**Mexico**

**State-level**

| **Name** | **Variable name** | **Description** | **Source** |
| --- | --- | --- | --- |
| **Logged population** | log\_pop\_mx | Logarithm of the population in 2020. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of population aged 65 and over** | pct\_over65\_mx | Percentage of the population aged 65 and over. Sum of the population aged 65 and over divided by the total population, times 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Population density** | pop\_density\_mx | Total population per square kilometer. Total population divided by the area in square kilometers. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percentage of population in urban areas** | pct\_urban\_mx | Percent of the population aged 18 and over residing in urban areas. Population aged 18 and over residing in urban areas divided by the total population aged 18 and over, times 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of religious population** | pct\_religious\_mx | Calculated as= [1 - (non religious population aged 5 and over divided by the total population aged 5 and over)]x 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of catholic population** | pct\_catholic\_mx | Calculated as=[ 1 - (catholic population aged 5 and over divided by the total population aged 5 and over)] x 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of population employed in the tertiary sector** | pct\_tertiaryemp\_mx | Percent of the population employed in the tertiary sector.  Calculated as the population employed in the tertiary sector aged 15 and over divided by the total population aged 15 and over, times 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of indigenous-speaking population** | pct\_indiglang\_mx | Percent of the population who speak some indigenous language. Calculated as= [1 - (population aged 3 years and over who speaks some indigenous language divided the total population aged 3 years and over)] x 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **GDP per capita** | gdp\_percap\_2020 | GDP in millions of pesos in 2013 prices divided by the total population. | Producto Interno Bruto por entidad federativa (PIBE), 2018 revisado, año base 2013 serie detallada. In: <http://en.www.inegi.org.mx/programas/pibent/2013/default.html#Datos_abiertos> and 2020 Census from INEGI, in: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of informal employment** | pct\_informal\_enoe | Percentage of population informally employed in 2019. Data is provided on a quarterly basis. The variable was calculated as the average number of people employed in the informal sector over the 4 quarters of 2019 divided by the average number of people employed in all sectors over the 4 quarters of 2019. This data only includes the population aged 15 or over. | Encuesta Nacional de Ocupación y Empleo (ENOE) from INEGI. In: https://www.inegi.org.mx/programas/enoe/15ymas/#Microdatos |
| **Gini Coefficient** | gini\_mx | gini coefficient for 2020. | Consejo Nacional de Evaluación (CONEVAL). In: https://www.coneval.org.mx/Medicion/Paginas/Cohesion\_Social.aspx#:~:text=Coeficiente%20de%20Gini%3A%20mide%20la,en%20la%20distribuci%C3%B3n%20del%20ingreso. |
| **Percent of the population living in extreme poverty** | pct\_extreme\_poverty\_mx | Percentage of the population living in extreme poverty in 2020.[[1]](#footnote-0) | Consejo Nacional de Evaluación (CONEVAL). |
| **Percent of the population with a health insurance related to formal employment** | pct\_healthins\_mx | Total number of people affiliated with at least one of the following health services:  -The social security IMSS  - The ISSSTE  -The state ISSSTE  -PEMEX, DEFENSA or MARINA  -Private insurance  Divided by the total population, times 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of the population with health insurance** | pct\_healthins\_informal\_mx | Total number of people affiliated to any type of health service, divided by the population, times 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Index of interpersonal trust** | trust\_people\_mx | Index constructed as the first principal component of the following four variables in the questionnaire on Section V on Institutional Trust from Question 5.2.  Dígame el grado de confianza que tiene en / What is the degree of trust you have with your:  **AP5\_2\_1**  - vecinos (neighbors)  **AP5\_2\_2** - compañeros de trabajo / negocio, escuela (colleagues – coworkers or classmates at school)  **AP5\_2\_3** - familiares o parientes (hermanos, tíos, primos, etc.) (relatives)  **AP5\_2\_4** - amigos (friends) | Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública (ENVIPE) 2019.  In: https://www.inegi.org.mx/programas/envipe/2019/#Microdatos |
| **Index of institutional trust** | trust\_inst\_mx | Index constructed as the first principal component of the following four variables in the questionnaire on Section V on Institutional Trust ¿Cuánta confianza le inspira la (el) (AUTORIDAD)? / How much trust do you have in each of these authorities?    **AP5\_4\_04\_C** - Policía Federal / Federal Police  **AP5\_4\_05\_C** - Policía Ministerial o Judicial / Judicial or Ministerial Police  **AP5\_4\_07\_C** - Procuraduría General de la República (PGR) / General Attorney’s Office  **AP5\_4\_08\_C** - Ejército / Army  **AP5\_4\_09\_C** - Marina / Navy  **AP5\_4\_10\_C** - Jueces /Judges | Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública (ENVIPE) 2019.  In: https://www.inegi.org.mx/programas/envipe/2019/#Microdatos |
| **Healthcare expenditures per capita** | health\_expenditure\_2017 | Healthcare expenditures per capita. Total expenditures in healthcare for 2017 in thousands of pesos in 2017 market prices divided by the total population. | Data on healthcare expenditure is provided byMexico’s Health Ministry. Population data comes from yearly municipal projections estimated by Data Cívica. |
| **Tuberculosis cases** | tuberc\_cases\_2018 | Tuberculosisincidence rate per 100, 000 inhabitants. Total cases in 2018 divided by the total population in 2020. | Secretaría de Salud, SSA, Egresos hospitalarios. In: <http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da_egresoshosp_gobmx.html>  Population data comes from yearly municipal projections estimated by Data Cívica. |
| **Hospital beds per capita** | hospBeds\_rate\_ent | Hospital beds per 1000 inhabitants. Hospital beds among the population per 1000 inhabitants. | INEGI Banco de Indicadores: Total camas area hospitalizacion. https://www.inegi.org.mx/app/indicadores/ |
| **Average precipitation** | avg\_precipit | Monthly average precipitation in millimeters. | Comisión Nacional de Agua (CONAGUA). <https://smn.conagua.gob.mx/es/climatologia/pronostico-climatico/precipitacion-form> |
| **Infant mortality rate** | infant\_mort\_ent | Number of infant deaths for every 1,000 live births. Infant deaths refers to children younger than 1 year. | Sistema Nacional de Estadística y Geografía (SNI). https://www.snieg.mx/cni/escenario.aspx?idOrden=1.1&ind=6300000011&gen=146&d=n |
| **Election margin** | elxn\_margin\_mx | Percentage point lead that a candidate or party has in an election over the candidate or party ranked second. Calculated as:  The difference between the first and second place, divided by the total valid votes, times 100. | Data from 2018 presidential election from the Instituto Nacional Electoral (INE). In: https://siceen.ine.mx:3000/#/tablas-resultados |
| **State capacity** | state\_capacity | Total property tax collected per capita. Calculated by adding the total property tax collected in pesos in 2019 divided by the total population. | Budget transparency. Expenditure observatory.In: (<https://www.transparenciapresupuestaria.gob.mx/es/PTP/Recaudacion_Local>) |
| **Female leader** | women\_exec\_mx | Female governors in office prior to the pandemic. Factor variable that takes the value of 1 if the governor is female and 0 otherwise. | Censo de Gobiernos Estatales. In: https://www.inegi.org.mx/programas/cnge/2021/#Documentacion |
| **Female legislator** | women\_leg\_mx | Percentage of total local legislators that are female. Calculated by dividing the number of state-level female legislators over the total number of members of the local congress times 100. | Censo Nacional de Poderes Legislativos Estatales [2019 from INEGI. https://www.inegi.org.mx/programas/cnple/2019/](https://www.inegi.org.mx/programas/cnple/2019/) |
| **Right-wing party executive** | party\_exec\_right\_ent\_mx | Binary variable that takes the value of 1 if the state-level executive is from the Partido de Accion Nacional (PAN), a right-wing party, and 0 otherwise. | Censo Nacional de Gobierno, Seguridad Pública y Sistema Penitenciario Estatales 2020. In: https://www.inegi.org.mx/programas/cngspspe/2020/ |
| **Federal-state executive partisan mismatch** | party\_mis\_fed\_mx | Mismatch in parties between federal head of state and state-level executive. Binary/boolean/dummy variable that takes the value of 1 if the state-level executive’s party is different from the federal head of state’s party. | Censo Nacional de Gobierno, Seguridad Pública y Sistema Penitenciario Estatales 2020. In: https://www.inegi.org.mx/programas/cngspspe/2020/ |
| **State executive-legislative partisan mismatch** | party\_mis\_state\_mx | Mismatch in parties between state-level executive leader and majority party in state-level congress. Dummy variable that takes the value of 1 if the state-level executive’s party is different from the majority party in state-level congress. | Censo Nacional de Poderes Legislativos Estatales [from INEGI. In: https://www.inegi.org.mx/programas/cnple/2019/](https://www.inegi.org.mx/programas/cnple/2019/)  Censo Nacional de Gobierno, Seguridad Pública y Sistema Penitenciario Estatales 2019 from INEGI. In: https://www.inegi.org.mx/programas/cngspspe/2019/#Microdatos |
| **Federal-mun executive partisan mismatch** | Not available for state level. | Not available for state level. | Not available for state level. |
| **Executive leader experience** | leader\_experience\_ent\_mx | Number of days the state level executive leader (governor) has spent in office up to March 1st 2020. | Censo Nacional de Gobierno, Seguridad Pública y Sistema Penitenciario Estatales 2020. In: <https://www.inegi.org.mx/programas/cngspspe/2020/> |
| **Local election in 2020** | elxn\_soon\_mx | Boolean variable that takes the value of 1 if there was a gubernatorial election in 2020 and 0 otherwise. | National Electoral Institute (INE) Election Calendar [https://www.ine.mx/voto-y-elecciones/calendario-electoral](https://www.ine.mx/voto-y-elecciones/calendario-electoral/) |
| **Average homicide rate** | avg\_homicide\_rate | Total homicides among the population per 100,000 inhabitants between 2015 and 2019. | Mortalidad y Natalidad from INEGI. [https://www.inegi.org.mx/programas/natalidad/#Datos\_abiertos , accessed nov 2021](https://www.inegi.org.mx/programas/natalidad/#Datos_abiertos) |
| **Serious respiratory disease cases** | irag\_rate\_ent | Average rate for 2017-2020. Yearly rates calculated as the number of deaths caused by severe respiratory diseases among total deaths per 100,000 inhabitants. | Mortalidad y Natalidad from INEGI.  [https://www.inegi.org.mx/programas/natalidad/#Datos\_abiertos , accessed nov 2021](https://www.inegi.org.mx/programas/natalidad/#Datos_abiertos) |
| **Influenza cases** | influenza\_rate\_ent | Average rate for 2017-2020. Yearly rates calculated as the number of influenza cases, among the total population per 100,000 inhabitants. | Dirección General de Epidemiología, Secretaría de Salud, Informes Semanales para la Vigilancia Epidemiológica de Influenza (2017-2020). In: https://www.gob.mx/salud/documentos/informes-semanales-para-la-vigilancia-epidemiologica-de-influenza-2020 |
| **Influenza deaths** | influenza\_death\_rate\_ent | Average rate for 2017-2020. Yearly rates calculated as the total influenza deaths, among the total deaths per 100,000 inhabitants. | Dirección General de Epidemiología, Secretaría de Salud, Informes Semanales para la Vigilancia Epidemiológica de Influenza (various years). In: https://www.gob.mx/salud/documentos/informes-semanales-para-la-vigilancia-epidemiologica-de-influenza-2020 |
| **Health state capacity** | health\_capacity\_mx\_ent | Number of public health facilities in each state, divided by the population, times 100,000. | Directorio Estadístico Nacional de Unidades Económicas (DENUE). In: <https://www.inegi.org.mx/rnm/index.php/catalog/587>  Accessed Nov. 2021. |
| **Percent of the population with obesity** | pct\_obesity | Population over 20 years of age with obesity, divided by the total population over 20 years of age, times 100. | Encuesta de Salud y Nutrición. (ENSANUT) https://www.inegi.org.mx/programas/ensanut/2018/#Microdatos  Accessed Nov. 2021. <https://www.inegi.org.mx/investigacion/pohd/2018/#Tabulados> |
| **Percent of the population with diabetes** | pct\_diabetes | Population over 20 years of age with diabetes, divided by the total population over 20 years of age, times 100. | Encuesta de Salud y Nutrición. (ENSANUT) https://www.inegi.org.mx/programas/ensanut/2018/#Microdatos  Accessed Nov. 2021. <https://www.inegi.org.mx/investigacion/pohd/2018/#Tabulados> |
| **Percent of the population with hypertension** | pct\_hypertension | Population over 20 years of age with hypertension, divided by the total population over 20 years of age, times 100. | Encuesta de Salud y Nutrición. (ENSANUT) https://www.inegi.org.mx/programas/ensanut/2018/#Microdatos  Accessed Nov. 2021. <https://www.inegi.org.mx/investigacion/pohd/2018/#Tabulados> |
| **Social backwardness index** | social\_backwardness\_mx | social backwardness index in 2020.[[2]](#footnote-1) | Indice de Rezago Social 2020 from CONEVAL. <https://www.coneval.org.mx/Medicion/IRS/Paginas/Indice_de_Rezago_Social_2020_anexos.aspx> |
| **Medical staff rate** | medical\_staff\_rate | total medical staff among the population per 1,000 inhabitants. | http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da\_recursos\_gobmx.html |
| **Nurses rate** | nurses\_rate\_ent | total nurses among the population per 1,000 inhabitants. | http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da\_recursos\_gobmx.html |
| **Cumulative sum of covid deaths** | tot\_covid\_deaths | Cumulative covid cases organized by month-year. | Daily covid cases from Mexico’s Health Ministry. (SSA). https://datos.covid-19.conacyt.mx/#DownZCSV |
| **Excess mortality INEGI** | excess\_mortality\_inegi | The difference of covid deaths in one year from the average number of deaths in previous years (2015-2019). This variable is only available for 2020. | INEGI's Registro de Defunciones Generales. In: https://www.inegi.org.mx/programas/mortalidad/?ps=Microdatos |
| **Excess mortality rate INEGI** | rate\_excess\_inegi | The difference of covid deaths in one year from the average number of deaths in previous years (2015-2019), divided by the average number of deaths in previous years, times 100. This variable is only available for 2020. | INEGI's Registro de Defunciones Generales. In: https://www.inegi.org.mx/programas/mortalidad/?ps=Microdatos |
| **Excess mortality SSA** | excess\_mortality\_ssa | The difference of covid deaths in one year from the average number of deaths in previous years (2015-2019). This variable is available for 2020 and 2021. | Data on covid deaths come from Mexico’s Health Ministry (SSA). In: http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da\_exceso\_mortalidad\_mexico\_gobmx.html  Data on deaths for 2015-2019 is provided by INEGI's Registro de Defunciones Generales. In: https://www.inegi.org.mx/programas/mortalidad/?ps=Microdatos |
| **Excess mortality rate SSA** | rate\_excess\_mortality\_ssa | The difference of covid deaths in one year from the average number of deaths in previous years (2015-2019), divided by the average number of deaths in previous years, times 100. This variable is available for 2020 and 2021. | Data on covid deaths come from Mexico’s Health Ministry (SSA). In: http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da\_exceso\_mortalidad\_mexico\_gobmx.html  Data on deaths for 2015-2019 is provided by INEGI's Registro de Defunciones Generales. In: https://www.inegi.org.mx/programas/mortalidad/?ps=Microdatos |

**Mexico**

**Municipality-level[[3]](#footnote-2)**

| **Name** | **Variable name** | **Description** | **Source** |
| --- | --- | --- | --- |
| **Logged population** | log\_pop\_mx | Logarithm of the population in 2020. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of population aged 65 and over** | pct\_over65\_mx | Percentage of the population aged 65 and over. Sum of the population aged 65 and over divided by the total population, times 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Population density** | pop\_density\_mx | Total population per square kilometer. Total population divided by the area in square kilometers. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percentage of population in urban areas** | pct\_urban\_mx | Percent of the population aged 18 and over residing in urban areas. Population aged 18 and over residing in urban areas divided by the total population aged 18 and over, times 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of religious population** | pct\_religious\_mx | Percent of religious population. Calculated as=[ 1 - (nonreligious population aged 5 and over divided by the total population aged 5 and over)] x 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of catholic population** | pct\_catholic\_mx | Percent of catholic population. Calculated as=[ 1 - (catholic population aged 5 and over divided by the total population aged 5 and over)] x 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of population employed in the tertiary sector** | pct\_tertiaryemp\_mx | Percent of the population employed in the tertiary sector.  Calculated as the population employed in the tertiary sector aged 15 and over divided by the total population aged 15 and over, times 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of indigenous-speaking population** | pct\_indiglang\_mx | Percent of the population who speak some indigenous language. Calculated as= [1 - (population 3 years and over who speaks some indigenous language divided the population 3 years and over)] x 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **GDP per capita** | gdp\_percapita\_municipal\_2020 | Percentage of vulnerable people by income in 2020.[[4]](#footnote-3) | Pobreza municipal 2010-2020. In: [**https://www.coneval.org.mx/Medicion/Paginas/Pobreza-municipio-2010-2020.aspx**](https://www.coneval.org.mx/Medicion/Paginas/Pobreza-municipio-2010-2020.aspx) |
| **Percent of informal employment** | pct\_informal\_mx | People who are 15 years and over with *Seguro Popular* and are employed divided by total employed people 15 years and over, times 100.[[5]](#footnote-4) | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Gini Coefficient** | gini\_mx | Gini coefficient for 2020. | Consejo Nacional de Evaluación (CONEVAL). In: https://www.coneval.org.mx/Medicion/Paginas/Cohesion\_Social.aspx#:~:text=Coeficiente%20de%20Gini%3A%20mide%20la,en%20la%20distribuci%C3%B3n%20del%20ingreso. |
| **Percent of the population living in extreme poverty** | pct\_extreme\_poverty\_mx | Percentage of the population living in extreme poverty in 2020.[[6]](#footnote-5) | Consejo Nacional de Evaluación (CONEVAL). |
| **Percent of the population with health insurance related to formal employment** | pct\_healthins\_mx | Total number of people affiliated with at least one of these health services:  -The social security (IMSS)  -el ISSSTE  -The state ISSSTE  -PEMEX, DEFENSA or MARINA  -private insurance  Divided by the total population, times 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Percent of the population with health insurance** | pct\_healthins\_informal\_mx | Total number of people affiliated to any type of health service, divided by the population, times 100. | 2020 Census from INEGI. In: <https://www.inegi.org.mx/programas/ccpv/2020/default.html#Microdatos> |
| **Infant mortality rate** | infant\_mort\_mun | Number of infant deaths for every 1,000 live births. Infant deaths refers to children younger than 1 year. | Data on infant deaths comes from the database for Deaths registered (general mortality) from INEGI. Data on live births comes from the birthrate database from INEGI. |
| **Victory margin** | elxn\_margin\_mx | Percentage point lead that a candidate or party has in an election over the candidate or party ranked second. Calculated as: the difference between the first and second place, divided by the total votes, times 100. | Data from 2018 presidential election from the Instituto Nacional Electoral (INE). |
| **State capacity** | state\_capacity | Total property tax collected per capita. Calculated by adding the total property tax collected in pesos in 2018 divided by the total population. | Budget transparency. Expenditure observatory. www.transparenciapresupuestaria.gob.mx (<https://www.transparenciapresupuestaria.gob.mx/es/PTP/Recaudacion_Local>) |
| **Female leader** | women\_exec\_mun\_mx | A binary variable that takes the value of 1 if the municipal president is a woman and 0 otherwise. | Censo Nacional de Gobiernos Municipales y Demarcaciones Territoriales de la Ciudad de México 2019. In: https://www.inegi.org.mx/programas/cngmd/2019/#Microdatos |
| **Female legislator** | women\_leg\_mun\_mx | Percentage of women who hold a position as an alderwomen or syndic. It is calculated by dividing the number of women in municipal-level legislative power by the total number of legislative-power members, times 100. | Censo Nacional de Gobiernos Municipales y Demarcaciones Territoriales de la Ciudad de México 2019. In: https://www.inegi.org.mx/programas/cngmd/2019/#Microdatos |
| **Right-wing party executive** | party\_exec\_right\_mun\_mx | Boolean variable that takes the value of 1 if the municipal president is from the Partido de Acción Nacional (PAN), a right-wing party, and 0 otherwise. | Censo Nacional de Gobiernos Municipales y Demarcaciones Territoriales de la Ciudad de México 2019. In: https://www.inegi.org.mx/programas/cngmd/2019/#Microdatos |
| **Federal-state executive partisan mismatch** | Not available for municipal level. | Not available for municipal level. | Not available for municipal level. |
| **State executive-legislative partisan mismatch** | Not available for municipal level. | Not available for municipal level. | Not available for municipal level. |
| **Federal-mun executive partisan mismatch** | party\_mis\_fed\_mun\_mx | Mismatch in parties between federal head of state and municipal-level executive. It is a dummy variable that takes the value of 1 if the municipal president’s party is different from the federal head of state’s party. | Censo Nacional de Gobiernos Municipales y Demarcaciones Territoriales de la Ciudad de México 2019 from INEGI. https://www.inegi.org.mx/programas/cngmd/2019/#Microdatos |
| **State-mun executive partisan mismatch** | party\_mis\_state\_mun\_mx | Mismatch in parties between the governor and the municipal president. A binary variable that takes the value of 1 if the municipal-level executive leader party is different from the state-level executive party | Censo Nacional de Gobiernos Municipales y Demarcaciones Territoriales de la Ciudad de México 2019 from INEGI. <https://www.inegi.org.mx/programas/cngmd/2019/#Microdatos>  Censo Nacional de Gobierno, Seguridad Pública y Sistema Penitenciario Estatales 2019 from INEGI. <https://www.inegi.org.mx/programas/cngspspe/2019/#Microdatos> |
| **Executive leader experience** | leader\_experience\_mun\_mx | Number of days municipal president has spent in office up to March 1st 2020. | [Censo Nacional de Gobiernos Municipales y Demarcaciones Territoriales de la Ciudad de México 2019](https://www.inegi.org.mx/programas/cngmd/2019/). In: <https://www.inegi.org.mx/programas/cngmd/2019/> |
| **Local election in 2020** | elxn\_soon\_mx | Binary variable that takes the value of 1 if there was a municipal president election in 2020. | National Electoral Institute (INE) Election Calendar https://www.ine.mx/voto-y-elecciones/calendario-electoral/ |
| **Average homicide rate** | avg\_homicide\_rate | Total homicides among the population per 100,000 inhabitants, between 2015-2019. | Mortalidad y Natalidad from INEGI. [https://www.inegi.org.mx/programas/natalidad/#Datos\_abiertos , accessed nov 2021](https://www.inegi.org.mx/programas/natalidad/#Datos_abiertos) |
| **Serious respiratory disease cases** | irag\_rate\_mun | Deaths caused by severe respiratory diseases among total deaths per 100,000 inhabitants in 2020. | Mortalidad y Natalidad from INEGI.  [https://www.inegi.org.mx/programas/natalidad/#Datos\_abiertos , accessed nov 2021](https://www.inegi.org.mx/programas/natalidad/#Datos_abiertos) |
| **Influenza deaths** | inf\_rate\_mun | Influenza deaths divided among the population per 100,000 inhabitants in 2020. | Inegi: Mortalidad y Natalidad from INEGI. [https://www.inegi.org.mx/programas/natalidad/#Datos\_abiertos , accessed nov 2021](https://www.inegi.org.mx/programas/natalidad/#Datos_abiertos) |
| **Influenza cases** | influenza\_cases\_rate | Influenza cases among total population per 100,000 inhabitants in 2020. | Secretaría de Salud, SSA, Egresos hospitalarios. <http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da_egresoshosp_gobmx.html> Accessed nov 2022. |
| **Tuberculosis cases** | tuberc\_cases\_rate | Tuberculosis cases among total population per 100,000 inhabitants in 2020. | Secretaría de Salud, SSA, Egresos hospitalarios. <http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da_egresoshosp_gobmx.html> Accessed nov 2022. |
| **Health state capacity** | health\_capacity\_mx\_mun | Number of public health facilities in each municipality, among the population, per 100,000 inhabitants. | Directorio Estadístico Nacional de Unidades Económicas (DENUE). In: <https://www.inegi.org.mx/rnm/index.php/catalog/587>  Accessed Nov. 2021. |
| **Percent of the population with obesity (low quality)** | pct\_obesity\_lq | Population over 20 years of age with obesity, divided by the total population over 20 years of age, times 100. Low quality includes estimations with coefficients of variation of over 20%. | Prevalencia de Obesidad, Hipertensión y Diabetes para los Municipios de México 2018. In: <https://www.inegi.org.mx/investigacion/pohd/2018/>  [018/#Tabulados](https://www.inegi.org.mx/investigacion/pohd/2018/#Tabulados) |
| **Percent of the population with obesity (high quality)** | pct\_obesity\_hq | Population over 20 years of age with obesity, divided by the total population over 20 years of age, times 100. High quality includes estimations with coefficients of variation of under 20%. | Prevalencia de Obesidad, Hipertensión y Diabetes para los Municipios de México 2018. In: <https://www.inegi.org.mx/investigacion/pohd/2018/>[018/#Tabulados](https://www.inegi.org.mx/investigacion/pohd/2018/#Tabulados) |
| **Percent of the population with diabetes (low quality)** | pct\_diabetes\_lq | Population over 20 years of age with diabetes, divided by the total population over 20 years of age, times 100. Low quality includes estimations with coefficients of variation of over 20%. | Prevalencia de Obesidad, Hipertensión y Diabetes para los Municipios de México 2018. In: <https://www.inegi.org.mx/investigacion/pohd/2018/> |
| **Percent of the population with diabetes (high quality)** | pct\_diabetes\_hq | Population over 20 years of age with diabetes, divided by the total population over 20 years of age, times 100. High quality includes estimations with coefficients of variation of under 20%. | Prevalencia de Obesidad, Hipertensión y Diabetes para los Municipios de México 2018. In: <https://www.inegi.org.mx/investigacion/pohd/2018/> |
| **Percent of the population with hypertension (low quality)** | pct\_hypertension\_lq | Population over 20 years of age with hypertension, divided by the total population over 20 years of age, times 100. Low quality includes estimations with coefficients of variation of over 20%. | Prevalencia de Obesidad, Hipertensión y Diabetes para los Municipios de México 2018. In: <https://www.inegi.org.mx/investigacion/pohd/2018/> |
| **Percent of the population with hypertension (high quality)** | pct\_hypertension\_hq | Population over 20 years of age with hypertension, divided by the total population over 20 years of age, times 100. High quality includes estimations with coefficients of variation of under 20%. | Prevalencia de Obesidad, Hipertensión y Diabetes para los Municipios de México 2018. In: <https://www.inegi.org.mx/investigacion/pohd/2018/> |
| **Social backwardness index** | social\_backwardness\_mx | social backwardness index in 2020. | Indice de Rezago Social 2020 from CONEVAL. <https://www.coneval.org.mx/Medicion/IRS/Paginas/Indice_de_Rezago_Social_2020_anexos.aspx> |
| **Healthcare expenditures per capita 2019** | healthcare\_expenditure\_19 | Healthcare expenditures per capita. Total expenditures in healthcare for 2019 in thousands of pesos, divided by the total population. | Data on healthcare expenditure is provided byMexico’s Health Ministry. Population data comes from yearly municipal projections estimated by Data Cívica with data from CONAPO. |
| **Healthcare expenditures per capita 2020** | healthcare\_expenditure\_20 | Healthcare expenditures per capita. Total expenditures in healthcare for 2020 in thousands of pesos, divided by the total population. 2020 data is preliminary. | Data on healthcare expenditure is provided byMexico’s Health Ministry. Population data comes from yearly municipal projections estimated by Data Cívica. |
| **Hospital beds per capita** | hospBeds\_rate\_mun | Hospital beds per 1000 inhabitants. Hospital beds among the population per 1000 inhabitants. | SSA, Datos Abiertos, recursos en salud<http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da_recursos_gobmx.html> |
| **Index of interpersonal trust** |  |  |  |
| **Index of institutional trust** |  |  |  |
| **Average precipitation** | av\_precipit\_2021 | Monthly average precipitation in millimeters. | Comisión Nacional de Agua (CONAGUA). <https://smn.conagua.gob.mx/es/climatologia/pronostico-climatico/precipitacion-form> |
| **Medical staff rate** | medical\_staff\_rate | Total medical staff among the population per 1,000 inhabitants. | http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da\_recursos\_gobmx.html |
| **Nurses rate** | nurses\_rate\_mun | Total nurses among the population per 1,000 inhabitants | http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da\_recursos\_gobmx.html |

**Dependent variables**

**State**

| **Name** | **Variable name** | **Description** | **Source** |
| --- | --- | --- | --- |
| **Cumulative sum of covid deaths** | tot\_covid\_deaths | Cumulative covid cases organized by month-year. | Daily covid cases from Mexico’s Health Ministry. (SSA). https://datos.covid-19.conacyt.mx/#DownZCSV |
| **Excess mortality INEGI** | excess\_mortality\_inegi | The difference of covid deaths in one year from the average number of deaths in previous years (2015-2019). This variable is only available for 2020. | INEGI's Registro de Defunciones Generales. In: https://www.inegi.org.mx/programas/mortalidad/?ps=Microdatos |
| **Excess mortality rate INEGI** | rate\_excess\_inegi | The difference of covid deaths in one year from the average number of deaths in previous years (2015-2019), divided by the average number of deaths in previous years, times 100. This variable is only available for 2020. | INEGI's Registro de Defunciones Generales. In: https://www.inegi.org.mx/programas/mortalidad/?ps=Microdatos |
| **Excess mortality SSA** | excess\_mortality\_ssa | The difference of covid deaths in one year from the average number of deaths in previous years (2015-2019). This variable is available for 2020 and 2021. | Data on covid deaths come from Mexico’s Health Ministry (SSA). In: <http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da_exceso_mortalidad_mexico_gobmx.html>  Data on deaths for 2015-2019 is provided by INEGI's Registro de Defunciones Generales. In: https://www.inegi.org.mx/programas/mortalidad/?ps=Microdatos |
| **Excess mortality rate SSA** | rate\_excess\_mortality\_ssa | The difference of covid deaths in one year from the average number of deaths in previous years (2015-2019), divided by the average number of deaths in previous years, times 100. This variable is available for 2020 and 2021. | Data on covid deaths come from Mexico’s Health Ministry (SSA). In: http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da\_exceso\_mortalidad\_mexico\_gobmx.html  Data on deaths for 2015-2019 is provided by INEGI's Registro de Defunciones Generales. In: https://www.inegi.org.mx/programas/mortalidad/?ps=Microdatos |

**Municipal**

| **Name** | **Variable name** | **Description** | **Source** |
| --- | --- | --- | --- |
| **Cumulative sum of covid deaths** | tot\_covid\_deaths | Cumulative covid cases organized by month-year. | Daily covid cases from SSA. <https://datos.covid-19.conacyt.mx/#DownZCSV> |
| **Excess mortality** | excess\_mortality\_inegi | The difference of covid deaths in one year from the average number of deaths in previous years (2015-2019). This variable is only available for 2020. | INEGI's Registro de Defunciones Generales. In: https://www.inegi.org.mx/programas/mortalidad/?ps=Microdatos |
| **Excess mortality rate** | rate\_excess\_inegi | The difference of covid deaths in one year from the average number of deaths in previous years (2015-2019), divided by the average number of deaths in previous years, times 100. This variable is only available for 2020. | INEGI's Registro de Defunciones Generales. In: https://www.inegi.org.mx/programas/mortalidad/?ps=Microdatos |
| **Excess mortality** | excess\_mortality\_ssa | The difference of covid deaths in one year from the average number of deaths in previous years (2015-2019). This variable is available for 2020 and 2021. | Data on covid deaths come from Mexico’s Health Ministry (SSA). In: <http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da_exceso_mortalidad_mexico_gobmx.html>  Data on deaths for 2015-2019 is provided by INEGI's Registro de Defunciones Generales. In: https://www.inegi.org.mx/programas/mortalidad/?ps=Microdatos |
| **Excess mortality rate** | rate\_excess\_mortality\_ssa | The difference of covid deaths in one year from the average number of deaths in previous years (2015-2019), divided by the average number of deaths in previous years, times 100. This variable is available for 2020 and 2021. | Data on covid deaths come from Mexico’s Health Ministry (SSA). In: <http://www.dgis.salud.gob.mx/contenidos/basesdedatos/da_exceso_mortalidad_mexico_gobmx.html>  Data on deaths for 2015-2019 is provided by INEGI's Registro de Defunciones Generales. In: https://www.inegi.org.mx/programas/mortalidad/?ps=Microdatos |

1. According to CONEVAL, a person is in a situation of extreme poverty when he/she has three or more deprivations, out of a possible six, within the Social Deprivation Index and is also below the minimum welfare line. People in this situation have such a low income that, even if they were to devote it entirely to the purchase of food, they would not be able to acquire the nutrients necessary for a healthy life. [↑](#footnote-ref-0)
2. It is a weighted measure that summarizes four indicators of social deprivation (education, health, basic services and housing quality and space) in a single index that aims to rank the observation units according to their social deprivation. [↑](#footnote-ref-1)
3. Mexico is comprised of 32 states, where the head of the executive branch is the governor. Likewise, each state is made up of municipalities, where the leader of the executive branch is the municipal president. [↑](#footnote-ref-2)
4. The population that has no social deprivation but whose income is less than or equal to the welfare line. [↑](#footnote-ref-3)
5. *Seguro Popular* is a form of insurance in Mexico, created to provide financial protection to the non-right holder population (i.e., those who do not have any other type of insurance such as IMSS, ISSSTE or PEMEX), through a public and voluntary health insurance scheme. [↑](#footnote-ref-4)
6. According to CONEVAL, a person is in a situation of extreme poverty when he/she has three or more deprivations, out of a possible six, within the Social Deprivation Index and is also below the minimum welfare line. [↑](#footnote-ref-5)