated documents from the Archivo General de la Nación (National Archives of
Mexico), Archivo Histórico de la Secretaría de Salubridad y Asistencia, and Archivo de
la Fundación Cultural Bustamante Vasconcelos in Oaxaca City. Those documents include
SSA correspondence, reports, pamphlets, posters, personal papers of SSA Director
Miguel Bustamante, epidemiological reports, presidents' speeches, and correspondence
with PASO and WHO. The documents speak to the formation and execution of the CNV,
the SSA's broader goals, and the politics of the each decade. Because the SSA produced
and informed the majority of my sources, it acts as the main character throughout the
thesis. Additional documents include newspapers (mainly from the 1960s) and letters
from foreigners to the Director of Health and the president. Those documents provide a
few outside perspective and point to resistance and dissention against the smallpox
campaigns. Combined, the documents reveal a continued focus on smallpox well into the
1960s, decades after its national elimination.

CHAPTER 2: SMALLPOX IN MEXICO'S HISTORY AND HISTORIOGRAPHY FROM 1492 TO 1952

In the last decade, the historiography on smallpox elimination in Mexico has diverged from an analysis that placed it among the most significant medical successes of the twentieth century. Instead, historians have criticized Mexico's smallpox campaigns of the mid-century and argued they diverted attention from "more pressing health needs in sanitation, housing, poverty, basic infrastructure, and access to primary care services."¹⁵ Though historians have successfully shifted the narrative away from romanticized versions, they have overlooked a few important topics. First, the current scholarship has failed to address smallpox campaigns after 1952. I argue that year marked a significant shift from a national focus on elimination to an international culture of prevention. Second, although some scholars have used health campaigns to demonstrate broader changes in Mexican politics, to my knowledge, no historian has examined the conflicting and diverging perspectives on smallpox vaccination in Mexico after 1952. To highlight those gaps, this chapter will start by briefly tracing smallpox back to its colonial introduction. It will then discuss how historians have analyzed health campaigns of twentieth century Mexico. The final subsection of this chapter then links health campaign analyses to the broader historiography on Mexican society and politics after 1940.

¹⁵ Anne-Emanuelle Birn, *Marriage of Convenience: Rockefeller International Health and Revolutionary Mexico* (Rochester: University of Rochester Press, 2006), 278.

The Colonial Legacy of Smallpox in the Americas

By the time of its elimination in Mexico in 1952, smallpox had plagued North America for more than four centuries. Two origin stories prevailed in Mexican memory that explained this Old World disease brought by the Spanish conquest. The first blamed African slaves for bringing smallpox to Mesoamerica, the home of the Aztec empire. Mexicans retold the story so often that the disease itself is sometimes called *viruela negra* (black smallpox). ¹⁶ The second story claims that in the sixteenth century, Europeans introduced the smallpox virus to Mesoamerica. ¹⁷ In both cases, the disease decimated indigenous populations throughout the region claiming its place as one of deadliest diseases in sixteenth-century Mesoamerica. In fact, the first epidemic of 1520 caused the death of an estimated 500,000 and an abundance of epidemics plagued the region since its introduction around 1518. While most historians agreed with that assessment, some, like Suzanne Austin Alchon, argued that epidemics alone did not explain the demise of New World populations.¹⁹ Although smallpox did not account for the entire decimation of indigenous populations, it was one important factor that contributed to indigenous deaths and that has remained in collective memory until the present.

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 ¹⁶ Miguel E. Bustamante Vasconcelos, "Consecuencias médico-sociales de la viruela y su erradicación," Fundación Cultural Bustamante Vasconcelos (FBV), fondo Dr. Miguel E. Bustamante Vasconcelos, 614.5. Also see "Como llegaron a México la viruela y la vacuna," April 5, 1974, El sol de México, Archivo General de la Nación (AGN), Secretaría de Gobernación, Médicos-hospitales, box 1714- A, folder 3.
 ¹⁷ See Noble David Cook and W. George Lovell, Secret Judgements of God: Old World Disease in Colonial Spanish America (Norman: University of Oklahoma Press, 1991); Suzanne Austin Alchon, A Pest in the Land: New World Epidemics in a Global Perspective (Albuquerque: University of New Mexico Press, 2003); and Woodrow Borah and Sherburne F. Cook, The Aboriginal Population of Central Mexico on the Eve of the Spanish Conquest (Berkley: University of California Press, 1963).
 ¹⁸ Heather L. McCrea, Diseased Relations: Epidemics, Public Health, and State-Building in Yucatán, Mexico, 1847-1924 (Albuquerque: University of New Mexico Press, 2010) and Paul Ramírez, "Like Herod's Massacre': Quarantines, Bourbon Reform, and Popular Protest in Oaxaca's Smallpox Epidemic, 1796-1797," The Americas 69:2 (October 2012): 203-235.

¹⁹ Alchon, A Pest in the Land, 3.

Patients infected with smallpox faced symptomatic high fever, aches, and pusfilled blisters that almost always left visible scars. Because no cure exists, patients either recovered from those symptoms, found themselves disfigured and disabled, or they died. Until the end of the eighteenth century, methods to prevent the disease proved ineffective. Though inoculation (variolation) had been practiced in Asia and Africa since ancient times, it was only used sporadically in the Americas during times of epidemics (New Spain- 1779 and 1797). In 1796, English physician and scientist Edward Jenner tested a safer method using cowpox to prevent the disease. By 1803, Edward Jenner's vaccine reached New Spain and the number of smallpox cases began to decline.²¹ However, the vaccine faced great resistance from the local population. Patients opposed the new preventative method because they saw it as invasive and harmful. Locals remained vary of the modern European invention that clashed with traditional beliefs. Because locals saw religion as a fundamental part of medicine, the church was instrumental in gaining popular acceptance of vaccines. Throughout Latin America, agents of the church persuaded and coerced those citizens who refused vaccination.²² Together, the church worked to prevent the spread of smallpox. Little by little, vaccinators made progress in a nation where the dark memory of smallpox coincided with reminders of conquest and colonization.

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 ²⁰ Catherine Mark and José G. Rigau-Pérez, "The World's First Immunization Campaign: The Spanish Smallpox Vaccine Expedition, 1803-1813," *Bulletin of the History of Medicine* 83, no. 1 (Spring 2009), 66.
 ²¹ Claudia Agostoni, "Médicos rurales y brigadas de vacunación en la lucha contra la viruela en el México posrevolucionario, 1920-1940," *Canadian Journal of Latin American and Caribbean Studies* 35:69, May 2014, 70.

²² Claudia Agostoni, "Entre la persuasión, la compulsión y el temor: la vacuna contra la viruela en México, 1920-1940," in *Los miedos en la historia*, eds. Elisa Speckman Guerra, Claudia Agostoni, Pilar Gonzalbo Aizpuru (México, D.F.: El Colegio de México, Centro de Estudios Históricos: UNAM, Instituto de Investigaciones Históricas, 2009).

By the end of the nineteenth century, the church made way for the first state projects that centered on mass vaccination. Under Porfirio Díaz (1884-1911), the federal government initiated smallpox campaigns that centered on both preserving and spreading the vaccine. Though the state upheld a repressive dictatorship, it did promote modern health models from Europe. The Superior Council of Health (Consejo Superior de Salubridad) created a Central Vaccine Office (Oficina Central de la Vacuna) under the direction of Dr. Eduardo Liceaga. However, that office targeted only the most populous areas of Mexico City as well as the middle class. The Superior Council of Health and its subdivisions sought to modernize health in the urban areas of Mexico. That emphasis on modernization reflected a general trend of Porfirian era politics and culture. ²⁴ Though health campaigns in the twentieth century also hoped to bring modernization, this Porfirian version chased a European ideal. Additionally, the federal authorities would only include rural areas in their plans after the revolution.

Beginning in 1910, Mexico's revolution promoted a vision for universal access to health care and the prevention of illnesses like smallpox. To reach those ideals, the Constitution of 1917 created Mexico's Department of Public Health (Departamento de Salubridad Pública). Like other revolutionary reforms, the Department of Public Health took years to implement programs on sanitation and disease prevention. By the mid-1920s, the federal government began the process of reconstruction, and the administration of President Plutarco Elías Calles (1924-28) created the Código Sanitario de los Estados Unidos Mexicanos (Sanitary Code of the United States of Mexico) in

²³ Agostoni, "Médicos rurales y brigadas de vacunación," 71.

²⁴ William H. Beezley, *Judas at the Jockey Club and Other Episodes of Porfirian Mexico* (Lincoln: University of Nebraska, 2004).

1926. The Sanitary Code aimed to control transmissible diseases. In regards to smallpox, it made that vaccine mandatory for all citizens, used sanitary brigades, and forced home disinfections. Those sanitation programs targeted urban centers and sought to control social disorder caused by prostitution and venereal diseases, as Katherine Bliss has discussed in *Compromised Positions*.²⁵

In her work, Bliss showed that state formation as seen through public health played out as a contested and negotiated process. It involved diverse actors such as workers, bureaucracy builders, and social reformers. Bliss' focus on Mexico City demonstrated that the state started its reforms in urban centers. Eventually, the state's public health programs would include small towns in rural locations.²⁶ The federal programs, some of the first to target rural areas in Mexico, reflected a revolutionary desire to include peoples outside of the urban centers. However, in the 1920s, Mexico lacked the infrastructure to implement reforms uniformly. As a result, medical officials executed those programs in an erratic manner.²⁷

In the 1930s and 1940s, state authorities began formulate the policies to implement the modern, centralized, and functional institutions discussed in the revolution's Constitution of 1917.²⁸ In 1931, the federal government created the Federal Sanitary Service in the States (Servicio Sanidad Federal en los Estados) to spread health campaigns and vaccination outside Mexico City. Doctors writing in 1954 believed the Federal Sanitary Service reflected a "need for a central organism in charge of unifying

²⁵ Katherine E. Bliss, Compromised Positions: Prostitution, Public Health, and Gender Politics in Revolutionary Mexico City (University Park: Pennsylvania State University Press, 2001).

²⁶ Agostoni, "Médicos rurales y brigadas de vacunación, 69.

²⁷ Ibid, 69.

²⁸ Marcos Cueto and Steven Palmer, *Medicine and Public Health in Latin America: A History* (New York: Cambridge University Press, 2015), 125.

standards and applying vaccines, but with enough autonomy to coordinate and supervise daily activities."²⁹ Additionally, the federal government mandated that every Mexican citizen present a smallpox vaccine certificate in the 1930s. In an effort to consolidate power, the Department of Health merged with the Secretariat of Welfare (1938) to form the Secretaria de Salubridad y Asistencia in 1943. In that same year, the new ministry created the first national smallpox program in hopes of coordinating a standardized campaign across urban and rural areas.

In 1943, the SSA created the National Smallpox Campaign (Campaña Nacional contra la Viruela- CNV) in direct response to an outbreak of the smallpox virus in various states such as Puebla, Oaxaca, Guerrero, and Tlaxcala. Though the epidemics caused the largest number of smallpox-related deaths on record since 1934, that figure paled in comparison to the millions affected by intestinal diseases and malaria. In fact, a study from the *Universidad Nacional Autónoma de México* (UNAM) estimated that by 1973, 25 million Mexicans suffered from parasite infections.³⁰ Historians like Anne-Emanuelle Birn even argued that the national and international focus on smallpox came "at the expense of more pressing health needs in sanitation, housing, poverty, basic health infrastructure, and access to primary care services." In fact, eliminating smallpox was a highly symbolic objective. The SSA undertook those campaigns, in part, to eliminate visible reminders of colonization.

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 ²⁹ Felipe Garcia Sanchez, Heliodoro Celis Salazar y Carlos Carboney Mora, "Viruela en la República Mexicana," *Salud Pública de México* 34, no. 5 (September-October 1992), originally printed in 1954.
 ³⁰ "25 Millones de Mexicanos con Infecciones Parasitarias," October 4, 1973, *Ultimas Noticias*, AGN, Secretaría de Gobernación, Médicos-hospitales, box 1714- A, folder 3.

³¹ Birn, Marriage of Convenience, 278.

A Historiography of Smallpox and Other Health Campaigns in Mexico

Though a number of scholars have studied smallpox epidemics and vaccines from their introduction through the nineteenth century, few historians discuss its impact on twentieth century Mexico. 32 Claudia Agostoni, one of the foremost historians of smallpox in twentieth century Mexico, traced the evolving campaigns from the 1920s-1940s, examined the relationship between fear and vaccine, and complicated the role of sanitary brigades in rural areas. In her work, Agostoni argued that the SSA did not execute a coordinated, uniform campaign. Instead, "difficulties, problems, challenges, and innovations accompanied the vaccine endeavor in Mexico in the 1940s."³³ Her argument shifted the narrative from that which retold staff members' account of a campaign free of conflict. Instead, Agostoni demonstrates that vaccine application, especially in rural areas, was incomplete or non-existent. Her work marks a major shift from previous historiography that claimed smallpox elimination as "one of the most significant medical successes of the twentieth century."34 Although Agostoni modified some of the major trends in the historiography on smallpox, her research stopped with its elimination in 1952.

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³² On smallpox campaigns in Mexico, see Ana María Carrillo "Los díficiles caminos de la campaña antivariolosa en México," *Ciencias* 55-56 (July-December 1999): 18-25; Claudia Agostoni, "Control, contención y educación higiénica en las campañas de vacunación contra la viruela en México durante la década de 1940," *História, Ciências, Saúde-Manguinhos* 22, no. 2 (April-June 2015): 355-370; idem, "Médicos rurales y brigadas de vacunación en la lucha contra la viruela en el México posrevolucionario, 1920-1940," *Canadian Journal of Latin American and Caribbean Studies* 35, no. 69 (2010): 67-91; idem, "Entre la persuasión, la compulsión y el temor: la vacuna contra la viruela en México, 1920-1940," in *Los miedos en la historia*, Elisa Speckman Guerra, Claudia Agostoni, Pilar Gonzalbo Aizpuru (Mexico, D.F.: El Colegio de Mexico, Centro de Estudios Históricos: UNAM, Instituto de Investigaciones Históricas, 2009); and idem, *Médicos, campañas y vacunas: la viruela y la cultura de su prevención hasta 1952* (Mexico City: UNAM, in press).

³³ Claudia Agostoni, "Control, contención y educación higiénica en las campañas de vacunación contra la viruela," 356.

³⁴ Ana María Carrillo, "Los díficiles caminos de la campaña antivariolosa en México," *Ciencias* 55-56 (July-December 1999): 18-25.

Other historians of medicine in Mexico have criticized the smallpox campaigns. For example, Anne-Emanuelle Birn has argued that the government devoted funds to a campaign that no longer affected a majority of the population. Though Birn did not support the efforts against smallpox, her studies on the hookworm campaigns of earlier decades revealed similar structures. Both the Mexican state and the Rockefeller Foundation (RF) undertook the smallpox and hookworm campaigns because of their "rapidly demonstrable, economical cure[s]."35 Simply stated, eliminating smallpox and alleviating hookworm from the nation seemed cheap, reasonable goals. These similarities suggest a lingering influences of the RF well into the 1940s and provide a baseline for health campaigns of the twentieth century. Other characteristics of previous disease campaigns carried over into the CNV of the 1940s. For example, during the height of both the smallpox and hookworm campaigns, state propaganda sought to convince the public that each disease was the most pressing national health issue. Additionally, each included an education component and used rural brigades to educate and treat patients. However, that would change in the 1950s.

Previous scholars concentrated on the evolution of public health programs through the twentieth century. For example, Katherine Bliss determined that an increase in syphilis infections in Mexico City encouraged state reform. The reforms criminalized "the spread of sexually contagious maladies… by 1939."³⁶ In that case, Bliss presented the history of a single disease and its ties to state formation and popular perceptions about gender and morality in the first few decades of the twentieth century. My thesis also

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³⁵ Birn, "Public Health or Public Menace?," 40.

³⁶ Katherine E. Bliss, "Between Risk and Confession: State and Popular Perspectives of Syphilis Infection in Revolutionary Mexico," in *Disease in the History of Modern Latin America*, ed. Diego Armas (Durham, Duke University Press, 2003), 185.

examines a single disease in order to examine broader political processes, namely the expansion of state power and the state's notions of modernity.³⁷ However, my study focuses on a later period. In recent years, research on health campaigns in Mexico after 1940 has only increased. One such scholar, Stephanie Baker, emphasized a shift away from vaccine-centered campaigns to health programs that "included community public works initiatives to improve local living conditions."³⁸ While Baker illustrated the state's new emphasis on "collective health" in the 1940s and 1950s, campaigns that targeted a single disease did not end. In contrast to Baker, I show that the state continued to fund smallpox vaccinations and increased awareness to prevent the disease from crossing national borders into the 1950s and 1960s.

Historians have overlooked global actors' experiences with smallpox after 1952. Previous scholars noted the crucial role of global actors such as the Rockefeller Foundation (RF) and the United States in earlier health programs.³⁹ On the hookworm campaigns of the 1920s, Anne-Emanuelle Birn demonstrated that the RF sponsored local sanitary units and public health education—similar to the structure of the smallpox campaign of the 1940s. She determined that the RF still exerted influence in Mexico through the 1960s, establishing a precedent of U.S. influence in Mexico's health policy. Additionally, Birn's *Marriage of Convenience* studies the connections between an

³⁷ For other single-disease studies, see Frank M. Snowden, *The Conquest of Malaria: Italy, 1900-1962* (New Haven: Yale University Press, 2006); and Richard J. Evans, *Death in Hamburg: Society and Politics in the Cholera Years* (New York: Penguin Books, 1987).

³⁸ Baker, "Salud Colectiva," 4.

³⁹ On earlier health programs in Mexico, see Katherine Bliss, *Compromised Positions: Prostitution, Public Health, and Gender Politics in Revolutionary Mexico City* (University Park: Pennsylvania State University Press, 2001); and Anne-Emanuelle Birn, *Marriage of Convenience: Rockefeller International Health and Revolutionary Mexico* (Rochester: University of Rochester Press, 2006), "Public Health or Public Menace? The Rockefeller Foundation and Public Health in Mexico, 1920-1950," *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 7, no. 1 (March 1996): 35-56; and chapters in Diego Armus' *Disease in the History of Modern Latin America* (Durham: Duke University Press, 2003).

international force, the Rockefeller Foundation's International Health Division, and a national force, revolutionary Mexico's Departmento de Salubridad Pública. ⁴⁰ Birn focuses on the 1920s and argues that the "marriage" between the international and national forces was characterized by competing interests, compromise, mutual benefits, and therapeutic intervention of the U.S. State Department. Competing interests returned to define the smallpox campaigns after 1952.

Marcos Cueto, another scholar who examined disease eradication, focuses on the malaria eradication program of the 1950s and 1960s in relation to the Cold War. The U.S. State Department thought that modernization and international health programs in poor countries "decrease[d] the possibilities of infiltration of those ideologies to which needy populations are often susceptible." In both cases, scholars emphasized the contested role of international actors in Mexico. Like Birn and Cueto, I examine the intersection of Mexican health programs with the international sphere. By adding a hemispheric context, I discuss both the experiences of foreign travelers with vaccination requirements and the SSA's efforts prevent the re-entry of smallpox after 1952. Both support my argument that the campaigns after 1952 included an international focus in vaccination campaigns.

Politics in Mid-Century Mexico

Before 2000, most historians of Mexico left the post-1940 period to sociologists, anthropologists, political scientists, and public health authorities. Few historians willingly studied a rapidly changing Mexico after its revolution; however, in the last fifteen years,

⁴⁰ Anne- Emanuelle Birn, *Marriage of Convenience: Rockefeller International Health and Revolutionary Mexico* (Rochester: University of Rochester Press, 2006).

⁴¹ Marcos Cueto, *Cold War, Deadly Fevers: Malaria Eradication in Mexico, 1955-1975* (Baltimore: Johns Hopkins University Press, 2007), 6.

publishers have seen a drastic increase in the number of political and cultural histories on the latter half of the twentieth century. Most notably, *Dictablanda* edited by Paul Gillingham and Benjamin Smith, Daniel Newcomer's *Reconciling Modernity*, and Stephen Niblo's *Mexico in the 1940s*, and *Fragments of a Golden Age* edited by Gilbert Joseph, Anne Rubenstein, and Eriz Zolov, challenge traditional interpretations that defined the 1938-1968 period as a "Golden Age" in Mexican history. No longer broadly described as "increasingly conservative," the 1938-1968 period demonstrates longer and more nuanced trajectories of political change.

In tracing those nuances, Paul Gillingham and Benjamin Smith's anthology, *Dictablanda*, describes the contradictory and ambiguous PRIísta state in the 1940s, 50s, and 60s. The authors determine the PRI (Partido Revolucionario Institucional-Institutional Revolutionary Party) operated a fragmented "hybrid regime" that balanced both force and consent. Neither a complete authoritarian state nor a democracy, the authors define the post-revolutionary PRIísta state as a *dictablanda*, or "soft" dictatorship. ⁴² The *dictablanda* of the 1940s broke with Lazaro Cárdenas' early administration and ruled with a tight fist, repressed dissent, and shifted to more conservative policies. Yet the state did not use completely authoritarian tactics as in a *dictadura*. Instead, the weakness of the state can be seen in its lack of complete authority and use of "soft" power like propaganda, health initiatives, and social security.

⁴² Gillingham and Smith use the term *dictablanda* to denote a combination of hard and soft, of authoritarian and democratic elements to describe Mexico post-1938. This is the Spanish word for dictatorship, *dictadura*, except with the second half, *dura*- hard, swapped out for *blanda*- soft. In essence, meaning a soft dictatorship.

period, hailing it the "Mexican miracle," *Dictablanda* shows that growth was limited to cities and to the north.⁴³

Other historians have examined the regional differences in Mexico's politics and society after 1940. Daniel Newcomer shifted the narrative from the country's capital. He examined new conservative, elite factions and their clash with older revolutionary ideas in the Bajío city of Léon in the 1940s. He challenged over-generalizations that determine that the goals of the period included "the establishment of its de facto ruling hegemony" and "modernization." Instead, Newcomer explores the complex ideas that comprised modernity, namely democratization, centralization, and industrialization. For Miguel Alemán Valdés, modernity meant peace and social progress within the nation. For Adolfo Ruiz Cortines, modernization came through *desarrollo estabilizador*, or stabilizing development. His administration prided economic development, education, health care, and media-based cultural nationalism over social equality and justice. Each president sought a different "modern" ideal through the smallpox campaigns.

Others scholars like Jaime Pensado and Alex Aviña have argued for a reperiodization by tracing student movements, violence, and repression prior to 1968.

Aviña's work centers on Guerrero and illustrates a long trajectory of violence and repression by the federal government in that region. ⁴⁶ Pensado argued that aggressive and public student political activism began in 1956, in the decade prior to that originally

⁴³ Paul Gillingham and Benjamin T. Smith, eds., *Dictablanda: Politics, Work, and Culture in Mexico,* 1938-1968 (Durham: Duke University Press, 2014), 12.

⁴⁴ Daniel Newcomer, *Reconciling Modernity: Urban State Formation in 1940s León, Mexico* (Lincoln: University of Nebraska Press, 2004), 5.

 ⁴⁵ Gilbert Joseph and Jürgen Buchenau, Mexico's Once and Future Revolution: Social Upheaval and the Challenge of Rule since the Late Nineteenth Century (Durham: Duke University Press, 2013), 157-8.
 46 Alex Aviña, Specters of Revolution: Peasant Guerrillas in the Cold War Mexican Countryside (Oxford: Oxford University Press, 2014).

described in the historiography.⁴⁷ Both Aviña and Pensado argue for a reconsideration of historical timelines. I build on their methodology to argue for a similar moment of change (1952).

Historians generally agree that the one party system in Mexico upheld a unique political system from the 1940s through the 1960s. The regime used both hard and soft tactics for control. 48 Hard tactics included those described by Aviña such as disappearances and mass-murders. Softer tactics included control over propaganda and culture. Stephen Niblo describes those "soft" tactics in Mexico in the 1940s. He indicates that World War II encouraged an increase propaganda efforts in Mexico. The Mexican state observed successful and failed foreign propaganda campaigns that use "indirect efforts" more effectually than obvious state-generated radio shows or newspapers. 49 Cultural diplomacy extended outside national propaganda to tourism during WWI. Dina Berger argues that tourism promoted transnational and transcultural understanding and thus improved international relations during WWII.⁵⁰ She writes that there was "an understood connection between economic, political, and hemispheric stability that might explain why the U.S. Office of Inter-American Affairs, for example, studied the viability of tourist development in Latin America."⁵¹ In fact, developing tourism in Mexico in the 1940s coincided with Avila Camacho and Alemán's goals to profit, modernize, and

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⁴⁷ Jaime Pensado, *Rebel Mexico: Student Unrest and Authoritarian Political Culture During the Long Sixties* (Stanford: Stanford University Press, 2013).

⁴⁸ Gilbert M. Joseph, Anne Rubenstein, and Eric Zolov, *Fragments of a Golden Age: The Politics of Culture in Mexico Since 1940* (Durham: Duke University Press, 2001).

⁴⁹Stephen R. Niblo, *Mexico in the 1940s: Modernity, Politics, and Corruption* (Wilmington: Scholarly Resources Inc., 1999), 355.

⁵⁰ Dina Berger, "Goodwill Ambassadors on Holiday: Tourism, Diplomacy, and Mexico- U.S. Relations," in *Holiday in Mexico: Critical Reflections on Tourism and Tourist Encounters*, eds. Dina Berger and Andrew Grant Wood (Durham: Duke University Press, 2010), 107.

⁵¹ Berger, "Goodwill Ambassadors on Holiday," 108.

democratize. Like Newcomer, Berger describes how each goal applied to tourism and spelt both economic and political stability.

To understand where the smallpox campaigns fit into these larger political debates, one must combine the historiography on politics with public health histories on power and state reform. In a number of ways, the smallpox eradication was the "soft" component of dictablanda in health care was a new social benefit of the period. In the same vein, it was "hard" because of its mandatory nature, the coercive tactics used to vaccinate those who were resistant to it, and the forced fumigation and sanitation of infected homes. The choice to fund the smallpox campaign also reflects the weakness of the federal government during this period, especially in comparison to earlier historiography that considered 1940-1968 period as a "Golden Age." In reality, "Mexico's state apparatus remained underfunded, understaffed, and ill-informed." The smallpox campaign, in comparison to other potential projects, was an attainable goal meaning the state had the funds for a campaign against a disease that was almost eliminated from the country already. If the Secretariat of Health and Welfare been more funded, staffed, or even an older institution, it likely would have taken on larger projects. Though historians have hinted at these conclusions, the next chapter will further explore the politics of the 1940s.

⁵² Gillingham and Smith, *Dictablanda*, 2.

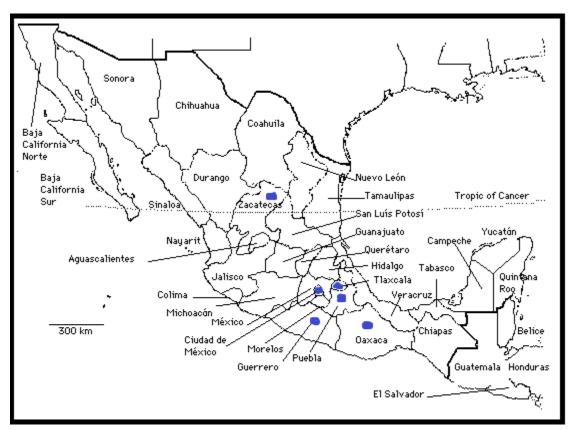
In 1942, a series of smallpox epidemics swept across Mexico and demanded the attention of the Departamento de Salubridad Pública (Department of Public Health-DSP). In that year, health authorities reported the highest mortality rate on record since 1934. Official documents show that smallpox had claimed the lives of least 8,000 Mexicans from 1942-1943. Medical officials recorded the most cases in states close to Mexico City: Tlaxcala, Guerrero, and Puebla experienced the highest number of recorded deaths. However, states farther from the country's capital like Oaxaca and Zacatecas also saw recurring outbreaks in the early 1940s. Because smallpox cases had drastically declined since 1934, those epidemics alarmed the newly formed Secretaría de Salubridad y Asistencia (SSA). The SSA soon created the first smallpox campaign coordinated on a national level. That campaign differed from previous attempts because it stemmed from a consolidation of institutional power (the SSA), sought to eradicate smallpox through vaccination and education, and aimed to unify the nation in a single campaign by including rural areas.

⁵³ Claudia Agostoni, "Control, contención y educación higiénica en las campañas de vacunación contra la viruela en México durante la década de 1940," 359; and Frank Fenner, Donald Ainslie Henderson, Isao Artia, Zdeněk Ježek, Ivan Danilovich Ladnyi, *Smallpox and Its Eradication* (Geneva: World Health Organization, 1988); and Agostoni, "Médicos rurales y brigadas de vacunación," 70.

⁵⁴ "Comentarios sobre viruela," June 12, 1944, AHSSA, SSA, Subsecretaría de Salubridad y Asistencia (SSyA), box 3, file 5, Mexico City, Mexico.

The Structure of the National Smallpox Campaign in Mexico

The SSA's National Smallpox Campaign (Campaña Nacional Contra la Viruela-CNV) worked to eliminate smallpox as source of "physical and social disability in the Republic." According the SSA, the CNV addressed the need to "unifi[y] systems of control, tabulation, efficiency of reports, instructions, etc" in Mexico. In prior decades, the smallpox campaigns demonstrated a lack of control over rural areas, slow reports, and miscommunication.



⁵⁷ "Map of Mexican State Names," blue dots indicate the states most affected by the outbreak of smallpox from 1942-1943

⁵⁵ "Instrucciones y reglamento generales de actividades de campana antivariolosa," 1945, Salubridad Pública (SP), Epidemiología (EM), box 60, file 8.

⁵⁶ Original text: unificación de sistemas de protección, de control, de tabulación, de rendimiento de informes, instructivos, etc.

⁵⁷ Image from: David K. Jordan, University of California at San Diego, "Map of Mexican State Names," http://pages.ucsd.edu/~dkjordan/arch/mexmap.html.

By 1943, the SSA hoped to remedy those issues and streamline the campaign. It shifted from earlier models that deployed emergency brigades in response to outbreaks of the disease. Instead, the new campaigns sought to immunize the susceptible population and prevent outbreaks before they happened. The CNV's instructions and rules distinguished between two methods: "emergency campaigns" and "background campaigns." Though the CNV focused most resources on background campaigns to vaccinate and educate the population, the SSA also used emergency campaigns in the event of an epidemic. ⁵⁸



"Collective Smallpox Vaccination"⁵⁹

With background campaigns, the SSA emphasized vaccination and education to prevent smallpox before it struck. Satellite offices across the country promoted federal vaccination propaganda to educate both doctors and patients. In terms of doctor's

⁵⁸ "Instrucciones y reglamento generales de actividades de campana antivariolosa," 1945, AHSSA, SP, EM, box 60, file 8.

⁵⁹ Image from: Ana María Carrillo, "Los díficiles caminos de la campaña antivariolosa en México," *Ciencias* 55-56 (July-December 1999), 24.

education, the SSA hoped pamphlets and presentations could help distinguish between smallpox and diseases with similar symptoms. The number of false smallpox reports perhaps declined in the 1940s; however doctors continued to report false cases of smallpox well into the 1960s. In that aspect, the CNV of the 1940s failed to achieve its goals. However, the campaign forced collaboration between federal, state, and local authorities. For example, the SSA held National Conventions for Sanitary Authorities, asked for social and economic cooperation with federal and local authorities, and encouraged collaboration with labor unions, teachers, local festivals, and local authorities. ⁶⁰ Because state officials created most of the documents that support those claims, those assertions stem from a one-sided perspective. Each of those actors likely faced difficulty in collaborating. Claudia Agostoni discusses a few instances of failed collaboration, especially in regards to preserving the vaccine and miscommunication stemming from cultural and linguistic diversity.

Although the CNV did not function exactly as the SSA planned, its goals reflect on the political atmosphere of the decade as well as new health policies from the twentieth century. The state envisioned a coordinated, uniform effort to eliminate smallpox from the nation. For politicians like President Miguel Alemán Valdés who prided themselves in promoting modernization and growth, smallpox elimination meant national progress towards those goals. Disease elimination, a twentieth-century concept, lingered in Mexico's public health policy after Rockefeller health interventions in earlier decades. The Rockefeller Foundation's International Health Board introduced the idea of disease eradication in the 1920s. During the presidency of Alvaro Obregón, the

⁶⁰ "Instrucciones y reglamento generales de actividades de campana antivariolosa," 1945, AHSSA, SP, EM, box 60, file 8.

government welcomed the RF to eradicate yellow fever in Yucatán, Veracruz, Quintana Roo, Tamaulipas, Colima, and Sinaloa. The RF completed a variety of health campaigns in Mexico after the revolution and before World War II. In Latin America, campaigns against hookworm, malaria, and yellow fever aimed to eliminate those diseases with the hopes of world eradication. In those interventions, the IHD formulated and introduced a brand-new concept (elimination) as a solution to rampant disease. Historians have determined that the concept of elimination stemmed from earlier Rockefeller interventions in Mexico.

By the 1940s, the Rockefeller Foundation (RF) demonstrated less direct control over health policy and disease campaigns in Mexico. In fact, throughout the entire decade those who created and executed the CNV collaborated little with international players like the RF. Though direct oversight appeared absent, RF influences lingered and the CNV displayed a number of similarities to the RF's hookworm campaign. During the height of both campaigns, state propaganda sought to convince the public that each disease was the most pressing national health issue. Additionally, each included an education component and deployed rural brigades to both educate and treat patients. In addition to similar structures, both the Mexican state and the Rockefeller Foundation undertook the smallpox and hookworm campaigns because of their "rapidly

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⁶¹ Gabriela Soto Laveaga and Claudia Agostoni, "Science and Public Health in the Century of Revolution," in *A Companion to Mexican History and Culture*, ed. William H. Beezley (Malden: Blackwell Publishing Ltd., 2011), 567.

⁶² I use the term *elimination* to refer to Mexico's state as a country free from a disease (in this case, smallpox). In an absolute sense, the term *eradication* applies to the world's state as a place free from a particular disease for an indefinite amount of time. *Eradication* indicates a purposeful health intervention and resulting status as a world without a single case of a particular disease.

⁶³ Nancy Leys Stepan, *Eradication: Ridding the World of Diseases Forever?* (Ithaca: Cornell University Press, 2011), 7; and Gabriela Soto Laveaga and Claudia Agostoni, "Science and Public Health in the Century of Revolution," in *A Companion to Mexican History and Culture* edited by William H. Beezley (Malden: Blackwell Publishing Ltd., 2011), 567.

demonstrable, economical cure[s]."⁶⁴ Simply stated, eliminating smallpox and alleviating hookworm from the nation could easily be accomplished. The success of each program justified the very existence of the RF and SSA.

The CNV might have been one of the first disease campaigns in decades without direct oversight from the RF. For that reason, Mexico took great pride in the CNV, especially considering the campaign achieved success almost immediately. By 1944 the number of smallpox-related deaths recorded in Mexico City totaled only fifteen.

However, in that same year, other illnesses like tuberculosis and digestive diseases caused hundreds of more deaths. Thus, the SSA saved Mexicans from smallpox and found great success in the campaign. However, its limited scope and comparative impact points to the weakness of the Mexican state during the 1940s as described by Paul Gillingham and Benjamin T. Smith in *Dictablanda*. The federal government lacked the funds, infrastructure, and personnel to tackle a more pressing need like diseases linked to poor water quality. And even in its outward expansion from Mexico City, the SSA faced many challenges.

From Mexico City to Health Education in Rural Areas

The rules and regulations of the National Smallpox Campaign extended the SSA's jurisdiction to Mexico's rural population. ⁶⁶ Absent from earlier campaigns, many rural and semi-rural areas lacked a tie to prior smallpox campaigns, and in some cases had no connection to the SSA in Mexico City whatsoever. The presidential decree in 1943 formed the SSA in hopes of extending its control to the states. The CNV demonstrates

⁶⁴ Birn, "Public Health or Public Menace?," 40.

⁶⁵ Carta de Mexico, D.F., 1944, AHSSA, SSA, SSyA, box 3, file 5.

⁶⁶ "Instrucciones y reglamento generales de actividades de campana antivariolosa," 1945, AHSSA, SP, EM, box 60, file 8.

one of the first campaigns that officials in the capital hoped would extend the federal government's control outwards. However, even within this campaign, the capital and rural areas miscommunicated regularly. Claudia Agostoni argues that the National Smallpox Campaign was not uniformly executed and effectively coordinated between rural and urban areas. She contends that a lack of communication and methods to preserve the smallpox vaccine prevented the uniform execution of the campaign. In some cases, vaccination was missing completely. And though her work commendably challenges previous historiography, the federal government's efforts to promote health and education in rural areas still deserves attention. Those efforts speak to the SSA and federal government's priorities in this decade and illustrate a unified front in eliminating smallpox.

The SSA often used education, the second component of the smallpox campaign, to extend its reach to rural areas in the 1940s. Prior to 1943, the CNV and SSA only targeted states like Oaxaca when smallpox epidemics broke out. Those emergency campaigns emphasized home disinfections and fined residents who refused inspections after reportedly contracting smallpox. And even those instances of home disinfection typically occurred in Mexico City. Additionally, the SSA only increased vaccinations following an epidemic. The CNV began much in the same way, in reaction to the 1942-3 epidemics, but it promoted an entirely different culture, one that hoped to eliminate the disease. In essence, the effort was two-pronged. First, medical officials worked to vaccinate citizens through background and emergency campaigns. Second, the SSA used

⁶⁷ Dr. Barragán sobre Señor Teófilo Martínez (court case), 1923-1925, SP, Servicio Jurídico (SJ), box 3, folder 8.

the radio, pamphlets, videos, conferences/ congresses, music, plays, etc. to promote vaccines and hygiene. That comes as no surprise considering the federal government of the 1940s emphasized cultural engineering through education and state-approved mass media, radio, and film. The *dictablanda* hoped to control each of these forms of culture, even within health campaigns. Through new technology like radio, the government could reach more and more people to achieve its goal of a healthy, literate, educated nation.

The state's strength emerged through its control of propaganda machines. Prominent political figures promoted a romanticized vision of smallpox elimination to encourage vaccination. For example, Miguel Alemán Valdés and Miguel Bustamante both described the CNV as a "glorious expedition against smallpox" and a "heroic mission." Remnants of earlier campaigns, such tactics mirrored strategies that targeted hookworm in the 1920s. Propaganda campaigns that targeted vaccine and increased surveillance remained post-eradication. But Michel Foucault's cautionary notion that we "must not assume the sovereignty of the state... or the over-all unity of domination" applies here. The SSA's control over rural areas increased; yet power worked both ways. States often sent false claims of smallpox outbreaks to the federal government in order to obtain more resources in rural areas. The reason for those requests remain unclear. One possibility includes doctors' inability to distinguish between smallpox and

⁶⁸ Gillingham and Smith, *Dictablanda*, 5.

⁶⁹ "Gloriosa expedición contra la viruela," 1960, FBV, *Los trabajos del Dr. M.E. Bustamante*, Volume VI, 1960-1963.

⁷⁰ Michel Foucault, *The History of Sexuality, Volume I: An Introduction* (New York: Random House, Inc., 1978), 92.

⁷¹ See numerous letters in AHSSA, SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

chicken pox, thus the need for more experienced authorities. A second possible explanation is that doctors sent false reports to obtain more vaccines and resources. In any case, the goal to eliminate smallpox entirely made complaints common. The SSA wanted to eliminate the disease so it often granted requests for increased funds or vaccines.

From documents in their archives, the SSA was at least aware of and attempted to reach diverse populations in rural areas. One doctor who worked for the SSA, Rafael F. Gamboa, noted that rural inhabitants comprised 64.9% of Mexico's population. He indicated that many could not read and despite living in diverse areas, faced many of the same sanitary problems. The SSA thus supported Rural Education Congresses to promote state-generated videos, photographs, and radio programs that could reach an illiterate population. At the Second Congress for Rural Education in 1946, participants emphasized the importance of teachers in imparting vaccine and hygiene education. By using radio, film, and even puppets, teachers could educate their young students.

Teachers also acted as informants about smallpox cases and reactions to vaccines. In that sense, the SSA hoped they could help to control to rural areas and, in theory, inform the institution about the health of its nation.

⁷² Congreso de Educación Rural, July 7, 1948, AHSSA, SSA, SSyA, box 8, folder 2, México, D.F.

⁷³ Letter from Dr. Eduardo L. Trujillo P., 1946, AHSSA, SSA, Secretaría Particular (SPr), box 21, folder 6.

⁷⁴ Congreso de Educación Rural, 1948, AHSSA, SSA, SSyA, box 8, folder 2, México, D.F.



⁷⁵ Poster for the Second National Rural Hygiene Congress, November 26, 1946

Radio programs and posters played a large role in the SSA's health campaigns during the 1940s. For example, one large poster from the Hygiene Education Campaign for Schoolchildren depicted the "Ten Commandments for Individual Hygiene." Various renditions of the poster promoted vaccines being vaccinated as one of the ten commandments for good health. In 1946, the SSA included a radio component under its General Direction for Hygiene Education. It declared radio a special branch of hygiene education, and hoped to educate and improve the nation through this form of collective

⁷⁵ Departamento Autónomo de Prensa y Publicidad (DAPP), "Frente Revolucionario de Trabajadores de Medicina," 1946, AGN, Carteles (Galería 8), C/993/49.

culture and modernity. The SSA also hoped to reach the "popular classes" as this form of technology lent itself to reaching a large number of people who might be illiterate. ⁷⁶

The SSA's correspondence on the National Smallpox Campaign indicates that the nation turned inwards during the 1940s; collaboration with the U.S., PASO, and WHO appeared more frequently in the 1950s and 1960s as those entities began international campaigns. However, in one instance the SSA collaborated with the Office of Inter-American Affairs (OIAA) early in the 1940s to create and promote vaccine propaganda. The OIAA, led by Nelson Rockefeller, started in 1940 with the goal of distributing various forms of media and propaganda to Latin America. The office hoped to combat Nazism during World War II and promote solidarity for the defense of the Americas. Public health, health education, and hygiene comprised one area where the OIAA intervened with the hopes of keeping the U.S. safe.

To promote good relations with Latin America, the OIAA hired Walt Disney as an ambassador. Disney created a series of animated short films to educate viewers on various hygiene topics. Produced in both Spanish and English, those short films included disease and insects, basic hygiene, and nutrition among other subjects. The collection targeted mainly cleanliness and personal hygiene, but one short film on infant care covered vaccination. In that film, the narrator tells mothers to their babies to the clinic for a "simple, harmless smallpox vaccination" which will save her child's life. The OIAA sponsored the creation of that series for all of Latin America, but in 1946 the office did work with Mexico on various projects. The company produced films and pamphlets for

⁷⁶ Congreso Interamericano de Radiodifusoras, 1946, AHSSA, SSA, SSyA, box 7, folder 3.

⁷⁷ Cooperación interamericana de salubridad pública, Dirección de Proyectos MEX-HE, 1946, AHSSA, SSA, SSyA, box 9, folder 1.

all hygiene centers in Mexico with the intention of distributing them through the rural brigades. SSA records show that Disney also produced a film called smallpox specifically for Mexico, but the documents are unclear as to whether Disney ever created the film. U.S. archives likely house more documents on those programs and even possibly the films themselves. Disney's collaboration with Mexico during this period shows a collaboration on a project already of interest to the SSA. Before 1946, that office had already been working with new technology like radio and television to increase education and promote good health across the nation.⁷⁸

Proyecto MEX- MED 4, Michoacán

Proyecto MEX-MED 4 (1947) provides a case study to examine how the national smallpox campaign functioned through health brigades in a specific state. In Michoacán, the SSA aimed to improve the health of citizens in the region through a multi-tiered project which "included hygiene and nutritional education, disease treatment and prevention, and maternal-infant care." In undertaking the initiative, the SSA hoped to revitalize the Centers of Rural Hygiene from the 1930s and make them modern health facilities. ⁷⁹ In addition to a focus on water, unsanitary conditions, and contaminated food and water consumption, the *Proyecto* worked to treat communicable diseases and promote a culture of vaccination. Increased surveillance "kept a constant check on the amount of illness in the communit[ies]." In essence, this program and the clinics it supported acted as extensions of state power and provided the SSA with information on

⁷⁸ Cooperación interamericana de salubridad pública, Dirección de Proyectos MEX-HE, 1946, AHSSA, SSA, SSyA, box 9, folder 1.

⁷⁹ Stephanie Baker, "Salud Colectiva," 72.

⁸⁰ David Armstrong, *Political Anatomy of the Body: Medical Knowledge in Britain in the Twentieth Century* (Cambridge: Cambridge University Press, 1983), 75.

the health of its citizens. Proyecto MEX-MED 4 demonstrates how emergency rural health brigades functioned at the end of the 1940s, where vaccination fit into a rural health initiative, how the SSA tried to educate inhabitants, and the federal government's limited control.

Through Proyecto MEX-MED 4, the state completed both emergency and background campaigns. Beginning in May 1949, the Sanitary Brigade started in Uruapan and moved from city to city within the state. The brigade traveled to individual homes to vaccinate citizens as well as fairs set up by the municipal government. At those fairs, the brigade's hoped to isolate smallpox cases or outbreaks and vaccinate everyone susceptible to infection. Second, they spread pamphlets and tried to educate citizens on various health topics. In completing their directive, the federal authorities who comprised the brigade faced a few main problems. First, project director Dr. Gustavo Viniegra reported to the SSA in Mexico City that the summer months the brigade simply could not travel. The rain hindered their movements severely. In one instance, vaccinators tried to travel by truck, but the rain forced them to walk on foot. Second, the brigade faced resistance and citizens did not trust the federal authorities. The brigade often had to work with local authorities and the church to reach the population.⁸¹

At the beginning of the campaign, the federal authorities, the municipal president, and Dr. Gustavo Viniegra, attempted to work together in order to complete a mass vaccination for smallpox at various fairs in Uruapan. But citizens resisted the vaccines and reportedly formed a rebellion against the government in May. From June through August, the brigade faced similar issues in each city they traveled to. In August, the

 $^{^{\}rm 81}$ Proyecto Mex-Med. 4, 1947, AHSSA, SSA, SSyA, box 33, folder 9

brigade had moved to the city of Aguililla where many of the inhabitants reportedly "retired to their ranches" and others "refused to open their doors when the vaccinators called on them." In that particular situation, the municipial authorities and clergy had "to intervene energetically." Here, intermediaries helped federal authorities achieve their goals. It is likely that those same individuals helped the SSA create bilingual pamphlets in both Spanish and indigenous languages.

In many ways, those pamphlets provided comical situations and phrases for readers to remember. One read: "Con la viruela, mil cicatrices. Con la vacuna, años felices!" ("With smallpox, a thousand scars. With the vaccine, years happy"). 83 Others emphasized that residents should open their doors when the Sanitary Brigade came to town: "when the Sanitary Brigade arrives at this place, be happy because they're bringing you health;" "If a pair of vaccinators arrive at the door of your house, ACCEPT THEM, have faith that they're bringing you a blessing." 84 The pamphlets reiterated over and over vaccines came free of cost. They even threatened that a large sum of money went into the brigades, so it was in the best interest of the inhabitants to accept the free vaccinations. Some even resorted to threatening readers and reminded them that by law, everyone was obligated to get vaccinated against smallpox. These steps did not always work, as evidenced by the residents who ran back to their ranches to avoid the brigades. From the correspondence between the director and the SSA in Mexico City, it seems like intermediaries played a large role in spreading vaccines even in the 1940s. The inability

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⁸² Proyecto Mex-Med. 4, 1947, AHSSA, SSA, SSyA, box 33, folder 9

⁸³ Proyecto Mex-Med. 4, 1947, AHSSA, SSA, SSyA, box 33, folder 9.

⁸⁴ Proyecto Mex-Med. 4, 1947, AHSSA, SSA, SSyA, box 33, folder 9.

of federal officers to complete their work again points to the weakness of the state despite their best efforts at extending control. Doctors even reported one instance where they were "incapable of eliminating a persistent outbreak" which they feared would spread outside of the state.

Success in the SSA's Goal to Eliminate Smallpox

In 1950, the SSA further institutionalized the National Smallpox Campaign solidifying a successful path to elimination. The SSA created a General Director and Subdirection position for the campaign and appointed Dr. Carlos Calderón the former and Dr. H. Celis Salazar the latter. That year marked the last consolidation of federal power through the smallpox campaigns. On June 13, 1952, President Miguel Alemán Valdés declared that Mexico was finally liberated from smallpox and he credited the victory to all Mexicans. The SSA's secretary, Miguel Bustamante, reiterated many of the president's claims. He reflected on smallpox's elimination in 1977 and called for a celebration of "twenty-five years without fear and freedom from a grave and terrible affliction."

Smallpox elimination held great significance beyond medical advancement.

Mexican scholars noted that "the history of smallpox in Mexico is the history of Mexico itself," reiterating that they considered the disease a legacy of colonialism.⁸⁷ Since they attributed it to a colonial past, the state saw its elimination as indicative of modernity.

⁸⁵ Lic. Miguel Alemán Valdés, June 16, 1952, AHSSA, SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

Original text: "con colaboración de todos los mexicanos... con recursos mexicanos y con técnica mexicana"

⁸⁶ Miguel E. Bustamante Vasconcelos, "Consecuencias médico-sociales de la viruela y su erradicación, June 15, 1977, FBV, Fondo Dr. Miguel E. Bustamante Vasconcelos, 614.5, 27.

⁸⁷ Enrique Florescano and Elsa Malvido, *Ensayos sobre la historia de las epidemias en México* (Mexico City: Instituto Mexicano del Seguro Social, 1982), 742.

That coincided with the so-called "Mexican miracle," or sustained economic growth initiated in the 1940s. Even Bustamante credited the accomplishment to economic modernization, arguing that smallpox elimination did not merely reflect the results of scientific progress and economic growth, but also social and political organization, educational advances, cultural development, federal smallpox programs, and state cooperation. ⁸⁸ The campaign touched on almost all aspects of society.



"Smallpox doesn't attack us. We're vaccinated," Mérida, Yucatán, 195389

Elimination of a disease within national borders, especially a country as large and diverse as Mexico, proved no small feat. It required extensive surveillance, detection, and cooperation. Nancy Leys Stepan noted that the task of quantifying smallpox cases in the Americas presented a problem for disease elimination. "The figures were wrong; they represented a serious under-count, because of failures in systems of reporting or checking or the failure of many rural areas to report at all, owing to the complete absence of rural

⁸⁸ "Gloriosa expedición contra la viruela," 1960, FBV, *Los trabajos del Dr. M.E. Bustamante*, Volume VI, 1960-1963.

⁸⁹ "Smallpox doesn't attack us. We're vaccinated." This photo shows a parade post-eradication. AHSSA, Main Display, Mérida, Yucatán, 1953.

health facilities." However, in Mexico, a number of factors contributed to a successful elimination program; those included the cultural significance of the disease, a previous consolidation of state power, and an increased focus on rural health in the post-revolutionary period. These factors all resulted in Mexico's national elimination of smallpox two decades prior to countries in South America like Brazil, Argentina, Colombia, and Ecuador. Stepan also contended that "eradication required systems of surveillance and detection, something missing in most countries until the very end state of the [global] eradication effort" in the 1960s. However, that was not the case in Mexico. The CNV achieved its goal in 1952 and the post-eradication period featured continued control in stopping the disease from crossing its borders.

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⁹⁰ Nancy Leys Stepan, *Eradication: Ridding the World of Diseases Forever?* (Ithaca: Cornell University Press, 2011), 198-9.

⁹¹ For more information on rural health programs in Mexico, see Stephanie L. Baker's "*Salud Colectiva*: The Role of Public Health Campaigns in Building a Modern Mexican Nation, 1940s-1960s," PhD diss., the University Illinois at Chicago, 2012.

⁹² Stepan, Eradication, 199.

CHAPTER 4: DISPUTES OVER SMALLPOX VACCINES AFTER ITS ELIMINATION IN MEXICO. 1952-1970

In the spring of 1962, Frederick Eilertson, a native of Canada, wrote a letter from Mexico City that captured the Mexican government's attention. Letters sent from Canadian tourists did not typically pass over the desks of Mexican officials. So why did this particular letter cause a flurry of correspondence between government employees in Mexico and in Canada? Eilertson sent the note to a friend named Edward Amann who lived in Calgary at the time. The letter informed Amann that his friend had contracted smallpox while residing in Mexico. Because Amann worked as a medical official at Calgary Hospital, his position afforded him specialized knowledge of the incurable disease. Therefore, Amann sent a telegram to the Director of Health in Mexico City asking for a confirmation of diagnosis. This telegram alarmed the Secretaría de Salubridad y Asistencia because vaccines had eliminated smallpox from Mexico ten years prior. A single case could reintroduce the disease and consequentially destroy Mexico's status as a nation free from smallpox. For that reason, the SSA started a careful epidemiologic investigation, searching from one person to the next. On March 29, 1962, medical officials found Eilertson in Mexico City recuperating from a case of the chicken pox. It was only a false alarm⁹³

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^{93 &}quot;Información al C. Secretario," March 29, 1962, AHSSA, SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

The case of Frederick Eilertson illustrates a few main characteristics of the smallpox campaigns after 1952. First, even after elimination the Secretaría de Salubridady Asistencia struggled with false reports. In the 1940s, the federal government faced the same issue and doctors often misdiagnosed smallpox cases. However, after 1952 the SSA took special care with any report, even the false ones. A single case like Eilertson's could quickly cause an epidemic. His story reveals a second aspect of the campaigns in the 1950s and 1960s, that the SSA feared travelers would reintroduce smallpox after its elimination in 1952. For that reason, the campaigns targeted international borders and encouraged collaboration with the U.S. government, Pan American Sanitary Organization (PASO), and eventually the World Health Organization (WHO). PASO hoped to eliminate smallpox from the Americas and WHO hoped to eradicate smallpox worldwide. The SSA showed investment in those goals because it wanted keep smallpox from re-entering Mexico. Medical officials therefore attended to false reports like Eilertson's and diverted increased attention to vaccination in the 1950s and 1960s. Although the disease no longer figured among those ailments that posed the greatest health risk, the government increased vaccinations against the disease and required that tourists carry smallpox vaccination certificates when traveling to Mexico.

This chapter explains why smallpox continued to divert the SSA's attention even after elimination in 1952. It centers on false reports, like Eilertson's, and discusses the increasing role of state and international authorities in the campaigns. It places smallpox elimination in a global context by including foreign travelers' experiences, the SSA's relationship with the World Health Organization (WHO), and Mexico's position in relation to WHO's Smallpox Eradication Program (SEP) (1966-1980). I argue that

following elimination in 1952, smallpox vaccination no longer acted as a centralizing force. A wide array of national and international interests clashed over vaccination requirements in the 1950s and 1960s. Ensuing disputes slowed attempts to centralize and unify health campaigns at the federal level.

Smallpox around the Globe and the Threat of Imported Cases

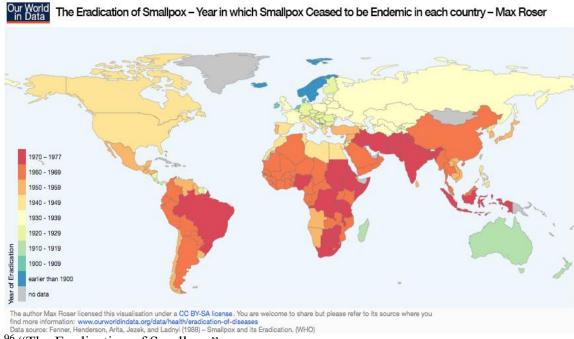
Following elimination in Mexico, preventing smallpox cases from slipping past border protections proved the greatest challenge. Any undetected case could easily reintroduce smallpox to Mexico and cause an epidemic. Though the SSA paid for routine vaccinations in hospitals, clinics, and doctors' offices, an emergency vaccination campaign to combat the disease's re-entry would prove costly. Countries free from the disease faced increased susceptibility as long as smallpox existed elsewhere in the world. Nancy Leys Stepan concluded that global smallpox eradication "was often presented as a generous, humanitarian act, a 'good' for the poor countries of the world." However, behind that rhetoric "was an economic calculation that, if smallpox could be made to disappear from the entire world, the costs to the richer, smallpox-free countries of its routine vaccination and its complications could be made to disappear as well." In other words, it laid in the best interests of those governments who paid for routine vaccinations to help in the efforts to eradicate the disease globally.

When Mexico eliminated smallpox in 1952, South America, Africa, and South Asia still struggled to contain, control, and eliminate the disease. In some of those countries, smallpox elimination was not a national goal until international actors like

⁹⁴ Nancy Leys Stepan, *Eradication: Ridding the World of Diseases Forever?* (Ithaca: Cornell University Press, 2011), 193.

⁹⁵ Stepan, Eradication, 193.

PASO and WHO initiated their programs against the disease. In 1950, PASO declared smallpox elimination one of its goals for the hemisphere. In 1959, WHO also determined an international goal for eradication. However, not until 1966 did the WHO devote enough funds to a global campaign to eradicate smallpox.



⁹⁶ "The Eradication of Smallpox"

In that year, the Smallpox Eradication Program (SEP, 1966-1980) sought to collaborate with local authorities to identify smallpox cases and immunize susceptible persons. In 1966, forty three nations reported a substantial number of smallpox cases. By 1971, that number had reduced to only five (Ethiopia, Sudan, India, Pakistan, and Indonesia). ⁹⁷ The WHO reported the last natural occurring case in Bangladesh in 1975 (*variola major*) and in Somalia in 1977 (*variola minor*). Worldwide, the last lab related case occurred in the

⁹⁶ Image from Max Roser, "The Eradication of Smallpox," 2016, Our World Data, http://ourworldindata.org/eradication-of-diseases/.

⁹⁷ C. Henry Kempe, "The End of Routine Smallpox Vaccination in the United States" *Pediatrics* 49, no. 4 (1972), 489.

United Kingdom in 1978. By 1980, the WHO declared smallpox eradicated from the globe. 98

Dr. Fred Lowe Soper, a public health official from the United States, pushed for global eradication, but he saw a "complete failure of the Pan American Sanitary Code, under which PAHO [Pan American Health Organization] operated, to prevent the spread of smallpox from country to country in the western hemisphere." Cuba provides historians with one such example. Though free from smallpox since 1904, a decrease in routine vaccination meant increased vulnerability to imported cases. In 1949, three imported cases led to "the rapid vaccination of 1,500,000 people," likely a costly affair. A similar instance occurred in New York in 1947. One case that originated in Mexico spread when the traveler returned to the United States. At once, the New York City Department of Health "launched a mass immunization campaign that over a period of some 60 days vaccinated 6.35 million people." Historian Nancy Leys Stepan points to a lack of coordination and cooperation among Latin American countries as a cause of such outbreaks.

Comparatively, Mexico eliminated smallpox almost two decades prior to other countries in Latin America like Brazil, Argentina, Colombia, and Ecuador. Unlike Cuba and the United States, Mexico successfully surveyed and detected potential smallpox cases post-elimination and prevented the re-entry of the disease. Those successes in the

⁹⁸ The Global Eradication of Smallpox: Final Report of the Global Commission for the Certification of Smallpox Eradication, Geneva, December 1979, World Health Organization Archives, http://apps.who.int/iris/bitstream/10665/39253/1/a41438.pdf.

⁹⁹ Stepan, Eradication, 196.

¹⁰⁰ Stepan, Eradication, 197.

Pascal James Imperato, "Reflections on New York City's 1947 Smallpox Vaccination Program and Its 1976 Swine Influenza Immunization Program," *Journal of Community Health* 40 (2015), 581.

1950s and 1960s stemmed from Mexico's cooperation with international organizations, an increase in vaccination funding, and strict enforcement of its smallpox programs. In contrast, Brazil, the last country to eliminate smallpox in the Americas, did not create its own national smallpox campaign like in Mexico.



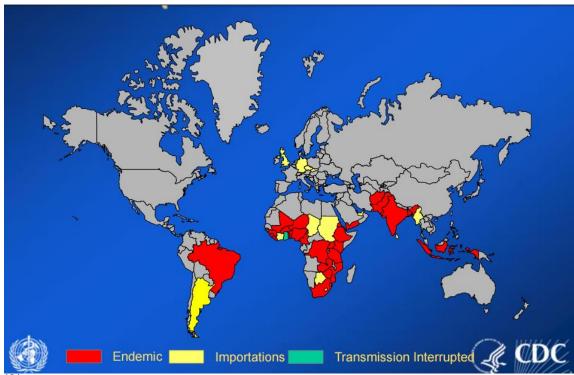
¹⁰² "A child is vaccinated, Brazil, 1970"

The PAHO had to intervene in 1965 to promote a national campaign. ¹⁰³ By 1970, smallpox was mostly gone from Brazil and the WHO awarded Brazil its international certificate of eradication in 1973. In those years, the United States and likely Mexico reduced its vaccination requirements. With the eradication of smallpox from the Americas, the threat of imported cases decreased. In fact, in 1971 the *Pediatrics* reported that only travelers headed to smallpox-endemic countries or health professionals need to

¹⁰² "A child is vaccinated, Brazil, 1970," World Health Organization Archives, "The Smallpox Eradication Program," Vaccination Photo Gallery, image 6, http://www.who.int/features/2010/smallpox/en/.

¹⁰³ The Global Eradication of Smallpox: Final Report of the Global Commission for the Certification of Smallpox Eradication, Geneva, December 1979, World Health Organization Archives, http://apps.who.int/iris/bitstream/10665/39253/1/a41438.pdf.

be vaccinated for smallpox in the United States. That year marked a shift from routine to selective vaccination for U.S. citizens.



104 "Smallpox Endemic Areas, 1967"

Border Control and Tourists Vaccination Requirements

Before global eradication, efforts to survey rural communities and keep smallpox out of Mexico produced a flurry of correspondence between state representatives and the SSA in Mexico City. Health officials in states like Jalisco, Michoacán, Oaxaca, and San Luis Potosí continued to send reports to the SSA affirming the absence of smallpox cases through the 1960s. However, various states sent false reports like those from the 1940s. One false report from Reynosa, Tamaulipas reveals that heightened fear of

¹⁰⁵ Numerous telegrams in SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

¹⁰⁴ Centers for Disease Control and Prevention (U.S.) & World Health Organization, August 25, 2014 from "History and Epidemiology of Global Smallpox Eradication," CDC Stacks: Public Health Publications, series: Smallpox: Disease, Prevention, and Intervention, http://stacks.cdc.gov/view/cdc/27929.

smallpox after 1952. On April 29, 1963, a newspaper called *El Mañana* reported a horrific outbreak of smallpox in Reynosa, Tamaulipas. The newspaper stated "A family of eight has been hit by the smallpox disease, five of the children are beyond help and destined to die soon... both parents are practically blind from the disease." ¹⁰⁶ The attending physician at the Red Cross Hospital, Dr. Socrates García Cantú, supposedly confirmed advanced cases of smallpox in three young children. Because of the close proximity to the border, the story even appeared in a U.S. newspaper, *Valley Morning Star*. On May 1, 1963, the newspaper reported that the border remained open and no decrease in border traffic and in business should occur. ¹⁰⁷ It was only another false report. That instance shows the heightened fear and cautious response of the SSA following the elimination of smallpox in Mexico. Yet it also reveals the vulnerability of national borders prior to world eradication. With the mass tourism movement between Mexico and the United States in the 1950s, both countries health authorities hoped to halt any potential cases before they spread.

To protect the country from imported smallpox cases, Mexico expanded its border control, mandated that visitors from overseas present international certificates as proof of vaccination, and actually increased the number of smallpox vaccines applied after 1952. During the 1950s, various states sent correspondence to the SSA requesting increased funds to expand the vaccination programs. In Michoacán, the state's Director of Health requested an increase in 12,000 pesos for the CNV in 1954. The federal authorities of the SSA accommodated the director's request in order to "maintain this favorable situation"

¹⁰⁶ "Rio Bravo, Rancho Planta de Alazan," *El Mañana*, April 29, 1963, AHSSA, SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

¹⁰⁷ "Rio Bravo Smallpox Epidemic Reports Prove Unfounded," May 1, 1963, *Valley Morning Star*, Harlingen, Texas, 7.

that few nations enjoy."¹⁰⁸ By 1973, the nation still reported as many as 2,089,000 applied doses of the smallpox vaccine. An increase in the number of vaccines applied could correspond to a population increase; but in any case, that was more than twice as many smallpox vaccines than any other including diphtheria, tetanus, and pertussis (whooping cough) and the BCG vaccine for tuberculosis. ¹⁰⁹ Where health workers at clinics in ports, borders and general transportation routes "all actively participated in routinely protecting populations and eliminating epidemic outbreaks" in the 1940s, that increased in the 1950s and 1960s. ¹¹⁰

Mexico's SSA directed many of its resources and personnel to keeping Mexico free from smallpox, what President Alemán deemed a difficult challenge. ¹¹¹ Now that the vaccine- oriented campaign prevented further internal outbreaks, the SSA emphasized prevention in order to halt the disease from crossing international borders. Mexican medical authorities like Dr. Ignacio Morones Prieto, Governor of Nuevo León's SSA, and Dr. Carlos Calderón, the General Director of the CNV, collaborated with international actors to keep smallpox out of Mexico. That collaboration points to Mexico's friendly relationship with and participation in transnational organizations such as the Pan American Sanitary Organization (PASO) and the World Health Organization

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¹⁰⁸ "Letter to Michoacán," 1954, AHSSA, SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

¹⁰⁹ "Vacunación masiva en todo el país contra viruela y difteria," December 26, 1973, *Universal Gráfico*, AGN, Secretaría de Gobernación, Médicos-hospitales, box 1714- A, folder 3.

¹¹⁰ Agostoni, "Control, contención y educación higiénica en las campañas de vacunación," 356.

¹¹¹ Lic. Miguel Alemán Valdés, June 16, 1952, AHSSA, SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

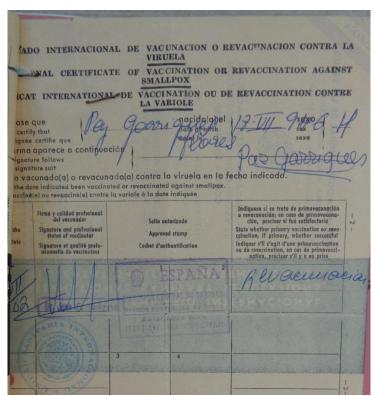
Original text: "con colaboración de todos los mexicanos... con recursos mexicanos y con técnica mexicana"

(WHO or OMS). ¹¹² Again, this contradicts the notion that countries in the Americans failed to cooperate to control diseases internationally.

A longer history of cooperation between countries in the Americans resulted in coordination of the smallpox campaigns in the 1950s and 1960s. American countries banded together and formed the PASO (Pan American Sanitary Organization) forty-six years before the emergence of a global version, the WHO emerged. For that reason, WHO initiatives from the early 1950s often looked to the Regional Committee for the Americas for its cues. For example, one report from WHO's executive board meeting held on December 22, 1953 focused solely on the campaign against smallpox. Regional committee reports from Southeast Asia, the Western Pacific, and Africa all requested direction from WHO. Where Europe declined to respond to the question of a world-wide campaign against smallpox, the Americas Committee presented a lengthy report. In this statement, the committee noted that eradication of smallpox was one of PASO's basic programs since 1950. The second most important suggestion was "that the World Health Organization promote inter-governmental agreements, which have given most satisfactory results in the Region of the Americas, with a view to preventing border epidemics."113 That stance resulted from previous experiences with imported cases of smallpox in Cuba and in the United States as well as a difficulty elimination smallpox from Brazil and its bordering countries.

¹¹² The Pan American Sanitary Organization, now called the Pan American Health Organization (PAHO), was founded in 1902. It is the world's oldest international public health agency, even older than the World Health Organization (WHO) which was founded in 1948. All American countries can be members of the PAHO. Some of the oldest members include the United States, Mexico, Brazil, Cuba, Bolivia, and Chile. ¹¹³ Executive Board, 13, December 22, 1953, World Health Organization Archives, "Campaign against Smallpox," http://apps.who.int/iris/handle/10665/129832.

Since at least 1950, Mexico had cooperated with the PASO initiative to prevent border epidemics of smallpox through inter-governmental agreements. Following smallpox's elimination in 1952, efforts to protect Mexico's borders from foreign reintroduction only increased. To the protest of many foreign travelers, Mexico soon required the smallpox vaccine for entry into the country. Since the campaign to eliminate smallpox in the 1940s focused on vaccines, it is no surprise that the SSA adopted a similar policy to keep the disease out of the country. In the 1950s and 1960s, the SSA required that all travelers entering Mexico provide proof of vaccination or revaccination every three years (see photo).



¹¹⁴ Smallpox Vaccination Certificate

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¹¹⁴ Smallpox Vaccination Certificate, AGN, Subsecretaría de Salubridad- Asuntos Internacionales, Certificados de vacunación antivariolosa, 313.2/000 (73) 2, Mexico City, Mexico.

At first, Mexicans received news of vaccine requirements with little protest. For example, on April 24, 1953, the *Asociación de Hoteles del Noroeste* (Association of Northwestern Hotels) sent a telegram to the SSA confirming its support for the requirement. However, within three days, the association sent a second telegram to the SSA repealing their support of the requirement. However, within three days, the association sent a second telegram to the SSA repealing their support of the requirement. However, within three days, the association sent a second telegram to the SSA repealing their support of the requirement. However, within three days, the association sent a second telegram to the SSA repealing their support of the requirement. However, within three days, the association sent a second telegram to the SSA repealing their support of the northern states. Worried about the negative impacts of such requirements on tourism, entities like the *Asociación de Hoteles del Noroeste* and *Comisión Estatal del Turismo de Sonora* (Sonora's State Tourism Commission) asked the SSA to reconsider requiring certificates from U.S. travelers. Those protests did not sway the Director of Health even though "state governors came under increasing everyday control... further evidenced by the steady decline in the numbers dismissed" in the 1950s. Hough the documents included in this thesis do not speak directly to governors' positions on the smallpox campaigns, it is likely that they too contributed to disputes after 1952.

Complaints against the smallpox vaccine requirement came not only from Mexico, but from foreign travelers as well. Businessmen, families, and students all mailed handwritten notes to doctors and the SSA's secretary, Miguel Bustamante, requesting exemptions from the vaccine. Many of these letters reveal the *Asociación de Hoteles del Noroeste*'s biggest fears—that tourism and business would decline because of the vaccine requirement. In one example, a man from Kentucky, David Stry, sent

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¹¹⁵ April 24, 1953, AHSSA, SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico. ¹¹⁶ Paul Gillingham, "Baltasar Leyva Mancilla of Guerrero: Learning Hegemony," in *State Governors in the Mexican Revolution*, 1910-1952: Portraits in Conflict, Courage, and Corruption eds. Jürgen Buchenau and William H. Beezley (Lanham: Rowman & Littlefield Publishers, Inc., 2009), 177.

multiple letters to the SSA over the course of a few years. In one letter from 1966, Stry objected to being vaccinated. He questioned why he could travel to other locations like Puerto Rico and Hawaii where vaccination was not required, and determined that he would not travel to Mexico because of it. Stry ends the letter with "Germs' must be able to recognize political boundaries." But diseases are blind to political and territorial boundaries. For that reason, the SSA continued to require the vaccine without exception.

In other letters, travelers appealed to negative effects of the vaccine in order to win their case. George Pelton of Colorado remarked that he knew of two children who had their arms amputated because of the shots. According to Pelton, a professor at the University of Colorado said that "there have been no deaths from smallpox in the past several years but over 300 deaths from vaccination." A second woman, Angela T. Cannella, wrote that "the undesirable effects from chemical medicines in the body currently called 'iatrogenic diseases' is the reason for genetic mutations beginning to appear in our present civilization." Others writing similar letters included publications like the "Vaccine Inquirer" concluded that syphilis was a direct result of smallpox shots. While most of these claims were exaggerated, the letters themselves indicate that travelers had a real fear of vaccines. Unsure of possible side effects, a select few were

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¹¹⁷ Letter from David Stry to Dr. Moreno Valle, November 25, 1966, AHSSA, SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

¹¹⁸ George Pelton to Dr. Valle, March 21, 1967, AHSSA, SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

¹¹⁹ Angela T. Cannella to Dr. Moreno, April 4, 1967, AHSSA, SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

¹²⁰ "Vaccine Inquirer," January/March 1966, AHSSA, SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

¹²¹ For more on vaccination in the United States, see Elena Conis' *Vaccine Nation: America's Changing Relationship with Immunization* (Chicago: The University of Chicago Press, 2015) and Arthur Allen's *Vaccine: The Controversial Story of Medicine's Greatest Lifesaver* (New York: W.W. Norton & Co., 2007).

unwilling to risk their health for a trip to Mexico. In fact, by the 1950s, the United States was about "to reach a tipping point, where the risks of sequelae (deaths and side effects) from vaccination would outweigh the risks from smallpox itself.¹²² Though most claims exaggerated the effects of smallpox vaccinations, at this point the risks did outweigh the benefits. For that reason, travelers did not want smallpox vaccinations when traveling to Mexico.

The final type of protest against the certificate requirements for travel reveals a religious perspective on vaccine. John W. Schreiber of Los Angeles, California appealed to the SSA on August 19, 1963. He intended to sail from Baja California to Mexico with his family, but as members of the Christian Science Church, vaccination contradicted his faith. Hopeful for an exemption on religious grounds, Schreiber requested a document in Spanish stating that the vaccine was unnecessary for his family. Like all those who wrote before and would write after him, Schreiber received the same response from Miguel Bustamante: "there is no exception for any Mexican or for any foreigner." Even appeals to religiosity failed to sway Bustamante.

When defending vaccine requirements for travelers, the SSA and its Secretary, Miguel Bustamante, often noted that they were only following WHO's "international regulatory model." They cited PAHO and WHO's laws and wrote there was nothing they could do to change it. That suggests Mexico was willing to cooperate in pan-Americanism for protection from the "decimator" of the Aztec empire. For Europeans,

122 Stepan, Eradication, 193.

¹²³ John W. Schreiber, August 19, 1963, AGN, Subsecretaría de Salubridad- Asuntos Internacionales, Certificados de vacunación antivariolosa, 313.2/000 (73) 2, Mexico City, Mexico.

¹²⁴ Dr. Miguel E. Bustamante to Secretary of Foreign Relations, "Certificados internacionales de vacunación contra la viruela," June 17, 1963, AGN, Subsecretaría de Salubridad- Asuntos Internacionales, Certificados de vacunación antivariolosa, 313.2/000 (73) 2, Mexico City, Mexico.

the SSA tried to reason with travelers. Pamphlets noted that it was a good idea to have the smallpox vaccine certificate since travel to any part of the world, including the United States, required it. Without the certificate, health agents at international borders vaccinated travelers. If travelers refused, the government surveyed the individual's movements and reserved the right to isolate the traveler for fourteen days if deemed necessary. In one instance, a passenger's failure to carry a smallpox vaccination certificate to Mexico reached the Pan American Health Organization. Much to his dismay, the individual was detained and fined for a lack of certificate. Here, the conflicting goals of the SSA and U.S. travelers become apparent.

The spread of air travel in the 1960s served as an additional obstacle for the SSA and WHO in their fight to prevent imported cases of smallpox. In a final report on smallpox elimination, the WHO noted that "false certificates were occasionally obtained" and "the rapid expansion of air travel created new problems because passengers incubating the disease could reach and pass through their port of entry days before illness developed." ¹²⁷ Passengers who boarded a flight seemingly healthy usually did not realize they had come down with an illness during the short flight. In contrast, ship travelers would notice an illness before arriving at their destination days after boarding. Health officials would then quarantine such individuals before they could enter a smallpox-free country and infect others. A single imported case could have devastating results. Europe, for example, imported 50 cases of smallpox between 1950 and 1973. Those imported

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¹²⁵ "Información sobre salud para los que deseen viajar por Europa," AHSSA, SSA, SPr, Campaña contra la viruela- box 79, file 2, Mexico City, Mexico.

 ¹²⁶ Letter to Dr. Ruth Puffer of the Pan American Health Organization, 1967, AGN, Asuntos
 Internacionales, Secretaría de Salubridad- Certificados de Vacunación Antivariolosa, 021 313.2/000(73)/2.
 ¹²⁷ The Global Eradication of Smallpox: Final Report of the Global Commission for the Certification of Smallpox Eradication, Geneva, December 1979, World Health Organization Archives, http://apps.who.int/iris/bitstream/10665/39253/1/a41438.pdf.

cases led to 1113 additional infections. ¹²⁸ For that reason, the SSA kept strict requirements, especially with travelers coming by plane.

One instance described by SSA officials placed two North Americans on a plane traveling from Guatemala to Mérida, Yucatán on December 29, 1962. The two travelers failed to carry smallpox certificates with them, and adamantly refused vaccinations upon entry into Mexico. Sanitary officials thus sent the couple to the embassy. Next, the head of the International Sanitary Service in Mérida informed the Subscretario de Salubridad of the incident. The Director of Coordinated Services wanted to remind Pan American World Airways of the certificate requirements for entry in Mexico. That exchange highlights the conflicting interests of the SSA, tourists, and businesses related to travel. The SSA hoped to prevent any possible re-entry of smallpox, the tourists did not want to be vaccinated against smallpox, and the plane company wanted the business of the tourists, regardless of whether they carried smallpox certificates or not. The instance continues to support the divisions in the smallpox campaigns of the 1950s, an enemy to centralization and consolidation in health campaigns during those years

Foreign travelers' experiences suggest Mexico's willingness to cooperate with WHO in its Smallpox Eradication Program in the 1960s. The SSA strictly enforced vaccination requirements because it was unwilling to wager with the health of the nation. That fear for smallpox re-entry protected Mexico until global eradication in 1980. When that global success finally came, Mexico had enjoyed almost thirty years free from the

¹²⁸ Ibid.

¹²⁹ Telegram from Dr. Felipe Malo Juvera to Subsecretaria de Salubridad, January 11, 1963, AGN, Asuntos Internacionales, Secretaría de Salubridad- Certificados de Vacunación Antivariolosa, 021 313.2/000(73)/2, Mérida, Yucatán.

¹³⁰ Telegram from Dr. Luis Cervantes Garcia, April 22, 1963, AGN, Asuntos Internacionales, Secretaría de Salubridad- Certificados de Vacunación Antivariolosa, 021 313.2/000(73)/2, México, D.F.

disease. For the Mexican government, this signified more than just a scientific or medical advancement; the victory coincided with economic progress, political organization, educational advances, and cultural development. But though Mexico had eliminated its greatest enemy, smallpox, in 1952, dissenting voices halted any hope of a centralized and uniform campaign in the 1950s.

In this chapter, I demonstrated that the state continued to fund smallpox vaccinations and increased awareness to prevent the disease from crossing national borders into the 1950s and 1960s. Programs in those years different from the CNV of the 1940s because the goal was prevention, not elimination. The programs also emphasized border control, mandated that visitors from overseas present international certificates as proof of vaccination, and increased the number of smallpox vaccines applied during those decades. The disease's cultural significance and its comparison to modernity encouraged the campaigns of the 1940s. But in the 1950s and 1960s, the programs were shaped by PASO/ WHO goals to eradicate smallpox worldwide, a desire to increase support of the state party, and the hopes of attracting tourists after WWII. The Mexican state in the 1950s increased cooperation with international organizations and became a hemispheric leader in successful vaccination programs. However, it struggled to gain support for continued campaigns after eliminating its greatest enemy.

CONCLUSION

An examination of the smallpox campaigns reveals that in the 1940s, the SSA promoted a culture of education and, according to Claudia Agostoni, started lasting legacy of prevention in its public works projects. Politicians in the 1940s emphasized modernization and education, they saw those goals achieved in 1952. Prior to that year, the SSA promoted national unity and a centralized smallpox campaign that hoped to eliminate smallpox. After 1952, the SSA already achieved elimination so prevention and border control characterized the smallpox campaigns. In that same year, a national focus shifted to an international one. By 1966, documents suggest that Mexico helped inform the WHO's Smallpox Eradication Program. Future studies could analyze the extent to which Mexico participated in forming that program.

This thesis demonstrates a significant shift in the smallpox campaigns after 1952, but unanswered questions remain. To what extent did Ruiz Cortines and Adolfo López Mateos play a role in the smallpox campaigns of the 1950s? Their names, absent from the documents included in this thesis, are overshadowed by politicians, doctors, and tourists. That suggests an increased role of individual states and governors. Would further research in the archives support that claim? Does that apply to the presidencies of Gustavo Díaz Ordaz and even Luis Echeverría as well? Additional studies could trace the connections between the branches of government to understand with more depth the relationship between each president and the SSA. Scholars could even include theperspectives of patients and their reception of smallpox campaigns through oral histories or the project could extend to include international actors and documents from the U.S. government, PASO (or PAHO), and WHO.

Another question for further study is how did the smallpox campaigns of the 1950s affect later health programs? The research completed for this thesis suggests that the SSA's vaccine-focused CNV provided the necessary infrastructure to expand other vaccination programs. For instance, by 1973 the SSA applied 11 million vaccines for polio, measles, diphtheria, tetanus, and pertussis (whooping cough) to children less than four years old without charge. They also created 45,000 rural and urban clinics and 2524 health centers. ¹³¹ A culture of prevention resulted from the lack of a cure for smallpox and an increase in surveillance. In the 1960s, Mexico promoted its own version of WHO's emphasis on preventative medicine, salud colectiva (collective health). 132 New approaches, increased funding, and international cooperation resulted in a slow improvement in Mexico's health care at the end of the twentieth century. But its inadequacy still plagues the nation and debates surrounding the safety of vaccines remain even today. As recent as April 2015, vaccines applied at the Instituto Mexicano del Seguro Social (Mexican Social Security Institute, IMSS) reportedly killed a number of newborn babies. The media sensationalizes such stories and instills fear in countries like Mexico and the United States. Shocking stories of vaccines, whether false or true, have not disappeared in the last six decades.

Mexico's focus on vaccine and elimination is relevant to both Mexicans and foreign travelers even today. The SSA and WHO respond to disease outbreaks with mass vaccination programs, travel vaccination requirements, and involuntary quarantine or surveillance. For example, the response to the H1N1 swine flu outbreak in 2009 mirrors

¹³¹ "Pretende la SSA Aplicar Once Millones de Vacunas," November 12, 1973, *El Excélsior*, AGN, Secretaría de Gobernación, Médicos-hospitales, box 1714- A, folder 3.

¹³² For more information see Baker, Salud Colectiva.

the vaccination programs following the final smallpox epidemics in Mexico, the United States, and Cuba. With the outbreak of contagious diseases in Mexico, U.S. citizens become more concerned with border control. Additionally, the outbreak of the Ebola virus in 2014 echoes the standard procedure for surveillance and quarantine in suspected smallpox cases in Mexico in the 1960s. The origins of such concepts and responses to vaccination and eradication are central to understanding the foundation of twenty-first century public health policies.

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AHSSA Archivo Histórico de la Secretaría de Salud (Mexico City)

Fondo Salud Pública (SP)

Fondo Secretaria de Salubridad y Asistencia (SSA)

FBV Fundación Cultural Bustamante Vasconcelos (Oaxaca City)

Fondo Dr. Miguel E. Bustamante V.

WHOA World Health Organization Archives (Digital)

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