

**WAS THE FIRST PUBLIC HEALTH CAMPAIGN SUCCESSFUL?  
THE TUBERCULOSIS MOVEMENT AND ITS EFFECT ON MORTALITY**

D. Mark Anderson

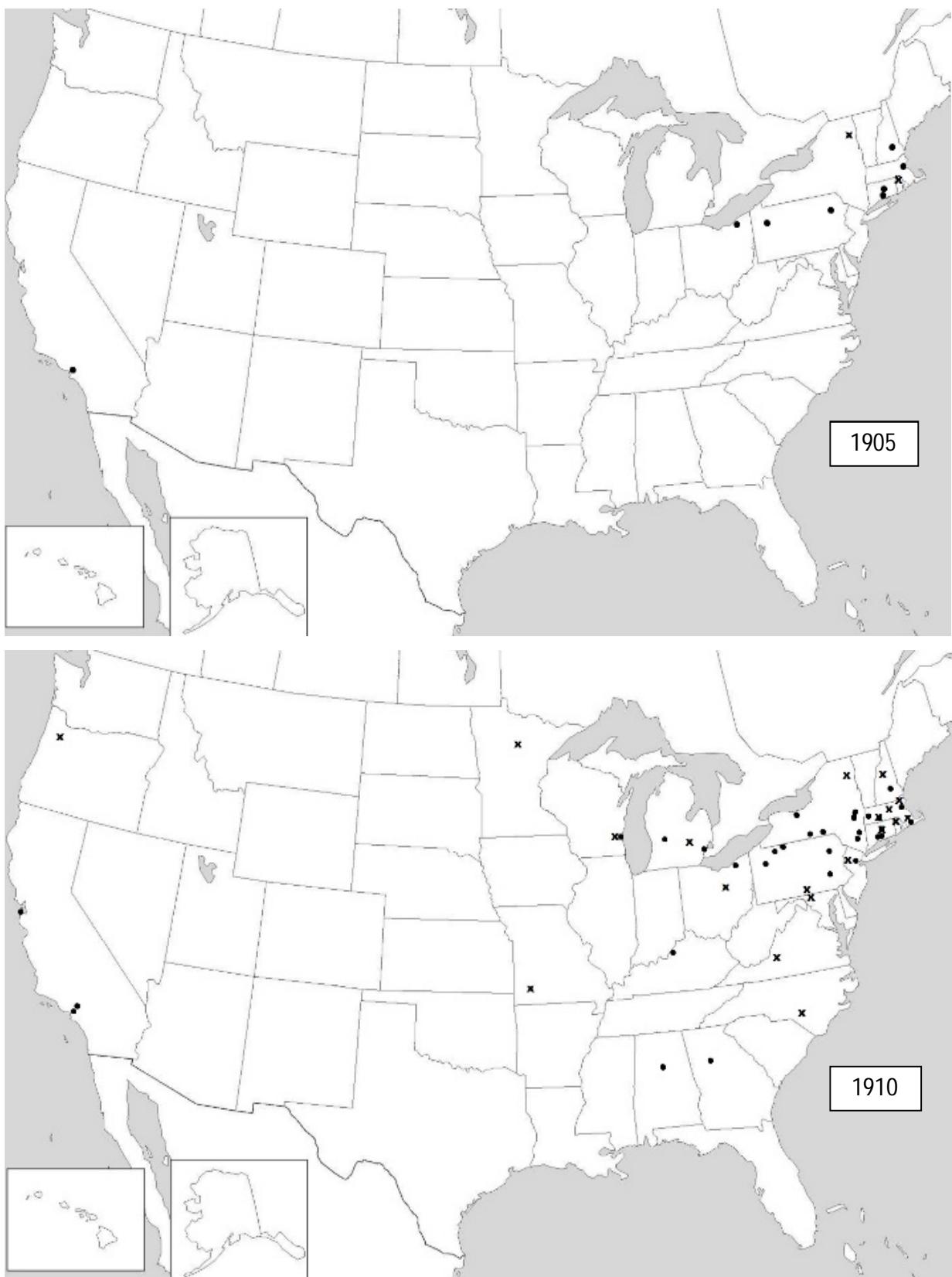
Kerwin Kofi Charles

Claudio Las Heras Olivares

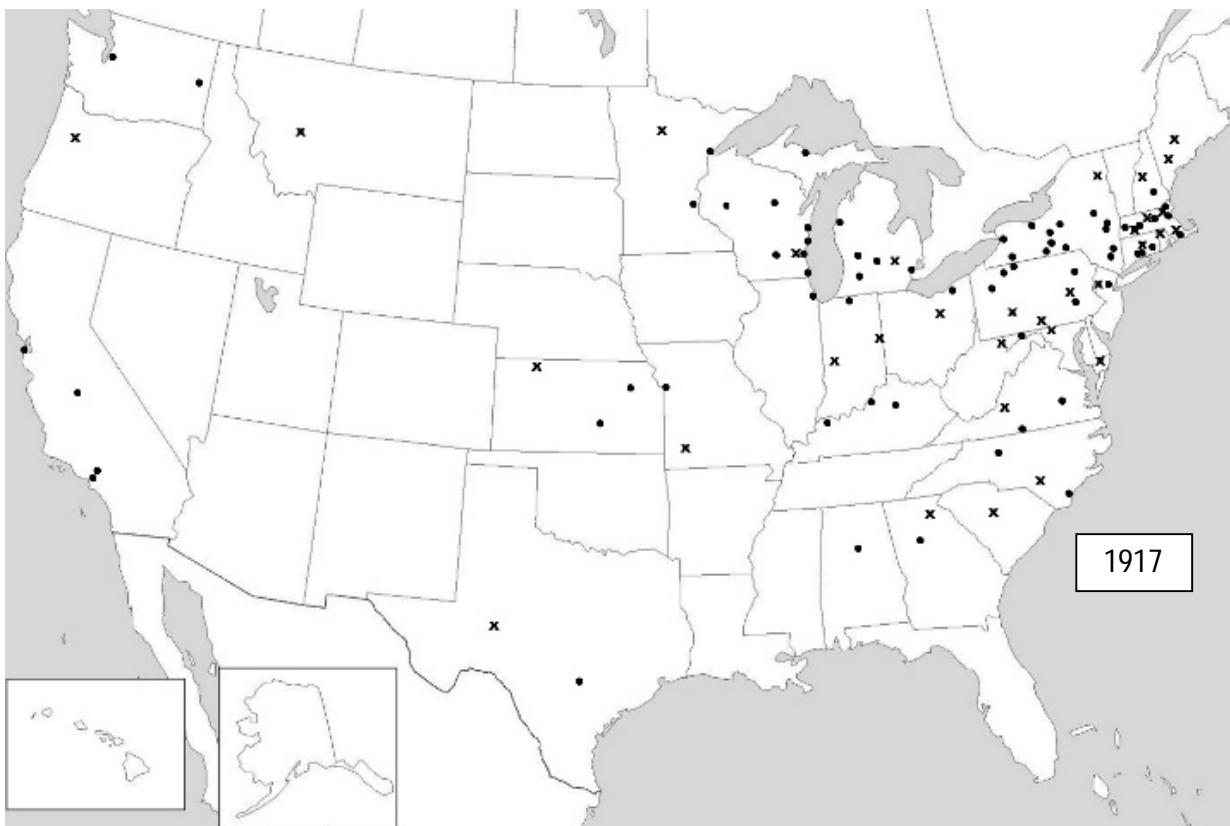
Daniel I. Rees

**ONLINE APPENDIX**

**Figure A1. The Growth of Sanatoriums: Evidence from the NASPT**

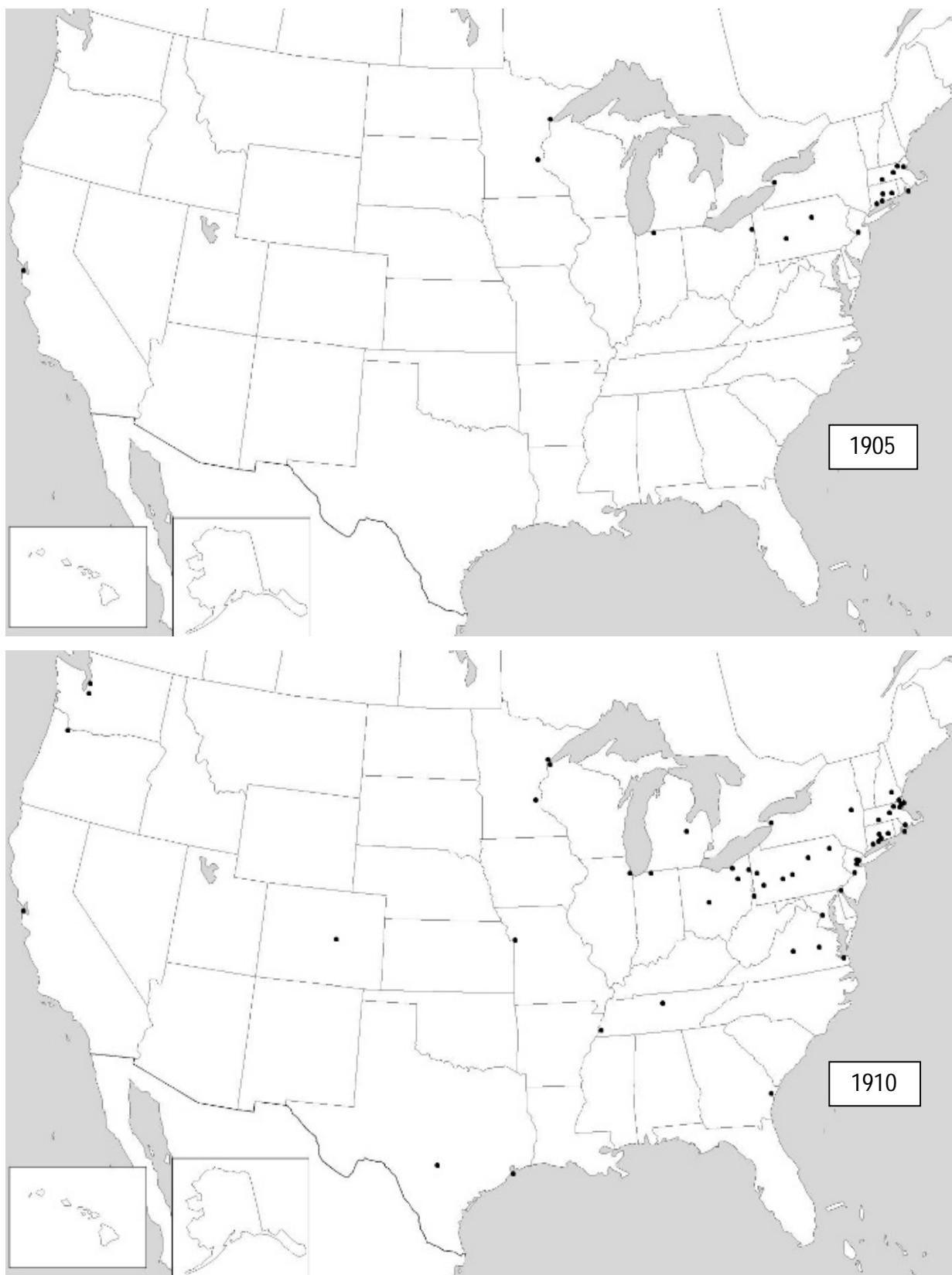


**Figure A1. The Growth of Sanatoriums: Evidence from the NASPT (continued)**



Notes: Based on data from Appendix Table 1. Only sanatoriums that contributed identifying variation to estimates based on equation (1) are shown. State-run sanatoriums are denoted with an "x."

**Figure A2. The Growth of Municipal Reporting Ordinances: Evidence from the NASPT**



**Figure A2. The Growth of Municipal Reporting Ordinances: Evidence from the NASPT (continued)**



Notes: Based on data from Appendix Table 1. Only municipal ordinances that contributed identifying variation to estimates based on equation (1) are shown.

**Table A1. Municipal-level Anti-TB Measures, 1900-1917**

| State | City             | Years of available data | First sanatorium | First TB hospital | First open-air camp | Municipal reporting ordinance | Municipal disinfection ordinance | Municipal spitting ordinance | Municipal common cup ordinance | Municipal TB association | First dispensary |
|-------|------------------|-------------------------|------------------|-------------------|---------------------|-------------------------------|----------------------------------|------------------------------|--------------------------------|--------------------------|------------------|
| AL    | Birmingham       | 1908-1917               | 1910             |                   |                     |                               |                                  |                              |                                | 1910                     | 1911             |
| AL    | Mobile           | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1914             |
| AL    | Montgomery       | 1908-1917               |                  |                   | 1911                |                               |                                  |                              | 1911                           |                          | 1909             |
| CA    | Alameda          | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1909             |
| CA    | Bakersfield      | 1910-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1917             |
| CA    | Berkeley         | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1910             |
| CA    | Eureka           | 1910-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1911             |
| CA    | Fresno           | 1900-1917               | 1915             |                   |                     |                               |                                  | 1911                         |                                |                          | 1916             |
| CA    | Los Angeles      | 1900-1917               | 1902             |                   |                     |                               |                                  |                              |                                |                          | 1908             |
| CA    | Oakland          | 1900-1917               |                  |                   |                     |                               | 1903                             |                              |                                | 1909                     | 1910             |
| CA    | Pasadena         | 1906-1917               | 1909             |                   |                     | 1912                          |                                  | 1910                         |                                |                          | 1909             |
| CA    | Sacramento       | 1900-1917               |                  | 1916              |                     |                               |                                  | 1904                         |                                |                          | 1915             |
| CA    | San Bernardino   | 1910-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1917             |
| CA    | San Diego        | 1900-1917               |                  | 1903              | 1912                |                               |                                  | 1907                         |                                |                          | 1909             |
| CA    | San Francisco    | 1900-1917               | 1909             |                   |                     | 1903                          |                                  |                              | 1913                           |                          | 1909             |
| CA    | San Jose         | 1900-1917               |                  | 1911              |                     |                               |                                  | 1907                         |                                |                          | 1911             |
| CA    | Stockton         | 1906-1917               |                  |                   | 1909                |                               |                                  |                              |                                |                          | 1915             |
| CO    | Colorado Springs | 1906-1917               |                  |                   |                     | 1908                          | 1909                             | 1907                         | 1912                           |                          | 1910             |
| CO    | Denver           | 1900-1917               |                  |                   |                     |                               |                                  | 1905                         |                                |                          | 1913             |
| CO    | Pueblo           | 1900-1917               |                  |                   |                     |                               |                                  | 1905                         |                                |                          | 1910             |
| CT    | Bridgeport       | 1900-1917               |                  | 1917              | 1907                | 1902                          | 1902                             |                              |                                |                          | 1914             |
| CT    | Bristol          | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1917             |
| CT    | Greenwich        | 1900-1917               |                  |                   | 1912                |                               |                                  |                              |                                |                          | 1916             |
| CT    | Hartford         | 1900-1917               | 1902             |                   |                     |                               |                                  | 1906                         |                                |                          | 1908             |
| CT    | Meriden          | 1900-1917               | 1910             |                   |                     | 1910                          | 1910                             | 1903                         | 1910                           |                          | 1907             |
| CT    | Middletown       | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1909             |
| CT    | New Britain      | 1900-1917               |                  |                   |                     | 1905                          |                                  |                              |                                |                          | 1908             |
| CT    | New Haven        | 1900-1917               |                  | 1916              | 1910                | 1905                          |                                  | 1901                         |                                |                          | 1907             |
| CT    | New London       | 1900-1917               |                  |                   |                     | 1905                          |                                  |                              |                                |                          | 1912             |
| CT    | Norwalk          | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1909             |
| CT    | Norwich          | 1900-1917               | 1913             |                   |                     | 1905                          |                                  |                              |                                |                          | 1909             |
| CT    | Stamford         | 1900-1917               |                  |                   | 1910                |                               |                                  | 1910                         |                                |                          | 1912             |
| CT    | Wallingford      | 1900-1917               | 1904             |                   |                     |                               |                                  |                              |                                |                          | 1915             |
| CT    | Waterbury        | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1908             |
| DE    | Wilmington       | 1900-1917               |                  |                   |                     | 1908                          |                                  | 1907                         |                                |                          | 1906             |
| DC    | Washington       | 1900-1917               |                  | 1908              | 1908                | 1908                          |                                  | 1903                         |                                |                          | 1905             |

**Table A1. Municipal-level Anti-TB Measures, 1900-1917 (continued)**

| State | City         | Years of available data | First sanatorium | First TB hospital | First open-air camp | Municipal reporting ordinance | Municipal disinfection ordinance | Municipal spitting ordinance | Municipal common cup ordinance | Municipal TB association | First dispensary |
|-------|--------------|-------------------------|------------------|-------------------|---------------------|-------------------------------|----------------------------------|------------------------------|--------------------------------|--------------------------|------------------|
| FL    | Jacksonville | 1900-1917               |                  | 1913              |                     |                               |                                  | 1908                         |                                |                          |                  |
| FL    | Tampa        | 1915-1917               |                  |                   | 1916                |                               |                                  |                              |                                |                          |                  |
| GA    | Atlanta      | 1900-1917               | 1909             |                   |                     |                               |                                  |                              |                                | 1907                     | 1907             |
| GA    | Savannah     | 1900-1917               |                  |                   |                     | 1909                          |                                  | 1904                         |                                | 1909                     |                  |
| IL    | Aurora       | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1911                     | 1917             |
| IL    | Chicago      | 1900-1917               | 1915             | 1909              | 1910                | 1906                          | 1907                             | 1901                         | 1913                           | 1906                     | 1907             |
| IL    | Decatur      | 1900-1917               |                  |                   |                     |                               |                                  | 1902                         |                                | 1917                     |                  |
| IL    | Evanston     | 1908-1917               |                  |                   |                     |                               | 1915                             |                              |                                | 1910                     |                  |
| IL    | Jacksonville | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1905                     | 1912             |
| IL    | Ottawa       | 1900-1909               |                  |                   | 1904                |                               |                                  |                              |                                |                          |                  |
| IL    | Quincy       | 1900-1917               |                  |                   |                     |                               |                                  | 1914                         |                                |                          |                  |
| IL    | Springfield  | 1900-1917               |                  |                   | 1913                |                               |                                  | 1907                         |                                | 1910                     | 1911             |
| IN    | Anderson     | 1901-1917               |                  |                   |                     |                               |                                  |                              |                                | 1912                     |                  |
| IN    | Elkhart      | 1901-1917               |                  |                   |                     |                               |                                  |                              |                                | 1913                     |                  |
| IN    | Evansville   | 1900-1917               |                  | 1910              |                     |                               |                                  | 1902                         |                                | 1904                     | 1908             |
| IN    | Fort Wayne   | 1901-1917               |                  |                   |                     |                               |                                  | 1904                         |                                | 1910                     | 1913             |
| IN    | Gary         | 1910-1917               |                  |                   |                     |                               |                                  |                              |                                | 1913                     |                  |
| IN    | Huntington   | 1901-1917               |                  |                   |                     |                               |                                  |                              |                                | 1912                     |                  |
| IN    | Indianapolis | 1900-1917               |                  |                   | 1904                |                               | 1902                             |                              |                                | 1911                     | 1908             |
| IN    | Kokomo       | 1901-1917               |                  |                   |                     |                               |                                  |                              |                                | 1912                     |                  |
| IN    | Lafayette    | 1900-1917               |                  |                   | 1915                |                               |                                  |                              |                                | 1908                     |                  |
| IN    | Laporte      | 1910-1917               |                  |                   |                     |                               |                                  |                              |                                | 1914                     |                  |
| IN    | Logansport   | 1901-1917               |                  |                   |                     |                               |                                  |                              |                                | 1912                     |                  |
| IN    | Muncie       | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     |                  |
| IN    | New Albany   | 1901-1917               |                  |                   |                     |                               |                                  |                              |                                | 1912                     | 1915             |
| IN    | Peru         | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1913                     |                  |
| IN    | Richmond     | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1907                     |                  |
| IN    | South Bend   | 1901-1917               | 1914             |                   | 1909                | 1902                          |                                  | 1906                         |                                | 1908                     | 1908             |
| IN    | Terre Haute  | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     |                  |
| IA    | Sioux City   | 1900-1905               |                  |                   |                     |                               |                                  | 1905                         |                                |                          |                  |
| KS    | Kansas City  | 1908-1917               |                  |                   |                     |                               |                                  |                              |                                | 1913                     |                  |
| KS    | Topeka       | 1912-1917               |                  | 1916              |                     |                               |                                  |                              |                                |                          |                  |
| KS    | Wichita      | 1900-1917               |                  | 1917              |                     |                               |                                  |                              |                                |                          |                  |
| KY    | Covington    | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1912             |
| KY    | Frankfort    | 1911-1917               |                  |                   |                     |                               |                                  |                              |                                | 1912                     |                  |
| KY    | Henderson    | 1911-1917               |                  | 1917              |                     |                               |                                  |                              |                                |                          |                  |

**Table A1. Municipal-level Anti-TB Measures, 1900-1917 (continued)**

| State | City         | Years of available data | First sanatorium | First TB hospital | First open-air camp | Municipal reporting ordinance | Municipal disinfection ordinance | Municipal spitting ordinance | Municipal common cup ordinance | Municipal TB association | First dispensary |
|-------|--------------|-------------------------|------------------|-------------------|---------------------|-------------------------------|----------------------------------|------------------------------|--------------------------------|--------------------------|------------------|
| KY    | Lexington    | 1911-1917               | 1917             |                   |                     |                               |                                  |                              |                                |                          |                  |
| KY    | Louisville   | 1900-1917               | 1907             |                   |                     |                               |                                  |                              | 1905                           | 1905                     | 1907             |
| KY    | Newport      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1916                     |                  |
| KY    | Owensboro    | 1911-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1915             |
| KY    | Paducah      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     |                  |
| LA    | New Orleans  | 1900-1917               |                  |                   | 1908                |                               | 1912                             |                              |                                | 1906                     | 1908             |
| ME    | Auburn       | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     |                  |
| ME    | Augusta      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1913             |
| ME    | Bangor       | 1900-1917               |                  |                   | 1910                |                               |                                  |                              |                                | 1909                     | 1909             |
| ME    | Lewiston     | 1906-1917               |                  |                   |                     |                               |                                  | 1912                         |                                | 1910                     | 1914             |
| ME    | Portland     | 1900-1917               |                  |                   |                     |                               | 1909                             |                              |                                |                          | 1910             |
| ME    | Waterville   | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     | 1910             |
| MD    | Annapolis    | 1900-1909               |                  |                   |                     |                               |                                  |                              |                                | 1906                     |                  |
| MD    | Baltimore    | 1900-1917               |                  |                   |                     |                               |                                  | 1905                         |                                |                          |                  |
| MD    | Cumberland   | 1906-1917               | 1913             |                   |                     |                               |                                  |                              |                                | 1909                     | 1913             |
| MD    | Frederick    | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1907                     | 1911             |
| MD    | Hagerstown   | 1907-1917               |                  |                   |                     |                               |                                  |                              |                                | 1911                     |                  |
| MA    | Adams        | 1900-1917               |                  |                   | 1910                |                               |                                  |                              |                                | 1908                     | 1915             |
| MA    | Attleborough | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1911                     | 1915             |
| MA    | Beverly      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1915                     | 1915             |
| MA    | Boston       | 1900-1917               | 1904             |                   | 1909                |                               |                                  |                              |                                | 1903                     |                  |
| MA    | Brockton     | 1900-1917               |                  |                   |                     |                               |                                  | 1904                         |                                | 1904                     | 1909             |
| MA    | Brookline    | 1900-1917               |                  | 1905              | 1908                |                               |                                  | 1907                         |                                | 1907                     | 1912             |
| MA    | Cambridge    | 1900-1917               |                  |                   |                     |                               | 1904                             |                              |                                | 1903                     | 1905             |
| MA    | Chelsea      | 1900-1917               |                  |                   |                     |                               |                                  | 1902                         |                                | 1907                     | 1910             |
| MA    | Chicopee     | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1915             |
| MA    | Clinton      | 1900-1917               | 1915             |                   | 1909                |                               |                                  |                              |                                | 1908                     | 1916             |
| MA    | Everett      | 1900-1917               |                  |                   |                     | 1911                          |                                  | 1906                         |                                | 1911                     | 1908             |
| MA    | Fall River   | 1900-1917               |                  | 1907              |                     | 1906                          |                                  | 1906                         | 1901                           |                          | 1908             |
| MA    | Fitchburg    | 1900-1917               |                  | 1913              |                     |                               |                                  |                              |                                |                          | 1909             |
| MA    | Framingham   | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     | 1915             |
| MA    | Gardner      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1908                     | 1909             |
| MA    | Gloucester   | 1900-1917               |                  |                   |                     | 1909                          |                                  |                              | 1909                           |                          | 1914             |
| MA    | Haverhill    | 1900-1917               | 1913             |                   |                     | 1906                          |                                  |                              | 1902                           |                          | 1907             |
| MA    | Holyoke      | 1900-1917               | 1912             |                   | 1908                |                               |                                  |                              | 1903                           |                          | 1915             |
| MA    | Lawrence     | 1900-1917               |                  | 1910              | 1908                |                               |                                  |                              |                                |                          | 1910             |

**Table A1. Municipal-level Anti-TB Measures, 1900-1917 (continued)**

| State | City         | Years of available data | First sanatorium | First TB hospital | First open-air camp | Municipal reporting ordinance | Municipal disinfection ordinance | Municipal spitting ordinance | Municipal common cup ordinance | Municipal TB association | First dispensary |
|-------|--------------|-------------------------|------------------|-------------------|---------------------|-------------------------------|----------------------------------|------------------------------|--------------------------------|--------------------------|------------------|
| MA    | Leominster   | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1915             |
| MA    | Lowell       | 1900-1917               |                  |                   | 1906                | 1903                          | 1913                             | 1903                         |                                | 1915                     | 1915             |
| MA    | Lynn         | 1900-1917               |                  | 1912              | 1909                | 1906                          | 1906                             | 1906                         |                                | 1907                     | 1907             |
| MA    | Malden       | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1907             |
| MA    | Medford      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1907             |
| MA    | Melrose      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1909             |
| MA    | New Bedford  | 1900-1917               |                  | 1908              |                     |                               |                                  |                              |                                |                          | 1906             |
| MA    | Newburyport  | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1909             |
| MA    | Newton       | 1900-1917               |                  |                   |                     |                               | 1914                             |                              |                                |                          |                  |
| MA    | North Adams  | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1914             |
| MA    | Northampton  | 1900-1917               |                  | 1914              |                     |                               |                                  |                              |                                |                          | 1915             |
| MA    | Peabody      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1914             |
| MA    | Pittsfield   | 1900-1917               | 1906             | 1913              |                     |                               |                                  |                              |                                |                          | 1905             |
| MA    | Plymouth     | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1916             |
| MA    | Quincy       | 1900-1917               |                  |                   | 1910                |                               |                                  |                              |                                |                          | 1908             |
| MA    | Salem        | 1900-1917               |                  | 1907              | 1908                |                               |                                  |                              |                                |                          | 1908             |
| MA    | Somerville   | 1900-1917               |                  |                   |                     | 1904                          |                                  |                              |                                |                          | 1906             |
| MA    | Springfield  | 1900-1917               |                  | 1912              | 1908                | 1904                          | 1909                             | 1901                         |                                |                          | 1907             |
| MA    | Taunton      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1908             |
| MA    | Wakefield    | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1915             |
| MA    | Waltham      | 1900-1917               |                  | 1911              |                     |                               |                                  |                              | 1906                           |                          | 1911             |
| MA    | Webster      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1915             |
| MA    | Westfield    | 1900-1917               | 1910             |                   |                     |                               |                                  |                              |                                |                          | 1910             |
| MA    | Winthrop     | 1910-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1915             |
| MA    | Worcester    | 1900-1917               |                  |                   |                     | 1902                          |                                  |                              |                                |                          | 1904             |
| MI    | Adrian       | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1911             |
| MI    | Alpena       | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1908             |
| MI    | Ann Arbor    | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1909             |
| MI    | Battle Creek | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1909             |
| MI    | Bay City     | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1909             |
| MI    | Detroit      | 1900-1917               | 1908             |                   |                     |                               |                                  |                              | 1906                           |                          | 1906             |
| MI    | Escanaba     | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1909             |
| MI    | Flint        | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1910             |
| MI    | Grand Rapids | 1900-1917               | 1907             |                   |                     |                               | 1910                             | 1905                         |                                |                          | 1908             |
| MI    | Jackson      | 1900-1917               |                  | 1915              |                     |                               |                                  |                              |                                |                          | 1908             |
| MI    | Kalamazoo    | 1900-1917               | 1914             |                   | 1909                |                               |                                  |                              | 1904                           |                          | 1912             |

**Table A1. Municipal-level Anti-TB Measures, 1900-1917 (continued)**

**Table A1. Municipal-level Anti-TB Measures, 1900-1917 (continued)**

| State | City         | Years of available data | First sanatorium | First TB hospital | First open-air camp | Municipal reporting ordinance | Municipal disinfection ordinance | Municipal spitting ordinance | Municipal common cup ordinance | Municipal TB association | First dispensary |
|-------|--------------|-------------------------|------------------|-------------------|---------------------|-------------------------------|----------------------------------|------------------------------|--------------------------------|--------------------------|------------------|
| NJ    | Hackensack   | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                | 1911                     |                  |
| NJ    | Hoboken      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1913                     | 1912             |
| NJ    | Jersey City  | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     | 1910             |
| NJ    | Kearny       | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1914             |
| NJ    | Millville    | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1907                     |                  |
| NJ    | Montclair    | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1907                     |                  |
| NJ    | Morristown   | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     | 1909             |
| NJ    | Newark       | 1900-1917               | 1908             | 1909              | 1909                | 1909                          | 1909                             |                              |                                | 1909                     | 1908             |
| NJ    | Orange       | 1900-1917               |                  | 1906              | 1909                | 1911                          | 1908                             | 1908                         |                                | 1904                     | 1904             |
| NJ    | Passaic      | 1900-1917               |                  |                   | 1909                | 1910                          | 1912                             | 1904                         |                                | 1913                     | 1915             |
| NJ    | Paterson     | 1900-1917               |                  |                   | 1910                | 1905                          | 1911                             |                              |                                | 1908                     | 1909             |
| NJ    | Perth Amboy  | 1900-1917               |                  |                   |                     | 1913                          |                                  | 1913                         | 1913                           | 1910                     | 1917             |
| NJ    | Phillipsburg | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     | 1911             |
| NJ    | Plainfield   | 1900-1917               |                  |                   | 1909                |                               |                                  |                              |                                | 1907                     | 1913             |
| NJ    | Trenton      | 1900-1917               |                  | 1911              |                     | 1902                          | 1902                             |                              |                                |                          | 1912             |
| NJ    | Union        | 1900-1917               |                  | 1912              |                     |                               |                                  |                              |                                |                          |                  |
| NJ    | West Hoboken | 1907-1917               |                  |                   |                     | 1914                          | 1914                             | 1914                         |                                |                          |                  |
| NY    | Albany       | 1900-1917               | 1910             |                   | 1908                |                               |                                  | 1908                         |                                | 1908                     | 1908             |
| NY    | Amsterdam    | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     | 1910             |
| NY    | Auburn       | 1900-1917               | 1912             |                   |                     |                               |                                  | 1905                         |                                |                          |                  |
| NY    | Batavia      | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     |                  |
| NY    | Binghamton   | 1900-1917               | 1908             |                   |                     |                               |                                  | 1907                         |                                | 1907                     |                  |
| NY    | Buffalo      | 1900-1917               | 1914             | 1902              | 1908                |                               |                                  |                              | 1910                           | 1908                     | 1907             |
| NY    | Cohoes       | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     | 1909             |
| NY    | Corning      | 1900-1917               |                  |                   | 1915                |                               |                                  |                              |                                | 1909                     | 1912             |
| NY    | Cortland     | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1908                     |                  |
| NY    | Dunkirk      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     | 1910             |
| NY    | Elmira       | 1900-1917               | 1909             | 1915              |                     |                               |                                  | 1903                         |                                |                          | 1914             |
| NY    | Geneva       | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1908                     |                  |
| NY    | Glens Falls  | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     | 1911             |
| NY    | Gloversville | 1900-1917               | 1912             |                   |                     |                               |                                  |                              |                                | 1911                     | 1913             |
| NY    | Hornell      | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     | 1912             |
| NY    | Hudson       | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     |                  |
| NY    | Ithaca       | 1900-1917               |                  | 1912              |                     |                               |                                  |                              |                                | 1911                     | 1911             |
| NY    | Jamestown    | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     | 1910             |
| NY    | Johnstown    | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     | 1915             |

**Table A1. Municipal-level Anti-TB Measures, 1900-1917 (continued)**

| State | City             | Years of available data | First sanatorium | First TB hospital | First open-air camp | Municipal reporting ordinance | Municipal disinfection ordinance | Municipal spitting ordinance | Municipal common cup ordinance | Municipal TB association | First dispensary |
|-------|------------------|-------------------------|------------------|-------------------|---------------------|-------------------------------|----------------------------------|------------------------------|--------------------------------|--------------------------|------------------|
| NY    | Kingston         | 1900-1917               |                  | 1909              |                     |                               |                                  |                              |                                | 1909                     | 1910             |
| NY    | Little Falls     | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                | 1911                     | 1912             |
| NY    | Lockport         | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     | 1913             |
| NY    | Middletown       | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     | 1911             |
| NY    | Mount Vernon     | 1900-1917               |                  |                   |                     | 1914                          |                                  | 1907                         |                                |                          |                  |
| NY    | New York         | 1900-1917               |                  |                   | 1907                |                               |                                  |                              | 1911                           | 1902                     |                  |
| NY    | Newburgh         | 1900-1917               | 1910             |                   | 1914                |                               |                                  |                              |                                | 1909                     | 1912             |
| NY    | Niagara Falls    | 1900-1917               |                  |                   |                     | 1905                          | 1905                             | 1905                         |                                | 1910                     | 1910             |
| NY    | North Tonawanda  | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                | 1912                     |                  |
| NY    | Ogdensburg       | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     |                  |
| NY    | Olean            | 1900-1917               | 1916             |                   | 1914                |                               |                                  |                              |                                | 1909                     | 1910             |
| NY    | Oswego           | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     |                  |
| NY    | Peekskill        | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                |                          | 1914             |
| NY    | Plattsburg       | 1906-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     |                  |
| NY    | Poughkeepsie     | 1900-1917               | 1909             |                   |                     |                               | 1916                             | 1907                         |                                | 1909                     | 1911             |
| NY    | Rochester        | 1900-1917               | 1910             | 1904              | 1908                | 1912                          |                                  |                              | 1912                           |                          |                  |
| NY    | Rome             | 1900-1917               |                  | 1913              |                     |                               |                                  |                              |                                | 1907                     | 1908             |
| NY    | Saratoga Springs | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     |                  |
| NY    | Schenectady      | 1900-1917               |                  | 1908              |                     | 1908                          | 1908                             | 1906                         | 1908                           | 1908                     | 1908             |
| NY    | Syracuse         | 1900-1917               | 1916             | 1909              |                     |                               |                                  | 1908                         |                                | 1909                     | 1908             |
| NY    | Troy             | 1900-1917               | 1910             |                   |                     |                               |                                  | 1904                         |                                | 1908                     | 1908             |
| NY    | Utica            | 1900-1917               |                  |                   | 1910                |                               |                                  |                              |                                | 1907                     | 1909             |
| NY    | Watertown        | 1900-1917               |                  |                   |                     |                               |                                  | 1910                         |                                | 1909                     | 1910             |
| NY    | Watervliet       | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     | 1910             |
| NY    | Yonkers          | 1900-1917               |                  | 1908              |                     |                               |                                  |                              |                                | 1905                     | 1906             |
| NC    | Durham           | 1910-1917               |                  | 1916              |                     |                               |                                  |                              |                                |                          |                  |
| NC    | Raleigh          | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1909                     |                  |
| NC    | Wilmington       | 1900-1917               | 1914             |                   |                     | 1913                          | 1913                             | 1913                         | 1914                           |                          |                  |
| NC    | Winston-Salem    | 1910-1917               | 1917             |                   |                     |                               |                                  |                              |                                |                          |                  |
| OH    | Akron            | 1909-1917               |                  |                   |                     |                               |                                  |                              |                                | 1917                     | 1916             |
| OH    | Alliance         | 1909-1917               |                  |                   |                     |                               |                                  |                              |                                | 1914                     |                  |
| OH    | Ashtabula        | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1915                     |                  |
| OH    | Bellaire         | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1912                     |                  |
| OH    | Cambridge        | 1909-1917               |                  |                   |                     |                               |                                  |                              |                                | 1914                     |                  |
| OH    | Canton           | 1900-1917               |                  |                   |                     | 1907                          |                                  | 1902                         |                                | 1910                     | 1910             |
| OH    | Chillicothe      | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1908                     | 1911             |

**Table A1. Municipal-level Anti-TB Measures, 1900-1917 (continued)**

| State | City       | Years of available data | First sanatorium | First TB hospital | First open-air camp | Municipal reporting ordinance | Municipal disinfection ordinance | Municipal spitting ordinance | Municipal common cup ordinance | Municipal TB association | First dispensary |
|-------|------------|-------------------------|------------------|-------------------|---------------------|-------------------------------|----------------------------------|------------------------------|--------------------------------|--------------------------|------------------|
| WI    | Green Bay  | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1911                     |                  |
| WI    | Janesville | 1908-1917               |                  |                   |                     |                               |                                  |                              |                                | 1912                     |                  |
| WI    | Kenosha    | 1908-1917               |                  | 1916              |                     |                               |                                  |                              |                                |                          |                  |
| WI    | La Crosse  | 1908-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     |                  |
| WI    | Madison    | 1900-1917               |                  | 1917              |                     |                               |                                  |                              |                                | 1909                     | 1910             |
| WI    | Manitowoc  | 1900-1905, 1908-1917    |                  | 1912              |                     |                               |                                  |                              |                                | 1911                     |                  |
| WI    | Marinette  | 1900-1917               |                  |                   |                     |                               |                                  |                              |                                | 1912                     |                  |
| WI    | Milwaukee  | 1900-1917               | 1907             | 1907              |                     |                               |                                  | 1905                         |                                | 1904                     | 1908             |
| WI    | Racine     | 1908-1917               |                  | 1913              |                     |                               |                                  |                              |                                | 1909                     |                  |
| WI    | Sheboygan  | 1908-1917               |                  |                   |                     |                               |                                  |                              |                                | 1910                     |                  |
| WI    | Superior   | 1900-1917               |                  |                   |                     | 1910                          |                                  |                              |                                | 1908                     |                  |
| WI    | Wausau     | 1908-1917               |                  | 1917              |                     |                               |                                  |                              |                                | 1910                     | 1911             |

Notes: Data on municipal-level anti-TB interventions come from *A Tuberculosis Directory*, published in 1911, 1916, and 1919 by the National Association for the Study and Prevention of Tuberculosis. Dates are listed only for municipalities with mortality data available before and after the specific anti-TB measure was implemented.

**Table A2. Predictors of Municipal Anti-TB Measures in 1917**

|  | (1)                        | (2)                               | (3)                 | (4)                 | (5)                  | (6)                        | (7)                           | (8)                       | (9)                         | (10)                            | (11)               |
|--|----------------------------|-----------------------------------|---------------------|---------------------|----------------------|----------------------------|-------------------------------|---------------------------|-----------------------------|---------------------------------|--------------------|
|  | <i>Any Anti-TB Measure</i> | <i>Number of Anti-TB Measures</i> | <i>Sanatorium</i>   | <i>TB Hospital</i>  | <i>Open-Air Camp</i> | <i>Reporting Ordinance</i> | <i>Disinfection Ordinance</i> | <i>Spitting Ordinance</i> | <i>Common Cup Ordinance</i> | <i>Municipal TB Association</i> | <i>Dispensary</i>  |
| <i>Pulmonary TB Mortality in 1900</i>        | -0.0001<br>(0.0003)        | 0.003<br>(0.002)                  | 0.0004<br>(0.0003)  | 0.0001<br>(0.0006)  | 0.0006*<br>(0.0003)  | 0.0001<br>(0.0004)         | 0.0002<br>(0.0004)            | 0.001**<br>(0.0005)       | -0.0004**<br>(0.0001)       | 0.0002<br>(0.0004)              | 0.0006<br>(0.0005) |
| <i>City Population in 1900 (in 100,000s)</i> | 0.011*<br>(0.006)          | 0.239***<br>(0.083)               | 0.033***<br>(0.011) | 0.041***<br>(0.013) | 0.030***<br>(0.007)  | 0.035***<br>(0.012)        | 0.007<br>(0.012)              | 0.028*<br>(0.015)         | 0.032***<br>(0.006)         | 0.013*<br>(0.007)               | 0.019*<br>(0.011)  |
| <i>% Female in 1900</i>                      | 0.909<br>(1.15)            | 5.39<br>(6.59)                    | 0.972<br>(1.13)     | 1.33<br>(0.987)     | 1.24<br>(1.27)       | -0.597<br>(0.624)          | 0.660<br>(0.835)              | -0.686<br>(1.61)          | -0.785<br>(0.475)           | 2.16<br>(1.64)                  | 1.10<br>(1.01)     |
| <i>% Black in 1900</i>                       | -0.419<br>(0.551)          | 7.28<br>(4.50)                    | -0.035<br>(0.700)   | 1.11<br>(0.721)     | 0.191<br>(0.647)     | 1.84*<br>(0.968)           | 1.27<br>(0.912)               | 1.73<br>(1.04)            | 0.413*<br>(0.243)           | 0.845<br>(0.883)                | -0.085<br>(1.02)   |
| <i>% Foreign in 1900</i>                     | 0.020<br>(0.391)           | 8.79***<br>(2.47)                 | 0.494<br>(0.312)    | 0.753**<br>(0.348)  | 0.947**<br>(0.462)   | 1.70***<br>(0.366)         | 0.959***<br>(0.270)           | 2.14***<br>(0.543)        | 0.360<br>(0.226)            | 0.607<br>(0.486)                | 0.827<br>(0.510)   |
| <i>% Under 18 in 1900</i>                    | -1.32<br>(1.35)            | 3.35<br>(5.82)                    | -0.412<br>(0.609)   | 0.635<br>(0.776)    | -0.388<br>(1.02)     | 0.777<br>(0.972)           | 0.820<br>(0.817)              | 1.21<br>(1.15)            | 0.574<br>(0.633)            | -0.017<br>(1.28)                | 0.157<br>(1.83)    |
| <i>% Literate in 1900</i>                    | 0.135<br>(0.825)           | 13.9**<br>(5.43)                  | 0.757<br>(1.04)     | 0.990*<br>(0.491)   | 0.417<br>(0.705)     | 2.33**<br>(0.932)          | 1.60**<br>(0.771)             | 3.49***<br>(1.04)         | 0.795*<br>(0.454)           | 1.85**<br>(0.783)               | 1.70<br>(1.60)     |
| N  | 306                        | 306                               | 306                 | 306                 | 306                  | 306                        | 306                           | 306                       | 306                         | 306                             | 306                |
| R <sup>2</sup>                               | 0.307                      | 0.399                             | 0.207               | 0.266               | 0.262                | 0.339                      | 0.222                         | 0.318                     | 0.386                       | 0.321                           | 0.370              |

\*Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Each column represents the results from a separate OLS regression. In column (1), the dependent variable is equal to one if the municipality had adopted any anti-TB measure by 1917. In column (2), the dependent variable is equal to the number of anti-TB measures adopted by the municipality by 1917. In columns (3)-(11), the dependent variable is equal to one if the municipality had adopted the specified anti-TB measure by 1917. Controls include state fixed effects. Standard errors, corrected for clustering at the state level, are in parentheses.

**Table A3. State-level Anti-TB Measures, 1900-1917**

| State | State reporting law  | State disinfection law  | State common cup law                               | State TB association  | First state-run sanatorium  |
|-------|--|---|--|---|---|
| AL    | Municipalities with mortality data pre- and post-state policy change         |   |  | 1914<br>Birmingham, Mobile, Montgomery  |   |
| CA    | Municipalities with mortality data pre- and post-state policy change         |   |  | 1907<br>Alameda, Berkeley, Fresno, Los Angeles, Oakland, Pasadena, Sacramento, San Diego, San Francisco, San Jose, Stockton |   |
| CO    | 1911<br>Municipalities with mortality data pre- and post-state policy change | Colorado Springs, Denver, Pueblo, Trinidad  | 1913<br>Colorado Springs, Denver, Pueblo, Trinidad | 1911<br>Colorado Springs, Denver, Pueblo, Trinidad  | 1909<br>Colorado Springs, Denver, Leadville, Pueblo   |
| CT    | 1909<br>Municipalities with mortality data pre- and post-state policy change | Ansonia, Bridgeport, Bristol, Danbury, Greenwich, Hartford, Manchester, Meriden, Middletown, Naugatuck, New Britain, New Haven, New London, Norwalk, Norwich, Stamford, Stonington, Torrington, Vernon, Wallingford, Waterbury, Windham |  |   | 1909<br>Ansonia, Bridgeport, Bristol, Danbury, Greenwich, Hartford, Manchester, Meriden, Middletown, Naugatuck, New Britain, New Haven, New London, Norwalk, Stamford, Stonington, Torrington, Vernon, Wallingford, Waterbury, Windham          |
| DE    | 1914<br>Municipalities with mortality data pre- and post-state policy change |   | Wilmington   | 1906<br>Wilmington  | 1909<br>Ansonia, Bridgeport, Bristol, Danbury, Greenwich, Hartford, Manchester, Meriden, Middletown, Naugatuck, New Britain, New Haven, New London, Norwalk, Norwich, Stamford, Stonington, Torrington, Vernon, Wallingford, Waterbury, Windham |
| FL    | 1916<br>Municipalities with mortality data pre- and post-state policy change |   |  | Jacksonville, Key West, Pensacola, Tampa  | 1911<br>Atlanta, Savannah   |
| GA    | 1909<br>Municipalities with mortality data pre- and post-state policy change |   |  | Atlanta, Savannah   | Atlanta, Savannah   |

**Table A3. State-level Anti-TB Measures, 1900-1917 (continued)**

| State | State reporting law  | State disinfection law   | State common cup law  | State TB association   | First state-run sanatorium   |
|-------|--|--|---|--|--|
| IL    | Municipalities with mortality data pre- and post-state policy change | 1914<br>Aurora, Belleville, Chicago, Decatur, Evanston, Jacksonville, Quincy, Springfield  |   | 1905<br>Aurora, Belleville, Chicago, Decatur, Jacksonville, Ottawa, Quincy, Springfield  |  |
| IN    | Municipalities with mortality data pre- and post-state policy change | 1907<br>Anderson, Columbus, Elkhart, Elwood, Evansville, Fort Wayne, Hammond, Huntington, Indianapolis, Jeffersonville, Kokomo, Lafayette, Logansport, Marion, Michigan City, Muncie, New Albany, Peru, Richmond, South Bend, Terre Haute, Vincennes, Wabash, Washington | 1913<br>Anderson, East Chicago, Elkhart, Elwood, Evansville, Fort Wayne, Hammond, Huntington, Indianapolis, Jeffersonville, Kokomo, Lafayette, Logansport, Marion, Michigan City, Mishawaka, Muncie, New Albany, Peru, Richmond, South Bend, Terre Haute, Vincennes | 1907<br>Anderson, Columbus, Elkhart, Elwood, Evansville, Fort Wayne, Hammond, Huntington, Indianapolis, Jeffersonville, Kokomo, Lafayette, Logansport, Marion, Michigan City, Muncie, New Albany, Peru, Richmond, South Bend, Terre Haute, Vincennes, Wabash, Washington | 1911<br>Anderson, East Chicago, Elkhart, Elwood, Evansville, Fort Wayne, Gary, Hammond, Huntington, Indianapolis, Jeffersonville, Kokomo, Lafayette, Logansport, Marion, Michigan City, Muncie, New Albany, Peru, Richmond, South Bend, Terre Haute, Vincennes |
| KS    | Municipalities with mortality data pre- and post-state policy change | 1909<br>Kansas City, Lawrence, Leavenworth, Wichita  |   | 1908<br>Kansas City, Lawrence, Leavenworth, Wichita  | 1914<br>Kansas City, Lawrence, Leavenworth, Parsons, Pittsburg, Topeka, Wichita  |
| KY    | Municipalities with mortality data pre- and post-state policy change |  |   | 1909<br>Covington, Louisville, Newport, Paducah  |  |
| LA    | Municipalities with mortality data pre- and post-state policy change | 1909<br>New Orleans  |   | 1906<br>New Orleans  |  |
| ME    | Municipalities with mortality data pre- and post-state policy change | 1895<br>Auburn, Augusta, Bangor, Biddeford, Lewiston, Portland, Waterville   | 1913<br>Auburn, Augusta, Bangor, Biddeford, Lewiston, Portland, Waterville  | 1901<br>Augusta, Bangor, Bath, Biddeford, Portland   | 1915<br>Auburn, Augusta, Bangor, Biddeford, Lewiston, Portland, Waterville   |

**Table A3. State-level Anti-TB Measures, 1900-1917 (continued)**

| State  | State reporting law  | State disinfection law | State common cup law  | State TB association  | First state-run sanatorium  |
|--|--|------------------------|---|---|---|
| MD   | 1904   |                        | 1912  | 1904  | 1908  |
| Municipalities with mortality data pre- and post-state policy change | Annapolis, Baltimore, Frederick  |                        | Baltimore, Cumberland, Frederick, Hagerstown  | Annapolis, Baltimore, Frederick   | Annapolis, Baltimore, Cumberland, Frederick, Hagerstown   |
| MA   | 1907   |                        |   | 1906  | 1908  |
| Municipalities with mortality data pre- and post-state policy change | Adams, Amesbury, Arlington, Attleborough, Beverly, Boston, Brockton, Brookline, Cambridge, Chelsea, Chicopee, Clinton, Everett, Fall River, Fitchburg, Framingham, Gardner, Gloucester, Haverhill, Holyoke, Hyde Park, Lawrence, Leominster, Lowell, Lynn, Malden, Marlborough, Medford, Melrose, Milford, Natick, New Bedford, Newburyport, Newton, North Adams, Northampton, Peabody, Pittsfield, Plymouth, Quincy, Revere, Salem, Somerville, Southbridge, Springfield, Taunton, Wakefield, Waltham, Ware, Watertown, Webster, Westfield, Weymouth, Woburn, Worcester |                        | Adams, Amesbury, Arlington, Attleborough, Beverly, Boston, Brockton, Brookline, Cambridge, Chelsea, Chicopee, Clinton, Danvers, Everett, Fall River, Fitchburg, Framingham, Gardner, Gloucester, Haverhill, Holyoke, Hyde Park, Lawrence, Leominster, Lowell, Lynn, Malden, Marlborough, Medford, Melrose, Milford, Natick, New Bedford, Newburyport, Newton, North Adams, Northampton, Peabody, Pittsfield, Plymouth, Quincy, Revere, Salem, Somerville, Southbridge, Springfield, Taunton, Wakefield, Waltham, Ware, Watertown, Webster, Westfield, Weymouth, Woburn, Worcester | Adams, Amesbury, Arlington, Attleborough, Beverly, Boston, Brockton, Brookline, Cambridge, Chelsea, Chicopee, Clinton, Danvers, Everett, Fall River, Fitchburg, Framingham, Gardner, Gloucester, Haverhill, Holyoke, Hyde Park, Lawrence, Leominster, Lowell, Lynn, Malden, Marlborough, Medford, Melrose, Milford, Natick, New Bedford, Newburyport, Newton, North Adams, Northampton, Peabody, Pittsfield, Plymouth, Quincy, Revere, Salem, Somerville, Southbridge, Springfield, Taunton, Wakefield, Waltham, Ware, Watertown, Webster, Westfield, Weymouth, Woburn, Worcester | Adams, Amesbury, Arlington, Attleborough, Beverly, Boston, Brockton, Brookline, Cambridge, Chelsea, Chicopee, Clinton, Danvers, Everett, Fall River, Fitchburg, Framingham, Gardner, Gloucester, Haverhill, Holyoke, Hyde Park, Lawrence, Leominster, Lowell, Lynn, Malden, Marlborough, Medford, Melrose, Milford, Natick, New Bedford, Newburyport, Newton, North Adams, Northampton, Peabody, Pittsfield, Plymouth, Quincy, Revere, Salem, Somerville, Southbridge, Springfield, Taunton, Wakefield, Waltham, Ware, Watertown, Webster, Westfield, Weymouth, Woburn, Worcester |

**Table A3. State-level Anti-TB Measures, 1900-1917 (continued)**

| State | State reporting law   | State disinfection law   | State common cup law   | State TB association   | First state-run sanatorium   |
|-------|---|--|--|--|--|
| MI    | 1893  |  |  | 1908<br>Adrian, Alpena, Ann Arbor,<br>Battle Creek, Bay City,<br>Detroit, Escanaba, Flint,<br>Grand Rapids, Iron<br>Mountain, Ironwood,<br>Ishpeming, Jackson,<br>Kalamazoo, Lansing,<br>Manistee, Marquette,<br>Menominee, Muskegon,<br>Owosso, Pontiac, Port<br>Huron, Saginaw, Sault Ste.<br>Marie, Traverse City | 1907<br>Adrian, Alpena, Ann Arbor,<br>Battle Creek, Bay City,<br>Detroit, Escanaba, Flint,<br>Grand Rapids, Iron<br>Mountain, Ironwood,<br>Ishpeming, Jackson,<br>Kalamazoo, Lansing,<br>Manistee, Marquette,<br>Menominee, Muskegon,<br>Owosso, Pontiac, Port<br>Huron, Saginaw, Sault Ste.<br>Marie, Traverse City |
| MN    | Municipalities with mortality data<br>pre- and post-state policy change |  | 1913<br>Duluth, Mankato,<br>Minneapolis, St. Cloud, St.<br>Paul, Stillwater, Virginia,<br>Winona | 1913<br>Duluth, Mankato,<br>Minneapolis, St. Could, St.<br>Paul, Stillwater, Virginia,<br>Winona   | 1908<br>Duluth, Mankato,<br>Minneapolis, St. Paul,<br>Winona   |
| MO    | Municipalities with mortality data<br>pre- and post-state policy change |  |  |  | 1907<br>Kansas City, St. Joseph, St.<br>Louis  |
| MT    | Municipalities with mortality data<br>pre- and post-state policy change | 1913<br>Anaconda, Billings, Butte,<br>Great Falls, Helena,<br>Missoula | 1913<br>Anaconda, Billings, Butte,<br>Great Falls, Helena,<br>Missoula                           | 1913<br>Anaconda, Billings, Butte,<br>Great Falls, Helena,<br>Missoula   | 1908<br>Helena   |
| NE    | Municipalities with mortality data<br>pre- and post-state policy change | 1909<br>Lincoln, Omaha   |  | 1913<br>Lincoln, Omaha   | 1907<br>Lincoln, Omaha   |
| NH    | Municipalities with mortality data<br>pre- and post-state policy change |  |  |  | 1906<br>Berlin, Concord, Dover,<br>Keene, Laconia,<br>Manchester, Nashua,<br>Portsmouth, Rochester   |

**Table A3. State-level Anti-TB Measures, 1900-1917 (continued)**

| State  | State reporting law   | State disinfection law | State common cup law  | State TB association   | First state-run sanatorium   |
|--|---|------------------------|---|--|--|
| NJ   | 1909  |                        | 1911  | 1906   | 1907   |
| Municipalities with mortality data pre- and post-state policy change | Atlantic City, Bayonne, Bloomfield, Bridgeton, Camden, East Orange, Elizabeth, Hackensack, Harrison, Hoboken, Jersey City, Kearny, Long Branch, Millville, Montclair, Morristown, New Brunswick, Newark, Orange, Passaic, Paterson, Perth Amboy, Phillipsburg, Plainfield, Trenton, Union, West Hoboken   |                        | Asbury Park, Atlantic City, Bayonne, Bloomfield, Bridgeton, Camden, East Orange, Elizabeth, Garfield, Hackensack, Hoboken, Irvington, Jersey City, Kearny, Long Branch, Millville, Montclair, Morristown, New Brunswick, Newark, Orange, Passaic, Paterson, Perth Amboy, Phillipsburg, Plainfield, Trenton, Union, West Hoboken, West New York, West Orange | Atlantic City, Bayonne, Bloomfield, Bridgeton, Camden, East Orange, Elizabeth, Hackensack, Harrison, Hoboken, Jersey City, Kearny, Long Branch, Millville, Montclair, Morristown, New Brunswick, Newark, Orange, Passaic, Paterson, Perth Amboy, Phillipsburg, Plainfield, Trenton, Union, West Hoboken  | Atlantic City, Bayonne, Bloomfield, Bridgeton, Camden, East Orange, Elizabeth, Hackensack, Harrison, Hoboken, Jersey City, Kearny, Long Beach, Millville, Montclair, Morristown, New Brunswick, Newark, Orange, Passaic, Paterson, Perth Amboy, Phillipsburg, Plainfield, Trenton, Union, West Hoboken   |
| NY   | 1907  |                        |   | 1907   | 1904   |
| Municipalities with mortality data pre- and post-state policy change | Albany, Amsterdam, Auburn, Batavia, Binghamton, Buffalo, Cohoes, Corning, Cortland, Dunkirk, Elmira, Geneva, Glens Falls, Gloversville, Hornell, Hudson, Ithaca, Jamestown, Johnstown, Kingston, Little Falls, Lockport, Middletown, Mount Vernon, New Rochelle, New York, Newburgh, Niagara Falls, North Tonawanda, Ogdensburg, Olean, Oswego, Peekskill, Plattsburg, Port Jervis, Poughkeepsie, Rochester, Rome, Saratoga Springs |                        |   | Albany, Amsterdam, Auburn, Batavia, Binghamton, Buffalo, Cohoes, Corning, Cortland, Dunkirk, Elmira, Geneva, Glens Falls, Gloversville, Hornell, Hudson, Ithaca, Jamestown, Johnstown, Kingston, Little Falls, Lockport, Middletown, Mount Vernon, New Rochelle, New York, Newburgh, Niagara Falls, North Tonawanda, Ogdensburg, Olean, Oswego, Peekskill, Plattsburg, Port Jervis, Poughkeepsie, Rochester, Rome, Saratoga Springs, Schenectady, Syracuse | Albany, Amsterdam, Auburn, Binghamton, Buffalo, Cohoes, Corning, Cortland, Dunkirk, Elmira, Geneva, Glens Falls, Gloversville, Hudson, Ithaca, Jamestown, Johnstown, Kingston, Little Falls, Lockport, Middletown, Mount Vernon, New Rochelle, New York, Newburgh, Niagara Falls, Ogdensburg, Olean, Peekskill, Port Jervis, Poughkeepsie, Rochester, Rome, Saratoga Springs, Schenectady, Syracuse, Watervliet, Yonkers |

**Table A3. State-level Anti-TB Measures, 1900-1917 (continued)**

| State  | State reporting law  | State disinfection law  | State common cup law   | State TB association   | First state-run sanatorium  |
|--|--|---|--|--|---|
| NY (continued)   | 1907   |   |  | 1907   | 1904  |
| Municipalities with mortality data pre- and post-state policy change | Schenectady, Syracuse, Troy, Utica, Watertown, Watervliet, Yonkers   |   |  | Troy, Utica, Watertown, Watervliet, Yonkers  |   |
| NC   | 1913   |   |  | 1906   | 1908  |
| Municipalities with mortality data pre- and post-state policy change | Asheville, Durham, Greensboro, Raleigh, Wilmington, Winston-Salem  |   |  | Raleigh, Wilmington  | Raleigh, Wilmington   |
| OH   |  |   |  | 1901   | 1909  |
| Municipalities with mortality data pre- and post-state policy change |  |   | Ashtabula, Bellaire, Canton, Chillicothe, Cincinnati, Cleveland, Columbus, Dayton, Findlay, Hamilton, Ironton, Lima, Marietta, Massillon, Middletown, Newark, Portsmouth, Tiffin, Toledo, Warren, Youngstown | Ashtabula, Bellaire, Canton, Chillicothe, Cincinnati, Cleveland, Columbus, Dayton, Findlay, Hamilton, Ironton, Lima, Marietta, Massillon, Middletown, Newark, Portsmouth, Tiffin, Toledo, Warren, Youngstown | Ashtabula, Bellaire, Canton, Chillicothe, Cincinnati, Cleveland, Columbus, Dayton, Findlay, Hamilton, Ironton, Lima, Marietta, Massillon, Middletown, Newark, Portsmouth, Tiffin, Toledo, Warren, Youngstown  |
| OR   | 1903   |   | 1915   | 1908   | 1910  |
| Municipalities with mortality data pre- and post-state policy change | Portland   |   | Portland   | Portland   | Portland  |
| PA   | 1909   |   | 1913   | 1892   | 1907  |
| Municipalities with mortality data pre- and post-state policy change | Allentown, Altoona, Beaver Falls, Braddock, Bradford, Butler, Carbondale, Carlisle, Chambersburg, Chester, Columbia, Danville, Dubois, Dunmore, Duquense, Easton, Erie, Harrisburg, Hazleton, Homestead, Johnstown, Lancaster, Lebanon, Mahoney City, McKeesport, Meadville, Mount Carmel, | Allentown, Altoona, Beaver Falls, Bethlehem, Braddock, Bradford, Butler, Carbondale, Carlisle, Carnegie, Chambersburg, Chester, Coatesville, Columbia, Connellsville, Dubois, Dunmore, Duquense, Easton, Erie, Farrell, Greensburg, Harrisburg, Hazleton, Homestead, Johnstown, Lancaster, Lebanon, Mahoney City, |  |  | Allentown, Altoona, Beaver Falls, Braddock, Bradford, Butler, Carbondale, Carlisle, Chambersburg, Chester, Columbia, Danville, Dubois, Dunmore, Duquense, Easton, Erie, Harrisburg, Hazleton, Homestead, Johnstown, Lancaster, Lebanon, Mahoney City, McKeesport, Meadville, Mount Carmel, Nanticoke, New Castle, Norristown, Oil City, Philadelphia, |

**Table A3. State-level Anti-TB Measures, 1900-1917 (continued)**

| State  | State reporting law  | State disinfection law | State common cup law  | State TB association  | First state-run sanatorium  |
|--|--|------------------------|---|---|---|
| PA (continued)   | 1909   |                        | 1913  | 1892  | 1907  |
| Municipalities with mortality data pre- and post-state policy change | Nanticoke, New Castle, Norristown, Oil City, Philadelphia, Phoenixville, Pittsburgh, Pittston, Plymouth, Pottstown, Pottsville, Reading, Scranton, Shamokin, Sharon, Shenandoah, South Bethlehem, Steelton, Sunbury, Titusville, Warren, West Chester, Wilkes-Barre, Wilkinsburg, Williamsport, York |                        | McKees Rocks, McKeesport, Meadville, Monessen, Mount Carmel, Nanticoke, New Castle, Norristown, North Braddock, Oil City, Old Forge, Philadelphia, Phoenixville, Pittsburgh, Pittston, Plymouth, Pottstown, Pottsville, Reading, Scranton, Shamokin, Sharon, Shenandoah, South Bethlehem, Steelton, Sunbury, Uniontown, Warren, Washington, West Chester, Wilkes-Barre, Wilkinsburg, Williamsport, York |   | Phoenixville, Pittsburgh, Pittston, Plymouth, Pottstown, Pottsville, Reading, Scranton, Shamokin, Sharon, Shenandoah, South Bethlehem, Steelton, Sunbury, Titusville, Warren, West Chester, Wilkes-Barre, Wilkinsburg, Williamsport, York |
| RI   | 1909   |                        |   | 1907  | 1905  |
| Municipalities with mortality data pre- and post-state policy change | Central Falls, Cranston, Cumberland, East Providence, Lincoln, Newport, Pawtucket, Providence, Warwick, Woonsocket   |                        |   | Central Falls, Cranston, Cumberland, East Providence, Newport, Pawtucket, Providence, Warwick, Woonsocket | Central Falls, Newport, Pawtucket, Providence, Woonsocket   |
| SC   |  |                        |   | 1913  | 1915  |
| Municipalities with mortality data pre- and post-state policy change |  |                        |   | Charleston  | Charleston  |
| TN   | 1905   |                        |   | 1912  |   |
| Municipalities with mortality data pre- and post-state policy change | Memphis, Nashville   |                        |   | Knoxville, Memphis, Nashville   |   |
| TX   | 1911   |                        |   | 1908  | 1912  |
| Municipalities with mortality data pre- and post-state policy change | Galveston, San Antonio   |                        |   | Galveston, San Antonio  | El Paso, Galveston, San Antonio   |

**Table A3. State-level Anti-TB Measures, 1900-1917 (continued)**

| State  | State reporting law   | State disinfection law  | State common cup law  | State TB association  | First state-run sanatorium  |
|--|---|---|---|---|---|
| UT   | 1913  | 1913  |   | 1916  |   |
| Municipalities with mortality data pre- and post-state policy change | Ogden, Salt Lake City   | Ogden, Salt Lake City   |   | Ogden, Salt Lake City   |   |
| VT   |   |   |   | 1916  | 1906  |
| Municipalities with mortality data pre- and post-state policy change |   |   |   | Barre, Burlington, Rutland  | Barre, Bennington, Burlington, Rutland  |
| VA   | 1910  | 1908  |   | 1909  | 1909  |
| Municipalities with mortality data pre- and post-state policy change | Alexandria, Danville, Lynchburg, Norfolk, Petersburg, Richmond  | Alexandria, Lynchburg, Norfolk, Petersburg, Richmond  |   | Alexandria, Danville, Lynchburg, Manchester, Norfolk, Petersburg, Richmond  | Alexandria, Danville, Lynchburg, Manchester, Norfolk, Petersburg, Richmond                                  |
| WA   | 1903  |   | 1912  | 1906  |   |
| Municipalities with mortality data pre- and post-state policy change | Seattle, Spokane, Tacoma  |   | Aberdeen, Bellingham, Everett, North Yakima, Seattle, Spokane, Tacoma, Walla Walla  | Seattle, Spokane, Tacoma  |   |
| WV   |   |   | 1913  | 1908  | 1913  |
| Municipalities with mortality data pre- and post-state policy change |   |   | Wheeling  | Wheeling  | Wheeling  |
| WI   | 1907  | 1907  | 1913  | 1908  | 1907  |
| Municipalities with mortality data pre- and post-state policy change | Appleton, Beloit, Chippewa Falls, Eau Claire, Green Bay, Madison, Manitowoc, Marinette, Milwaukee, Superior | Appleton, Beloit, Chippewa Falls, Eau Claire, Green Bay, Madison, Manitowoc, Marinette, Milwaukee, Superior | Appleton, Ashland, Beloit, Eau Claire, Fond du Lac, Green Bay, Janesville, Kenosha, La Crosse, Madison, Manitowoc, Marinette, Milwaukee, Oshkosh, Racine, Sheboygan, Superior, Wausau | Appleton, Ashland, Beloit, Chippewa Falls, Eau Claire, Fond du Lac, Green Bay, Janesville, Kenosha, La Crosse, Madison, Manitowoc, Marinette, Merrill, Milwaukee, Oshkosh, Racine, Sheboygan, Stevens Point, Superior, Wausau | Appleton, Beloit, Chippewa Falls, Eau Claire, Green Bay, Madison, Manitowoc, Marinette, Milwaukee, Superior |

Notes: Data on state-level anti-TB interventions come from *A Tuberculosis Directory*, published in 1911, 1916, and 1919 by the National Association for the Study and Prevention of Tuberculosis.

**Table A4. Pulmonary TB Mortality and Anti-TB Interventions without Controlling for Municipality-Specific Linear Trends**

|                                 | (1)              | (2)                | (3)                 | (4)                 |
|---------------------------------|------------------|--------------------|---------------------|---------------------|
| <i>Sanatorium</i>               | 0.010<br>(0.022) | 0.010<br>(0.023)   | 0.003<br>(0.027)    | -0.002<br>(0.026)   |
| <i>TB Hospital</i>              | 0.043<br>(0.026) | 0.051**<br>(0.021) | 0.056***<br>(0.019) | 0.050**<br>(0.020)  |
| <i>Open-Air Camp</i>            | 0.034<br>(0.029) | 0.039<br>(0.031)   | 0.026<br>(0.031)    | 0.032<br>(0.031)    |
| <i>Reporting Ordinance</i>      | ...              | -0.041<br>(0.034)  | -0.059*<br>(0.029)  | -0.065**<br>(0.029) |
| <i>State Reporting Law</i>      | ...              | -0.035<br>(0.031)  | -0.033<br>(0.032)   | -0.029<br>(0.033)   |
| <i>Disinfection Ordinance</i>   | ...              | ...                | 0.020<br>(0.038)    | 0.012<br>(0.038)    |
| <i>State Disinfection Law</i>   | ...              | ...                | -0.004<br>(0.035)   | -0.005<br>(0.035)   |
| <i>Spitting Ordinance</i>       | ...              | ...                | 0.019<br>(0.024)    | 0.012<br>(0.022)    |
| <i>Common Cup Ordinance</i>     | ...              | ...                | 0.057***<br>(0.019) | 0.062***<br>(0.018) |
| <i>State Common Cup Law</i>     | ...              | ...                | 0.016<br>(0.031)    | 0.012<br>(0.022)    |
| <i>Municipal TB Association</i> | ...              | ...                | ...                 | 0.011<br>(0.017)    |
| <i>State TB Association</i>     | ...              | ...                | ...                 | -0.020<br>(0.025)   |
| <i>Dispensary</i>               | ...              | ...                | ...                 | 0.023<br>(0.023)    |
| No. of municipalities           | 548              | 548                | 548                 | 548                 |
| N                               | 7,439            | 7,439              | 7,439               | 7,439               |
| R <sup>2</sup>                  | 0.836            | 0.836              | 0.837               | 0.838               |

\*Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Based on annual data from *Mortality Statistics* for the period 1900-1917, published by the U.S. Census Bureau. Each column represents the results from a separate OLS regression. The dependent variable is equal to the natural log of the pulmonary tuberculosis mortality rate per 100,000 population in municipality  $m$  and year  $t$ . Controls include the demographic characteristics listed in Table 1, municipality fixed effects, and year fixed effects. Regressions are weighted by municipality population. Standard errors, corrected for clustering at the state level, are in parentheses.

**Table A5. The Five Most Common Anti-TB Bundles in 1917**

|  | Number of municipalities with bundle | Average number of years between interventions | Number of times that 2 or more interventions went into effect during same year | Timing of interventions within each bundle |                 |                 |                 |                 |
|--|--------------------------------------|---|--|--|-----------------|-----------------|-----------------|-----------------|
|  |                                      |   |  |  | 1 <sup>st</sup> | 2 <sup>nd</sup> | 3 <sup>rd</sup> | 4 <sup>th</sup> |
| <i>Bundle 1</i><br><i>(= Municipal TB Association + Dispensary)</i>  | 61                                   | 3.43  | 15   | <i>Municipal TB Association</i>            | 43              | 18              | ...             | ...             |
|  |                                      |   |  | <i>Dispensary</i>                          | 33              | 28              | ...             | ...             |
| <i>Bundle 2</i><br><i>(= Municipal TB Association + Dispensary + Sanatorium)</i>                               | 12                                   | 2.58  | 4  | <i>Municipal TB Association</i>            | 11              | 0               | 1               | ...             |
|  |                                      |   |  | <i>Dispensary</i>                          | 3               | 4               | 5               | ...             |
|  |                                      |   |  | <i>Sanatorium</i>                          | 1               | 6               | 5               | ...             |
| <i>Bundle 3</i><br><i>(= Municipal TB Association + Dispensary + Spitting Ordinance)</i>                       | 12                                   | 3.38  | 4  | <i>Spitting Ordinance</i>                  | 9               | 3               | 0               | ...             |
|  |                                      |   |  | <i>Municipal TB Association</i>            | 4               | 6               | 2               | ...             |
|  |                                      |   |  | <i>Dispensary</i>                          | 0               | 5               | 7               | ...             |
| <i>Bundle 4</i><br><i>(= Municipal TB Association + Sanatorium)</i>  | 9                                    | 5.89  | 0  | <i>Municipal TB Association</i>            | 6               | 3               | ...             | ...             |
|  |                                      |   |  | <i>Sanatorium</i>                          | 3               | 6               | ...             | ...             |
| <i>Bundle 5</i><br><i>(= Municipal TB Association + Dispensary + Spitting Ordinance + Reporting Ordinance)</i> | 8                                    | 2.58  | 5  | <i>Spitting Ordinance</i>                  | 6               | 2               | 0               | 0               |
|  |                                      |   |  | <i>Reporting Ordinance</i>                 | 4               | 3               | 1               | 0               |
|  |                                      |   |  | <i>Dispensary</i>                          | 1               | 1               | 2               | 4               |
|  |                                      |   |  | <i>Municipal TB Association</i>            | 0               | 0               | 5               | 3               |

Notes: If municipality  $m$  did not have a dispensary and municipal TB association in 1917 (i.e., the most common anti-TB bundle), *Bundle 1* is equal to 0 in every year. If municipality  $m$  did not have a dispensary, municipal TB association, and sanatorium in 1917 (i.e., the second-most common anti-TB bundle), *Bundle 2* is equal to 0 in every year. *Bundle 3*, *Bundle 4*, and *Bundle 5* are defined analogously.

**Table A6. Pulmonary TB Mortality Regressed on Each State Anti-TB Measure Separately**

|                              | State Reporting Law            | State Disinfection Law       | State Common Cup Law         | State TB Association         |
|------------------------------|--------------------------------|------------------------------|------------------------------|------------------------------|
| <i>State Anti-TB Measure</i> | -0.015<br>(0.018)              | -0.031<br>(0.025)            | -0.024<br>(0.021)            | 0.016<br>(0.020)             |
| <i>5 Years Prior</i>         | ...<br><br>-0.032<br>(0.022)   | ...<br><br>0.033*<br>(0.019) | ...<br><br>-0.036<br>(0.041) | ...<br><br>-0.028<br>(0.017) |
| <i>4 Years Prior</i>         | ...<br><br>-0.027<br>(0.037)   | ...<br><br>0.061<br>(0.037)  | ...<br><br>-0.004<br>(0.037) | ...<br><br>-0.024<br>(0.022) |
| <i>3 Years Prior</i>         | ...<br><br>-0.068*<br>(0.034)  | ...<br><br>0.031<br>(0.057)  | ...<br><br>-0.007<br>(0.049) | ...<br><br>-0.033<br>(0.032) |
| <i>2 Years Prior</i>         | ...<br><br>-0.111**<br>(0.043) | ...<br><br>0.057<br>(0.064)  | ...<br><br>0.004<br>(0.043)  | ...<br><br>-0.040<br>(0.037) |
| <i>1 Year Prior</i>          | ...<br><br>-0.103**<br>(0.048) | ...<br><br>0.057<br>(0.061)  | ...<br><br>-0.039<br>(0.052) | ...<br><br>-0.043<br>(0.043) |
| <i>Year 0</i>                | ...<br><br>-0.116**<br>(0.054) | ...<br><br>0.052<br>(0.075)  | ...<br><br>-0.043<br>(0.067) | ...<br><br>-0.036<br>(0.052) |
| <i>1 Year After</i>          | ...<br><br>-0.121*<br>(0.062)  | ...<br><br>0.053<br>(0.070)  | ...<br><br>-0.018<br>(0.075) | ...<br><br>-0.029<br>(0.059) |
| <i>2 Years After</i>         | ...<br><br>-0.136**<br>(0.067) | ...<br><br>-0.006<br>(0.103) | ...<br><br>-0.081<br>(0.062) | ...<br><br>-0.020<br>(0.065) |
| <i>3 Years After</i>         | ...<br><br>-0.177**<br>(0.073) | ...<br><br>-0.021<br>(0.119) | ...<br><br>-0.087<br>(0.061) | ...<br><br>-0.021<br>(0.070) |
| <i>4 Years After</i>         | ...<br><br>-0.195**<br>(0.078) | ...<br><br>0.011<br>(0.102)  | ...<br><br>-0.101<br>(0.066) | ...<br><br>-0.026<br>(0.072) |
| <i>5+ Years After</i>        | ...<br><br>-0.170*<br>(0.089)  | ...<br><br>-0.027<br>(0.151) | ...<br><br>-0.129<br>(0.087) | ...<br><br>0.003<br>(0.083)  |
| Mean                         | 141.5                          | 141.5                        | 141.5                        | 141.5                        |
| No. of municipalities        | 548                            | 548                          | 548                          | 548                          |
| N                            | 7,439                          | 7,439                        | 7,439                        | 7,439                        |
| R <sup>2</sup>               | 0.882                          | 0.883                        | 0.882                        | 0.882                        |
|                              |                                |                              |                              | 141.5                        |
|                              |                                |                              |                              | 141.5                        |

\*Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Based on annual data from *Mortality Statistics* for the period 1900-1917, published by the U.S. Census Bureau. Each column represents the results from a separate OLS regression. The dependent variable is equal to the natural log of the pulmonary tuberculosis mortality rate per 100,000 population in municipality *m* and year *t*. Controls include the demographic characteristics listed in Table 1, municipality fixed effects, year fixed effects, and municipality-specific linear trends. The omitted category in the event-study analyses is 6 or more years prior to implementation. Regressions are weighted by municipality population. Standard errors, corrected for clustering at the state level, are in parentheses.

**Table A7. Event-Study Analyses for Each Municipal Anti-TB Measure Conditioning on the other Anti-TB Measures**

|                         | Sanatorium        | TB Hospital       | Open-Air Camp     | Reporting Ordinance | Disinfection Ordinance | Spitting Ordinance | Common Cup Ordinance | Municipal TB Association | Municipal Dispensary |
|-------------------------|-------------------|-------------------|-------------------|---------------------|------------------------|--------------------|----------------------|--------------------------|----------------------|
| 5 Years Prior           | -0.013<br>(0.018) | -0.015<br>(0.027) | -0.020<br>(0.014) | -0.021<br>(0.024)   | 0.028<br>(0.031)       | 0.042<br>(0.030)   | 0.010<br>(0.032)     | -0.011<br>(0.017)        | 0.012<br>(0.012)     |
| 4 Years Prior           | -0.013<br>(0.028) | -0.029<br>(0.036) | 0.001<br>(0.017)  | -0.019<br>(0.022)   | 0.041<br>(0.040)       | 0.025<br>(0.034)   | 0.014<br>(0.038)     | -0.017<br>(0.018)        | 0.012<br>(0.019)     |
| 3 Years Prior           | -0.042<br>(0.033) | -0.004<br>(0.043) | -0.028<br>(0.028) | -0.013<br>(0.026)   | 0.022<br>(0.049)       | 0.027<br>(0.038)   | 0.026<br>(0.047)     | 0.005<br>(0.018)         | -0.005<br>(0.029)    |
| 2 Years Prior           | -0.031<br>(0.043) | -0.011<br>(0.048) | -0.054<br>(0.034) | -0.042<br>(0.029)   | 0.054<br>(0.046)       | 0.025<br>(0.036)   | 0.005<br>(0.048)     | -0.020<br>(0.027)        | -0.005<br>(0.030)    |
| 1 Year Prior            | -0.031<br>(0.041) | -0.016<br>(0.051) | -0.019<br>(0.039) | -0.067<br>(0.043)   | 0.059<br>(0.072)       | 0.043<br>(0.040)   | -0.005<br>(0.055)    | -0.030<br>(0.030)        | 0.015<br>(0.035)     |
| Year 0                  | -0.018<br>(0.043) | 0.007<br>(0.064)  | -0.042<br>(0.048) | -0.118**<br>(0.048) | 0.073<br>(0.091)       | 0.025<br>(0.043)   | -0.004<br>(0.065)    | -0.021<br>(0.034)        | 0.003<br>(0.038)     |
| 1 Year After            | -0.070<br>(0.054) | -0.002<br>(0.069) | -0.051<br>(0.056) | -0.111**<br>(0.052) | 0.102<br>(0.087)       | 0.055<br>(0.047)   | 0.034<br>(0.080)     | -0.019<br>(0.036)        | 0.021<br>(0.040)     |
| 2 Years After           | -0.079<br>(0.066) | -0.003<br>(0.072) | -0.069<br>(0.056) | -0.121**<br>(0.054) | 0.119<br>(0.100)       | 0.090<br>(0.060)   | 0.039<br>(0.082)     | -0.013<br>(0.049)        | 0.067<br>(0.049)     |
| 3 Years After           | -0.053<br>(0.059) | 0.022<br>(0.077)  | -0.080<br>(0.053) | -0.142**<br>(0.062) | 0.109<br>(0.112)       | 0.056<br>(0.058)   | -0.002<br>(0.106)    | -0.038<br>(0.044)        | 0.033<br>(0.050)     |
| 4 Years After           | -0.077<br>(0.060) | 0.019<br>(0.084)  | -0.098<br>(0.063) | -0.157**<br>(0.064) | 0.133<br>(0.114)       | 0.061<br>(0.062)   | -0.026<br>(0.119)    | -0.031<br>(0.048)        | 0.033<br>(0.052)     |
| 5+ Years After          | -0.071<br>(0.065) | 0.011<br>(0.086)  | -0.096<br>(0.078) | -0.181**<br>(0.068) | 0.138<br>(0.127)       | 0.060<br>(0.064)   | -0.040<br>(0.119)    | -0.022<br>(0.052)        | 0.027<br>(0.062)     |
| Mean                    | 141.5             | 141.5             | 141.5             | 141.5               | 141.5                  | 141.5              | 141.5                | 141.5                    | 141.5                |
| No. of municipalities   | 548               | 548               | 548               | 548                 | 548                    | 548                | 548                  | 548                      | 548                  |
| N                       | 7,439             | 7,439             | 7,439             | 7,439               | 7,439                  | 7,439              | 7,439                | 7,439                    | 7,439                |
| R <sup>2</sup>          | 0.883             | 0.883             | 0.883             | 0.883               | 0.883                  | 0.883              | 0.883                | 0.883                    | 0.883                |
| Other anti-TB measures? | Yes               | Yes               | Yes               | Yes                 | Yes                    | Yes                | Yes                  | Yes                      | Yes                  |

\*Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Based on annual data from *Mortality Statistics* for the period 1900-1917, published by the U.S. Census Bureau. Each column represents the results from a separate OLS regression. The dependent variable is equal to the natural log of the pulmonary tuberculosis mortality rate per 100,000 population in municipality  $m$  and year  $t$ . Controls include the demographic characteristics listed in Table 1, the municipal and state anti-TB measures listed in Table 1, municipality fixed effects, year fixed effects, and municipality-specific linear trends. Regressions are weighted by municipality population. Standard errors, corrected for clustering at the state level, are in parentheses.

**Table A8. Pulmonary TB Mortality and Lags of Total Municipal Anti-TB Interventions**

|  | (1)               | (2)               | (3)               | (4)                | (5)                |
|--|-------------------|-------------------|-------------------|--------------------|--------------------|
| <i>Total Municipal Anti-TB Interventions</i>             | -0.002<br>(0.006) | -0.002<br>(0.008) | -0.007<br>(0.011) | -0.001<br>(0.009)  | -0.0004<br>(0.010) |
| <i>Total Municipal Anti-TB Interventions, 1 Year Lag</i> | 0.009<br>(0.008)  | 0.007<br>(0.006)  | 0.006<br>(0.005)  | -0.0002<br>(0.008) | 0.004<br>(0.007)   |
| <i>Total Municipal Anti-TB Interventions, 2 Year Lag</i> | ...               | 0.001<br>(0.009)  | 0.010<br>(0.014)  | 0.013<br>(0.016)   | 0.009<br>(0.010)   |
| <i>Total Municipal Anti-TB Interventions, 3 Year Lag</i> | ...               | ...               | -0.015<br>(0.012) | -0.017<br>(0.014)  | -0.022<br>(0.017)  |
| <i>Total Municipal Anti-TB Interventions, 4 Year Lag</i> | ...               | ...               | ...               | -0.001<br>(0.005)  | -0.002<br>(0.005)  |
| <i>Total Municipal Anti-TB Interventions, 5 Year Lag</i> | ...               | ...               | ...               | ...                | -0.003<br>(0.008)  |
| Mean   | 139.5             | 137.5             | 135.9             | 134.7              | 132.5              |
| No. of municipalities                                    | 534               | 526               | 515               | 504                | 498                |
| N  | 6,899             | 6,370             | 5,849             | 5,334              | 4,830              |
| R <sup>2</sup>   | 0.885             | 0.888             | 0.892             | 0.895              | 0.897              |

\*Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Based on annual data from *Mortality Statistics* for the period 1900-1917, published by the U.S. Census Bureau. Each column represents the results from a separate OLS regression. The dependent variable is equal to the natural log of the pulmonary tuberculosis mortality rate per 100,000 population in municipality  $m$  and year  $t$ . The municipal anti-TB index is equal to the sum of the municipal anti-TB measures listed in Table 1. Controls include the demographic characteristics listed in Table 1, the state anti-TB measures listed in Table 1, municipality fixed effects, year fixed effects, and municipality-specific linear trends. Regressions are weighted by municipality population. Standard errors, corrected for clustering at the state level, are in parentheses.

**Table A9. Descriptive Statistics for Sanatorium Variables in Table 7**

|   | Mean (SD)     |
|---|---------------|
| <i>Sanatorium</i>   | 0.078 (0.268) |
| <i>Number of Sanatoriums in Municipality</i>                    | 0.110 (0.473) |
| <i>Number of Sanatorium Beds in Municipality</i> (100s of beds) | 11.5 (72.1)   |
| <i>Any Sanatorium in State</i>                                  | 0.703 (0.457) |
| <i>Number of Sanatoriums in State</i>                           | 2.96 (3.64)   |
| <i>State-Run Sanatorium</i>                                     | 0.554 (0.497) |
| N   | 7,439         |

Notes: Unweighted means with standard deviations in parentheses.

**Table A10. Pulmonary TB Mortality and Leads and Lags of State-Run Sanatoriums**

|  | (1)                  | (2)                 | (3)                | (4)               |
|--|----------------------|---------------------|--------------------|-------------------|
| <i>3 Years Prior to State-Run Sanatorium</i> | ...                  | ...                 | ...                | 0.004<br>(0.017)  |
| <i>2 Years Prior to State-Run Sanatorium</i> | ...                  | ...                 | 0.020<br>(0.031)   | 0.022<br>(0.033)  |
| <i>1 Year Prior to State-Run Sanatorium</i>  | ...                  | -0.015<br>(0.017)   | -0.006<br>(0.025)  | -0.003<br>(0.030) |
| <i>Year 0</i>                                | -0.038***<br>(0.013) | -0.045**<br>(0.018) | -0.035<br>(0.022)  | -0.032<br>(0.028) |
| <i>1 Year After State-Run Sanatorium</i>     | -0.051**<br>(0.019)  | -0.059**<br>(0.025) | -0.047*<br>(0.027) | -0.044<br>(0.033) |
| <i>2 Years After State-Run Sanatorium</i>    | -0.027<br>(0.022)    | -0.036<br>(0.025)   | -0.023<br>(0.026)  | -0.020<br>(0.033) |
| <i>3+ Years After State-Run Sanatorium</i>   | -0.045*<br>(0.024)   | -0.055*<br>(0.028)  | -0.041<br>(0.030)  | -0.037<br>(0.035) |
| Mean   | 141.5                | 141.5               | 141.5              | 141.5             |
| No. of municipalities                        | 548                  | 548                 | 548                | 548               |
| N  | 7,439                | 7,439               | 7,439              | 7,439             |
| R <sup>2</sup>                               | 0.883                | 0.883               | 0.883              | 0.883             |

\*Statistically significant at 10% level; \*\* at 5% level; \*\*\* at 1% level.

Notes: Based on annual data from *Mortality Statistics* for the period 1900-1917, published by the U.S. Census Bureau. Each column represents the results from a separate OLS regression. The dependent variable is equal to the natural log of the pulmonary tuberculosis mortality rate per 100,000 population in municipality  $m$  and year  $t$ . Controls include the demographic characteristics listed in Table 1, the municipal and state anti-TB measures listed in Table 1, municipality fixed effects, year fixed effects, and municipality-specific linear trends. Regressions are weighted by municipality population. Standard errors, corrected for clustering at the state level, are in parentheses.