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# Individual-Level Datasets

# Acute Care Hospital Case Mix (Case Mix)

#### CASEMIX.ED\_PHD

**Brief Description:** The Outpatient Emergency Department (ED) Database contains patient demographics, clinical characteristics, services provided, charges, and hospitals and practitioner information, as well as mode of transport.

Data Owner: Center for Health Information and Analysis (CHIA)

Population: ED discharges from MA hospitals for all MA residents

#### **Important Data Notes:**

- Does not include:
  - o Hospital services rendered to Massachusetts residents at out of state hospitals
  - Hospitals operated by the Veterans Administration (VA)
  - Behavioral health hospitals
- A record ends up in the Case Mix file for the "highest" level of care received. If a person was seen in the ED and then transferred for Observation, that record would be in the Observation dataset. If a person was seen in the ED and then admitted inpatient, that record would be in the Hospitalization dataset.

More information: <a href="http://www.chiamass.gov/case-mix-data/">http://www.chiamass.gov/case-mix-data/</a>

#### CASEMIX.HD\_PHD

**Brief Description:** The Hospital Inpatient Discharge Database (HIDD) contains comprehensive patientlevel information including socio-demographics, clinical data, and charge data.

Data Owner: Center for Health Information and Analysis (CHIA)

Population: Inpatient hospital discharges from MA hospitals for all MA residents

#### **Important Data Notes:**

- Does not include:
  - Hospital services rendered to Massachusetts residents at out of state hospitals
  - Hospitals operated by the Veterans Administration (VA)
  - Behavioral health hospitals
- A record ends up in the Case Mix file for the "highest" level of care received. For example, if a person was seen for Observation and then admitted inpatient that record would be in the Hospitalization dataset.

More information: <a href="http://www.chiamass.gov/case-mix-data/">http://www.chiamass.gov/case-mix-data/</a>

#### CASEMIX.OO\_PHD

**Brief Description:** The Outpatient Hospital Observation Discharge Database (OOD) contains comprehensive patient-level information, including socio-demographics, clinical data, and charge data.

Data Owner: Center for Health Information and Analysis (CHIA)

Population: Observation stay discharges from MA hospitals for all MA residents

#### **Important Data Notes:**

- Does not include:
  - o Hospital services rendered to Massachusetts residents at out of state hospitals
  - Hospitals operated by the Veterans Administration (VA)
  - Behavioral health hospitals
- A record ends up in the Case Mix file for the "highest" level of care received. This means that the Hospitalization dataset includes records where the person was admitted through the ED, after a period of Observation, or who were directly admitted to an inpatient unit.

#### More information: <a href="http://www.chiamass.gov/case-mix-data/">http://www.chiamass.gov/case-mix-data/</a>

# All Payer Claims Database (APCD)

#### PHDAPCD.DENTAL

**Brief Description:** Dental claims submitted by commercial insurance carriers and public programs (Medicaid/ MassHealth). These claims include specialty carriers and administrators of "carved-out" services including dental. The database also contains records about individual plan members (e.g., demographics and enrollment) and can be linked to provider and insurance product data (e.g., product type and coverage type).

#### Data Owner: Center for Health Information and Analysis (CHIA)

**Population:** The MA APCD includes data on coverage and services for the vast majority of Massachusetts residents with public or private insurance.

- Does not include:
  - Workers' Compensation
  - TRICARE and the Veterans Health Administration
  - Federal Employees Health Benefit Plan
- Information on uninsured individuals is only included to the extent that they enroll in the Commonwealth's Health Safety Net.
- Beginning in early 2016, as a result of the Supreme Court decision in Gobeille v. Liberty Mutual, some employers who offer self-funded ERISA plans have been removed from the MA APCD. There are several self-insured plans that are not subject to ERISA plans, such as those operated by state agencies, municipalities, the Group Insurance Commission, Medicare, and Medicaid.

The decision does not prohibit the voluntary submission of self-insured plan data to the MA APCD. At the end of 2017 reporting period, approximately 75% (or about 1.75 million members) of self-insured Member Eligibility data is missing from the MA APCD.

• Insurance fees (such as coinsurance) listed on a claim line either apply to the direct claim line or the entire claim – it depends on how the carrier is calculating it, and if payments are being bundled. Interpret with caution.

More information: <a href="http://www.chiamass.gov/ma-apcd/">http://www.chiamass.gov/ma-apcd/</a>

#### **PHDAPCD.MHEE**

**Brief Description:** Contains member eligibility data provided by MassHealth on enrolled clients. This can be linked to the medical, dental, and pharmacy APCD claims.

Data Owner: Center for Health Information and Analysis (CHIA)

**Population:** The MA APCD includes data on coverage and services for the vast majority of Massachusetts residents with public or private insurance.

#### **Important Data Notes:**

• Only covers MassHealth members

More information: <a href="http://www.chiamass.gov/ma-apcd/">http://www.chiamass.gov/ma-apcd/</a>

#### PHDAPCD.MEDICAL

**Brief Description:** Medical claims submitted by commercial insurance carriers and public programs (Medicaid/ MassHealth). These claims come both from medical carriers and from specialty carriers and administrators of "carved-out" services including mental health/chemical dependency. The database also contains records about individual plan members (e.g., demographics and enrollment) and can be linked to provider and insurance product data (e.g., product type and coverage type).

Data Owner: Center for Health Information and Analysis (CHIA)

**Population:** The MA APCD includes data on coverage and services for the vast majority of Massachusetts residents with public or private insurance.

- Does not include:
  - Workers' Compensation
  - TRICARE and the Veterans Health Administration
  - Federal Employees Health Benefit Plan
- Information on uninsured individuals is only included to the extent that they enroll in the Commonwealth's Health Safety Net.
- Beginning in early 2016, as a result of the Supreme Court decision in Gobeille v. Liberty Mutual, some employers who offer self-funded ERISA plans have been removed from the MA APCD. There are several self-insured plans that are not subject to ERISA plans, such as those operated

by state agencies, municipalities, the Group Insurance Commission, Medicare, and Medicaid. The decision does not prohibit the voluntary submission of self-insured plan data to the MA APCD. At the end of 2017 reporting period, approximately 75% (or about 1.75 million members) of self-insured Member Eligibility data is missing from the MA APCD.

- Highest Version Indicator: MA APCD submissions are at the claim line level. Typically, each time
  a claim is adjudicated a line is created. As a result, each claim may have multiple lines.
  Identifying the highest version of the claim allows analysts to determine total charges,
  discounts, payments, etc. Highest version flags, based on carrier-specific logic, are available for
  the top 32 carriers for Medical Claims.
- Insurance fees (such as coinsurance) listed on a claim line either apply to the direct claim line or the entire claim it depends on how the carrier is calculating it, and if payments are being bundled. Interpret with caution.
- For general analyses of ICD codes, it is recommended to search all ICD diagnosis code fields (MED\_ADM\_DIAGNOSIS, MED\_DIS\_DIAGNOSIS, MED\_ECODE, MED\_ICD1- MED\_ICD25).
- MED\_ECODE may contain codes other than e-codes; additionally, e-codes could be found in other ICD diagnosis code fields (MED\_ADM\_DIAGNOSIS, MED\_DIS\_DIAGNOSIS, MED\_ICD1-MED\_ICD25)

More information: <a href="http://www.chiamass.gov/ma-apcd/">http://www.chiamass.gov/ma-apcd/</a>

#### **PHDAPCD.PHARMACY**

**Brief Description:** Pharmacy claims submitted by commercial insurance carriers and public programs (Medicaid/ MassHealth). These claims come both from medical carriers and from specialty carriers and administrators of "carved-out" services including pharmacy. The database also contains records about individual plan members (e.g., demographics and enrollment) and can be linked to provider and insurance product data (e.g., product type and coverage type).

Data Owner: Center for Health Information and Analysis (CHIA)

**Population:** The MA APCD includes data on coverage and services for the vast majority of Massachusetts residents with public or private insurance.

- Does not include:
  - Workers' Compensation
  - o TRICARE and the Veterans Health Administration
  - Federal Employees Health Benefit Plan
- Information on uninsured individuals is only included to the extent that they enroll in the Commonwealth's Health Safety Net.
- Beginning in early 2016, as a result of the Supreme Court decision in Gobeille v. Liberty Mutual, some employers who offer self-funded ERISA plans have been removed from the MA APCD. There are several self-insured plans that are not subject to ERISA plans, such as those operated by state agencies, municipalities, the Group Insurance Commission, Medicare, and Medicaid. The decision does not prohibit the voluntary submission of self-insured plan data to the MA APCD. At the end of 2017 reporting period, approximately 75% (or about 1.75 million members) of self-insured Member Eligibility data is missing from the MA APCD.

- Highest Version Indicator: MA APCD submissions are at the claim line level. Typically, each time
  a claim is adjudicated a line is created. As a result, each claim may have multiple lines.
  Identifying the highest version of the claim allows analysts to determine total charges,
  discounts, payments, etc. Highest version flags, based on carrier-specific logic, are available for
  the top 29 carriers for Pharmacy Claims.
- Insurance fees (such as coinsurance) listed on a claim line either apply to the direct claim line or the entire claim – it depends on how the carrier is calculating it, and if payments are being bundled. Interpret with caution.

More information: <a href="http://www.chiamass.gov/ma-apcd/">http://www.chiamass.gov/ma-apcd/</a>

#### PHDAPCD.PRODUCT

**Brief Description:** Covers information on insurance products such as the type of insurance product and the coverage provided. Can be linked into the medical, dental, and pharmacy claims data.

Data Owner: Center for Health Information and Analysis (CHIA)

**Population:** The MA APCD includes data on coverage and services for the vast majority of Massachusetts residents with public or private insurance.

#### Important Data Notes:

- Does not include:
  - Workers' Compensation
  - TRICARE and the Veterans Health Administration
  - Federal Employees Health Benefit Plan
- Information on uninsured individuals is only included to the extent that they enroll in the Commonwealth's Health Safety Net.
- Beginning in early 2016, as a result of the Supreme Court decision in Gobeille v. Liberty Mutual, some employers who offer self-funded ERISA plans have been removed from the MA APCD. There are several self-insured plans that are not subject to ERISA plans, such as those operated by state agencies, municipalities, the Group Insurance Commission, Medicare, and Medicaid. The decision does not prohibit the voluntary submission of self-insured plan data to the MA APCD. At the end of 2017 reporting period, approximately 75% (or about 1.75 million members) of self-insured Member Eligibility data is missing from the MA APCD.

More information: <a href="http://www.chiamass.gov/ma-apcd/">http://www.chiamass.gov/ma-apcd/</a>

#### **PHDAPCD.PROVIDER**

**Brief Description:** Covers information on health providers in the medical, dental, and pharmacy claims data.

Data Owner: Center for Health Information and Analysis (CHIA)

**Population:** The MA APCD includes data on coverage and services for the vast majority of Massachusetts residents with public or private insurance.

- Does not include:
  - Workers' Compensation
  - o TRICARE and the Veterans Health Administration
  - Federal Employees Health Benefit Plan
- Information on uninsured individuals is only included to the extent that they enroll in the Commonwealth's Health Safety Net.
- Beginning in early 2016, as a result of the Supreme Court decision in Gobeille v. Liberty Mutual, some employers who offer self-funded ERISA plans have been removed from the MA APCD. There are several self-insured plans that are not subject to ERISA plans, such as those operated by state agencies, municipalities, the Group Insurance Commission, Medicare, and Medicaid. The decision does not prohibit the voluntary submission of self-insured plan data to the MA APCD. At the end of 2017 reporting period, approximately 75% (or about 1.75 million members) of self-insured Member Eligibility data is missing from the MA APCD.

#### More information: <a href="http://www.chiamass.gov/ma-apcd/">http://www.chiamass.gov/ma-apcd/</a>

# **Birth Certificates**

### **BIRTH.INFANT\_PHD**

**Brief Description:** Data are reported to the Registry of Vital Records and Statistics (RVRS) by all licensed birthing hospitals and birthing centers and by city and town clerks if they are establishing a home birth that occurred in their city/town in Massachusetts. Birth certificates include worksheets completed by the hospital and by the parents.

Data Owner: Registry of Vital Records and Statistics (RVRS)

Population: Infants born to MA residents

**Important Data Notes:** As legal records, the information recorded on birth certificates is considered highly accurate. However, some information like race and Hispanic ethnicity are not always fully populated.

For birth records from the Mainframe (system=1) please note that in order to determine counts of specific abnormal conditions, complications of labor and delivery, prenatal tests and procedures, risk factors for this pregnancy, labor and delivery procedures, congenital anomalies, and neonatal procedures you need to select both the None of the Above as 2 (No), and Yes for each specific abnormal conditions, complications of labor and delivery, prenatal tests and procedures, risk factors for this pregnancy, labor and delivery, prenatal tests and procedures, risk factors for this pregnancy, labor and delivery, prenatal tests and procedures, risk factors for this pregnancy, labor and delivery procedures, congenital anomalies, and neonatal procedures.

Also note that for 2011, the VIP variables for parity, gravidity and Kotelchuck might not reliable. There were also some specific hospital issues with the following:

- Statistical birth data from Beverly hospital may not be complete as a result of data not being entered because of a shortage in staff.
- As a result of coding problems, Brigham records may have Y for more than one option for each section when only one option could only be Y:

- **Hypertension and Eclampsia:** MCOND\_HYPER\_PRE\_E and MCOND\_HYPE\_E
- Hypertension and when during pregnancy: MCOND\_HYPE\_P and MCOND\_HYPE\_G
- Diabetes and when during pregnancy: MCOND\_DIABETES\_P, MCOND\_DIABETES\_G and MCOND\_PRE\_DIABETES
- Mother's Weight Change during pregnancy: MCOND\_WT\_GAIN and MCOND\_WT\_LOSS
- **Type of Labor:** MCOND\_PRIC and MI\_LONG2STAGE
- **Type of Rupture of Membranes:** MCOND\_PROM and MI\_RUPTURE
- Type of Cleft Lip/Palate: MI\_CLEFT and MI\_CLEFT\_P

#### Other Notes:

- Facility# 2061 NORTH ADAMS REGIONAL HOSPITAL closed in March 2014
- The following insurance fields were opened up for data entry in 2014 (there had been a defect in the system where the text boxes did not open up to allow users to enter values: 1.
   PAY\_TYPE\_OTHER; 2. PAY\_MANAGED\_CARE\_OTHER; 3. LD\_PAY\_TYPE\_OTHER; 4.
   LD\_PAY\_MANAGED\_CARE\_OTHER
- It was discovered in 2014 that the field ICOND\_NICU\_ADM was only being populated by Brigham and Women's through an import process.--All the other hospitals were answering whether NICU applied through the following fields (BWH also was doing this too by manual data entry by the birth registrars): TRANSFER2\_INTERNAL=Y; "NICU" value if applied will appear in TRANSFER2\_INTERNAL\_TO. <u>PLEASE USE</u> TRANSFER2\_INTERNAL=Y and look for "NICU" in TRANSFER2\_INTERNAL\_TO---This is more accurate going forward.
- It was discovered in 2014 that the field MI\_STER\_NEONAT was only being populated by Brigham and Women's through an import process.--All the other hospitals were answering whether steroids (glucocorticoids) were given to newborns through MI\_STER (BWH also was doing this too). <u>PLEASE USE</u> MI\_STER---This is more accurate going forward.
- Brigham and Women's Hospital (Fac#: 2341) switched to EPIC on 5/31/2015--the following fields are now included in the import file. The following fields were either manually entered or not captured by BWH at all: MCOND\_C\_SEC, MCOND\_C\_SEC\_NUM, MCOND\_OTHER, MCOND\_OTHERL, MCOND\_NONE\_2, MCOND\_CVS, MCOND\_TEST\_OTHER, MCOND\_TEST\_OTHERL, MI\_INTENS\_CARE, MCOND\_ECV\_F, MI\_UNPL\_OP, MI\_PROC\_OTHER, MI\_PROC\_OTHERL, MI\_NONE\_6, ICOND\_OTHER, ICOND\_OTHERL, ICOND\_NEO\_PROC\_OTHER, ICOND\_NEO\_PROC\_OTHERL, MI\_HEART\_OTHER\_CB, MI\_HEART\_OTHER, MI\_MUSCULO\_OTHER, MI\_MUSCULO\_OTHERL, MI\_DOWN\_P, MI\_ANOMALY\_OTHER, MI\_ANOMALY\_OTHERL, MI\_NONE\_8, TRANSFER2\_INTERNAL, TRANSFER2\_INTERNAL\_TO.
- Holy Family Hospital and Medical Center (Fac#: 2225) changed name to Steward Holy Family Hospital as of 10/28/2016 in VIP
- User must use the field INFANT\_FED to accurately reflect what is collected in VIP--"How was
  infant being fed during hospital stay?" The values in INFANT\_FED field are the actual drop down
  values selected in record. INFANT\_BFED was removed in the closed final 2016 file because it is
  not reliable. This field should not have been included in the file as it is not a field we collect in
  the database,
- Harrington Hospital (Facility ID: 2143) closed maternity dept on 10/01/2017, and Morton Hospital (Facility ID: 2022) closed their maternity dept on 12/01/2017.
- Microcephaly (MI\_MICROCEPH) was added to VIP on 08/01/2017

PHD Matching Rate: Level 1 match: 89.2% | Overall match: 92.8%

#### More information: https://www.mass.gov/lists/birth-data

#### BIRTH.MOM\_PHD

**Brief Description:** Data are reported to the Registry of Vital Records and Statistics (RVRS) by all licensed birthing hospitals and birthing centers and by city and town clerks if they are establishing a home birth that occurred in their city/town in Massachusetts. Birth certificates include worksheets completed by the hospital and by the parents.

Data Owner: Registry of Vital Records and Statistics (RVRS)

Population: MA residents who gave birth

**Important Data Notes:** The Vitals Information Partnership (VIP) system is designed to streamline and integrate vital event registration, securely, across the Commonwealth. The birth application in VIP was launched in Feb 2011. As legal records, the information recorded on birth certificates is considered highly accurate. However, some information like race and Hispanic ethnicity are not always fully populated.

For birth records from the Mainframe (system=1) please note that in order to determine counts of specific abnormal conditions, complications of labor and delivery, prenatal tests and procedures, risk factors for this pregnancy, labor and delivery procedures, congenital anomalies, and neonatal procedures you need to select both the None of the Above as 2 (No), and Yes for each specific abnormal conditions, complications of labor and delivery, prenatal tests and procedures, risk factors for this pregnancy, labor and delivery, prenatal tests and procedures, risk factors for this pregnancy, labor and delivery, prenatal tests and procedures, risk factors for this pregnancy, labor and delivery procedures, congenital anomalies, and neonatal procedures. In June of 2016, a new option for education was added for "Special education".

Also note that for 2011, the VIP variables for parity, gravidity and Kotelchuck might not reliable. There were also some specific hospital issues with the following:

- Statistical birth data from Beverly hospital may not be complete as a result of data not being entered because of a shortage in staff.
- As a result of coding problems, Brigham records may have Y for more than one option for each section when only one option could only be Y:
  - **Hypertension and Eclampsia:** MCOND\_HYPER\_PRE\_E and MCOND\_HYPE\_E
  - Hypertension and when during pregnancy: MCOND\_HYPE\_P and MCOND\_HYPE\_G
  - Diabetes and when during pregnancy: MCOND\_DIABETES\_P, MCOND\_DIABETES\_G and MCOND\_PRE\_DIABETES
  - Mother's Weight Change during pregnancy: MCOND\_WT\_GAIN and MCOND\_WT\_LOSS
  - **Type of Labor:** MCOND\_PRIC and MI\_LONG2STAGE
  - Type of Rupture of Membranes: MCOND\_PROM and MI\_RUPTURE
  - **Type of Cleft Lip/Palate:** MI\_CLEFT and MI\_CLEFT\_P

Other Notes:

• Facility# 2061 NORTH ADAMS REGIONAL HOSPITAL closed in March 2014

- The following insurance fields were opened up for data entry in 2014 (there had been a defect in the system where the text boxes did not open up to allow users to enter values: 1.
   PAY\_TYPE\_OTHER; 2. PAY\_MANAGED\_CARE\_OTHER; 3. LD\_PAY\_TYPE\_OTHER; 4.
   LD\_PAY\_MANAGED\_CARE\_OTHER
- It was discovered in 2014 that the field ICOND\_NICU\_ADM was only being populated by Brigham and Women's through an import process.--All the other hospitals were answering whether NICU applied through the following fields (BWH also was doing this too by manual data entry by the birth registrars): TRANSFER2\_INTERNAL=Y; "NICU" value if applied will appear in TRANSFER2\_INTERNAL\_TO. <u>PLEASE USE</u> TRANSFER2\_INTERNAL=Y and look for "NICU" in TRANSFER2\_INTERNAL\_TO---This is more accurate going forward.
- It was discovered in 2014 that the field MI\_STER\_NEONAT was only being populated by Brigham and Women's through an import process.--All the other hospitals were answering whether steroids (glucocorticoids) were given to newborns through MI\_STER (BWH also was doing this too). <u>PLEASE USE</u> MI\_STER---This is more accurate going forward.
- Brigham and Women's Hospital (Fac#: 2341) switched to EPIC on 5/31/2015--the following fields are now included in the import file. The following fields were either manually entered or not captured by BWH at all: MCOND\_C\_SEC, MCOND\_C\_SEC\_NUM, MCOND\_OTHER, MCOND\_OTHERL, MCOND\_NONE\_2, MCOND\_CVS, MCOND\_TEST\_OTHER, MCOND\_TEST\_OTHERL, MI\_INTENS\_CARE, MCOND\_ECV\_F, MI\_UNPL\_OP, MI\_PROC\_OTHER, MI\_PROC\_OTHERL, MI\_NONE\_6, ICOND\_OTHER, ICOND\_OTHERL, ICOND\_NEO\_PROC\_OTHER, ICOND\_NEO\_PROC\_OTHERL, MI\_HEART\_OTHER\_CB, MI\_HEART\_OTHER, MI\_MUSCULO\_OTHER, MI\_MUSCULO\_OTHERL, MI\_DOWN\_P, MI\_ANOMALY\_OTHER, MI\_ANOMALY\_OTHERL, MI\_NONE\_8, TRANSFER2\_INTERNAL, TRANSFER2\_INTERNAL\_TO.
- Holy Family Hospital and Medical Center (Fac#: 2225) changed name to Steward Holy Family Hospital as of 10/28/2016 in VIP
- User must use the field INFANT\_FED to accurately reflect what is collected in VIP--"How was
  infant being fed during hospital stay?" The values in INFANT\_FED field are the actual drop down
  values selected in record. INFANT\_BFED was removed in the closed final 2016 file because it is
  not reliable. This field should not have been included in the file as it is not a field we collect in
  the database,
- Harrington Hospital (Facility ID: 2143) closed maternity dept on 10/01/2017, and Morton Hospital (Facility ID: 2022) closed their maternity dept on 12/01/2017.
- Microcephaly (MI\_MICROCEPH) was added to VIP on 08/01/2017

PHD Matching Rate: Level 1 match: 97.3% | Overall match: 98.4%

More information: https://www.mass.gov/lists/birth-data

## **Bureau of Substance Addiction Services (BSAS) Treatment Data**

#### **PHDBSAS.BSAS**

**Brief Description:** BSAS is the single state authority responsible for regulating and licensing substance addiction treatment providers. All treatment providers who receive funding from BSAS are required to submit data to BSAS to carry out the responsibilities listed under the law.

Data Owner: Bureau of Substance Addiction Services (BSAS)

**Population:** Clients served through the BSAS system who are MA residents

#### Important Data Notes:

- 1. Only contracted treatment providers that receive funding from the Department submit this data to BSAS.
- 2. Demographic data is self-reported. There may be incidents where provider selects the race and sex for client.
- 3. Outpatient treatment data is incomplete and does not include all non-BSAS paid services
- **4.** BSAS does not collect data from providers that prescribe Vivitrol or from non-contracted Buprenorphine providers
- 5. Methadone data is incomplete. Due to challenges associated with recent system changes related to data submission, some Methadone providers have been unable to submit data.
- 6. Data collected in regard to section 35 commitments are incomplete in the BSAS data set.
- 7. New variable related to addiction services while pregnant added in 2018:
  - a. PREG\_ENH Pregnant Enhancement (service in residential program)
  - b. POSTPARTUM\_ENH Postpartum Enhancement (service in residential program)
  - **c.** POSTPARTUM\_ENH\_MBHP Postpartum Enhancement MBHP only (service in residential program) homelessness.
- 8. New variable related to homelessness added in 2018:
  - a. CLT\_HOMELESS\_AT\_ENROLLMENT

PHD Matching Rate: Level 1 matching: 91.0% I Overall match: 96.5%

More information: <a href="https://www.mass.gov/lists/esm-assessment-forms-and-manuals">https://www.mass.gov/lists/esm-assessment-forms-and-manuals</a>

## **Death Certificates**

#### DEATH.DEATH\_PHD

**Brief Description:** The official cause of death and the manner of death (i.e., intentional, unintentional, or undetermined) are assigned by physicians and medical examiners. Each death certificate also includes demographic information such as age, race, Hispanic ethnicity, gender, educational attainment, marital status, and occupation. These basic demographics are recorded by the funeral director and are typically provided by a family member.

Data Owner: Registry of Vital Records and Statistics (RVRS)

Population: All MA residents who died

#### Important Data Notes:

• Causes of death from the OCME often lag the date of death making some elements of death data less timely than others

- The Vitals Information Partnership (VIP) system is designed to streamline and integrate vital event registration, securely, across the Commonwealth. The deaths application in VIP was launched in Nov 2014, resulting in some variable changes.
- In June of 2016, a new option for education was added for "Special education".
- 2019 data might not be as complete. NCHS and OCME are still updating records.
- As legal records, the information recorded on death certificates is considered highly accurate. However, some information like race, Hispanic ethnicity, educational attainment, marital status, and occupation are not always fully populated. Causes of death from the OCME often lag the date of death making some elements of death data less timely than others.

PHD Matching Rate: Level 1 match: 90.8% | Overall match: 92.4%

More information: https://www.mass.gov/lists/death-data

# **Department of Corrections (DOC) Release Data**

#### DOC.DOC\_PHD

**Brief Description:** The Department of Correction (DOC) is required by statute to maintain adequate records of persons committed to the custody of the Department. In addition, DOC must establish and maintain programs of research, statistics, and planning, and conduct studies relating to correctional programs and responsibilities of the Department. To achieve those goals, DOC maintains a database of individuals incarcerated in Massachusetts prisons.

Data Owner: Department of Correction (DOC)

Population: MA residents incarcerated in a MA prison and released to the street

#### **Important Data Notes:**

• Massachusetts residents incarcerated outside of Massachusetts are not captured in this dataset

PHD Matching Rate: Level 1 Matching Rate: | Overall Matching Rate:

More information: https://www.mass.gov/lists/department-of-correction-annual-reports

### **Department of Housing and Community Development (DHCD)**

#### PHDDHCD.DHCD

**Brief Description:** DHCD collects and maintains data on all persons receiving services from the Department.

Data Owner: Department of Housing and Community Development (DHCD)

**Population:** Heads of household who received services from the Emergency Assistance Program; covers just emergency shelter data.

#### Important Data Notes:

- Data only includes services provided to families
- Only data on head of household is included
- Only covers emergency shelter data
- Covers clients active between 1/1/2010 and 12/31/2019

PHD Matching Rate: Level 1 Matching Rate: 93.4% | Overall Matching Rate: 97.7%

More information: <a href="https://www.mass.gov/emergency-housing-assistance-programs">https://www.mass.gov/emergency-housing-assistance-programs</a>

# Department of Industrial Accidents (DIA) – Worker's Compensation Data Warehouse

#### **PHDDIA.DIA**

Data Owner: Department of Industrial Accidents

Population: Residents of Massachusetts who filed a Worker's Compensation Claim from 2011-2019

- Census\_OCC\_DIA is autocoded to Census 2010 (<u>Industry and Occupation Code Lists &</u> <u>Crosswalks (census.gov)</u>and BLS\_OCC\_DIA is autocoded to SOC 2010 (<u>2010 Standard</u> <u>Occupational Classification System (bls.gov)</u>) using CDC's NIOCCS system. (<u>CDC - NIOSH Industry</u> <u>and Occupation Computerized Coding System (NIOCCS) - NIOSH</u>). NIOCCS is a web application used to translate industry and occupation text into standardized codes so that researchers can analyze their data. The 2010 SOC has 540 Occupational code groupings.
- 2. The dataset includes MA residents from out of state company headquarters and where incidents are out of state.
- 3. Data is reported by insurers, employers, and attorneys. Occasionally, and rarely an employee will represent themselves and complete the forms.
- Multiple incidents may exist for individuals, and the NAIC\_DIA, BLS\_OCC\_DIA and CENSUS\_OCC\_DIA codes are incomplete for some incidents of the same individual. A person may have multiple injuries with different industry and occupation codes. The majority of records had one code (BLS\_OCC\_DIA 67,015(27.1%) missing, 154,911 (62.5%) 1 code, and 25,970 (10.4%) 2 or more records.
- 5. NAIC\_DIA was less complete, 77.6% had no code. 51,273 had 1 code, and 4,414 had 2 or more records.

PHD Matching Rate: Level 1 Matching Rate: 76.6% | Overall Matching Rate: 91.2%

More information:

## Department of Mental Health (DMH) - Data Warehouse

#### PHDDMH.DMH

**Brief Description:** The Department of Mental Health, as the State Mental Health Authority, assures and provides access to services and supports to meet the mental health needs of individuals of all ages, enabling them to live, work and participate in their communities. The Department of Mental Health (DMH), under the umbrella of the Executive Office of Health and Human Services (EOHHS), is required by statute to maintain adequate records of persons receiving services of the department. This database includes psychiatric hospitalizations, substance abuse treatment and the desire for change and stage of change, loss of housing, incarceration, use of crisis stabilization beds and employment status between January 1, 2011 and December 31, 2020. Identifiers included gender, race, and age.

Data Owner: Department of Mental Health

**Population:** Different programs and services provided by DMH are kept current and are available for the period from 1/1/2011 through 12/31/2020.

**Important Data Notes:** Data includes services provided by DMH such as Community Based Flexible Supports (CBFS) and Clubhouse Coalition programs. It does not include routine or crisis mental health services provided in hospitals, emergency departments, and the private offices of licensed mental health providers. Some of these data can be found in the APCD and Case Mix data sets.

PHD Matching Rate: Level 1 Matching Rate: | Overall Matching Rate:

More information: https://www.mass.gov/orgs/massachusetts-department-of-mental-health

## **Department of Transitional Assistance (DTA) – Data Warehouse**

#### **PHDDTA.DTA**

**Brief Description:** Each month a "snapshot" is taken of DTA's current client base. Information ranging from general demographics to individual client metrics are captured and aggregated to form a data warehouse. Information may change month to month through automated data exchanges or client interactions. This monthly dataset contains household and client level data from 2011 through 2018.

Data Owner: Department of Transitional Assistance

Population: Active SNAP Clients only

#### Important Data Notes:

- EARNED\_INCOME and UNEARNED\_INCOME, in dollars is provided by case workers or the SSA system and may have entry errors. The majority of cases (67% of unearned income, and 54% of EARNED\_INCOME cases) have zero values. The maximum allowed in these data is \$100,000.
- 2. Race/ethnicity are self-reported. Sex/gender/ dob and SSN are compared to SSN records as part of an identity match where discrepancies are found the caseworker

PHD Matching Rate: Level 1 Matching Rate: | Overall Matching Rate:

More information: https://www.mass.gov/department-of-transitional-assistance-data-and-research

# **Department of Veterans' Services (DVS) Benefit Data**

#### PHDDVS.DVS

**Brief Description:** DVS collects information of all Massachusetts veterans receiving benefits through DVS. Among other data, DVS collects data on persons who received DVS medical, housing, or other benefits from DVS through communities.

Data Owner: Department of Veterans' Services (DVS)

Population: Veterans & their eligible dependents receiving benefits from DVS

#### **Important Data Notes:**

• This is only a subset of all Veterans

PHD Matching Rate: Level 1 Matching Rate: 88.2% | Overall Matching Rate: 93.6%

More information: https://www.mass.gov/orgs/massachusetts-department-of-veterans-services

## **Early Intervention Data System**

#### EI.EI\_PHD

**Brief Description:** Early Intervention (EI) Data System contains information about children and under the age of three who are not reaching age-appropriate milestones, diagnosed with certain conditions, or have medical or social histories which may put them at risk for a developmental delay. The referral, assessment, and service delivery data are reported electronically by Early Intervention Agencies contracted by MA DPH.

Data Owner: Bureau of Health and Family Nutrition, Division of Early Intervention

Population: Children under the age of three at risk for developmental delays

#### **Important Data Notes:**

- Contains data on children born in 2011-2019 who are receiving services (CY)
- EI will be implementing a new web-based client and service delivery system to be fully implemented in the spring of 2020.
- Other: The value of other race also includes a Multi-Race category.
- There can only be one record associated with a child in the EI System. When a child's information is entered, the EI System automatically searches all of the records in the System for a potential duplicate based on the child's name, date of birth, address, and other personal identifying information. Sometimes kids could be referred to different programs close in time, get transferred, moved, or leave and come back. There could be few causes where there is a possibility that duplicate records remain.
- The variable on international adoption will no longer be collected once the system migrates (few months ahead)
- There are 3 variables indicating homelessness.
  - 1. On client's form is:
    - a. Are you currently homeless ?- answer options yes/no
    - b. Have you been homeless in the last 12 Months?-answer options yes/no/unknown
  - 2. On evaluation is:
    - a. Do any of the following conditions exist in the Biological or Primary Family? Homelessness? answer options yes/no/unknown

Collections of variable #2a began on 4/15/2017 and variables #1a & 1b on 1/1/2018. If questions regarding homelessness are asked as part of clients form then they not changing. Since client can have multiple evaluations questions # 2a can change the values depending on the family experience. Since 1/1/18 all 3 variables are collected. In the new system, question #1a will be dropped in the new system and question #1b will be collected at the time of evaluation.

- As per January 1, 2018, there are new values for the Discharge Reason categories on the Discharge dataset- please see El codes.
- First service date: Often in EI "service" means the time the professional time, such as assessments, evaluations. This is to determine eligibility. At that time, the child is assessed but does not receive therapeutic service. The therapeutic service starts after family plan is made. Different people and different organizations use different definitions.

PHD Matching Rate: Level 1 Matching Rate: 87.7% | Overall Match Rate: 95.3%

More information: <u>https://www.mass.gov/orgs/early-intervention-division</u>

## **Fetal Death Certificates**

#### FETALDTH.FETALDTH\_PHD

**Brief Description:** Dataset on all fetal deaths that occurred in the state.

Data Owner: Registry of Vital Records and Statistics

Population: Fetal deaths that occurred in Massachusetts

#### Important Data Notes:

- Fetal death data are only for reportable stillbirths. Reportable stillbirths are defined as a fetus
  that showed no signs of life at the time of delivery/extraction <u>and</u> was either 20 weeks or more
  gestation or more <u>or</u> weighed 350 grams or more. Non-reportable stillbirths are not reported to
  the Registry of Vital Records and Statistics.
- Starting in 2015, we began to use the NCHS/CDC fetal death report format resulting in some variable changes.

PHD Matching Rate: Level 1 Matching Rate: 93.0% | Overall Matching Rate: 98.3%

More information:

### **Hepatitis A Virus Surveillance**

#### PHDHEPA.HAV

**Brief Description:** Tests indicating the presence of the hepatitis A virus, or antibodies produced in response to this virus, have been reportable in Massachusetts since 1985. These data are housed in the Massachusetts Virtual Epidemiologic Network (MAVEN), a person-based, fully integrated, Web-based disease surveillance and case management system. Information on residence, demographics, clinical

picture, vaccine history, and risk history are collected by the state and/or local health departments from the laboratory, healthcare, or service provider(s), and/or the case themselves.

**Data Owner:** Bureau of Infectious Disease and Laboratory Sciences, Integrated Surveillance, and Informatics Services

**Population:** Massachusetts residents with confirmed hepatitis A virus infection, reported to the surveillance system between 2011 and 2019.

#### Important Data Notes:

- Data are current as of 02/20/2021 and are subject to change
- Cases are classified according to the appropriate national classification guidelines for that timeframe. For more information on cases classification please see (<u>https://wwwn.cdc.gov/nndss/conditions/hepatitis-a-acute/</u>)
- Interpretation of hepatitis A risk data must incorporate any limitations on timeframe or scope as described in the individual data elements.
- The residence of a case reflects where the individual was living when reported, not necessarily where the individual acquired their infection.

PHD Matching Rate: Level 1 Matching Rate: 95.7% | Overall Matching Rate: 98.1%

More information: <u>https://www.mass.gov/hepatitis-a</u>

https://www.mass.gov/infectious-disease-surveillance-reporting-and-control

## Hepatitis C Virus Surveillance

#### **PHDHEPC.HCV**

**Brief Description:** Tests indicating the presence of the hepatitis C virus, or antibodies produced in response to this virus, have been reportable in Massachusetts since 1992. These data are housed in the Massachusetts Virtual Epidemiologic Network (MAVEN), a person-based, fully integrated, Web-based disease surveillance and case management system. Subsequent records supplement the report over time for persons testing positive. Information on residence, demographics, clinical picture, and risk history are collected by the state and/or local health departments from the laboratory, healthcare, or service provider(s), and/or the case themselves.

**Data Owner:** Bureau of Infectious Disease and Laboratory Sciences, Integrated Surveillance, and Informatics Services

**Population:** Massachusetts residents with evidence of hepatitis C virus infection, first reported to the surveillance system between 2011 and 2019.

- Data are current as of 3/22/2021 and are subject to change
- Cases are classified according to the appropriate national classification guidelines for that timeframe. For more information on cases classification please see (https://wwwn.cdc.gov/nndss/conditions/hepatitis-c-chronic/case-definition/2016/)
  - Due to significant changes in case classification in 2016, cases reported after 1/1/2016 with a positive antibody test but a negative RNA test would be classified as revoked in the absence of a positive RNA test in the first year of reporting and are not included in this dataset. Prior to 2016, these cases may have been classified as confirmed or probable.
- Cases in the surveillance system likely underestimate all HCV infected individuals as they represent only people who were tested for hepatitis C and successfully reported.
- The residence of a case reflects where the individual was living when initially reported, not necessarily where the individual acquired their infection.
- The Massachusetts Surveillance System is person-based, and for a chronic infectious disease such as hepatitis C, maintains longitudinal records on cases. Therefore, if a person tested positive for hepatitis C in this timeframe but had an earlier record of a positive test reported to the surveillance system, they will not be included in this dataset.

PHD Matching Rate: Level 1 Matching Rate: 86.7% | Overall Matching Rate: 95.3%

More information: <a href="http://www.mass.gov/hepc">www.mass.gov/hepc</a>

https://www.mass.gov/infectious-disease-surveillance-reporting-and-control

# **House of Corrections**

#### **PHDHOC.HOC**

**Brief Description:** It is the mission of the Massachusetts Sheriffs' Association to promote, advocate and support the office of sheriff in all fourteen counties of the Commonwealth, to effectuate their cooperative working relationship with one another, to enhance their work as the chief law enforcement officers of the counties, and to advance efforts to unify their efforts in policy development, operations and training while preserving the autonomy of each office. The Houses of Correction operate on a county level. They are required to track releases to the public through the Executive Office of Public Safety and Security. Individual releases are the basis for the data included in Chapter 55. The information includes basic identifiers as well as specific release dates.

Data owner: House of Corrections

Population: Individuals who were incarcerated in a Massachusetts county jail from 2011-2020

PHD Matching Rate: Level 1 Matching Rate: | Overall Matching Rate:

#### **Important Data Notes:**

-Data currently only includes one House of Correction

More information: https://www.mass.gov/orgs/massachusetts-sheriffs-association

## Human Immunodeficiency Syndrome (HIV) Incidence Surveillance

#### PHDHIV.HIV\_INC

**Brief Description:** Tests indicating the presence of the human immunodeficiency syndrome (HIV) virus, or antibodies produced in response to this virus, have been reportable in Massachusetts since 1985. These data are housed in the Massachusetts Virtual Epidemiologic Network (MAVEN), a person-based, fully integrated, Web-based disease surveillance and case management system. Information on residence, demographics, clinical picture, vaccine history, and risk history are collected by the state and/or local health departments from the laboratory, healthcare, or service provider(s), and/or the case themselves.

**Data Owner:** Bureau of Infectious Disease and Laboratory Sciences, Integrated Surveillance, and Informatics Services

**Population:** Massachusetts residents with confirmed HIV virus infection, reported to the surveillance system between 2011 and 2019.

#### **Important Data Notes:**

- Data are new cases in Massachusetts current as of X/X/XXXX and are subject to change
- Cases are classified according to the appropriate national classification guidelines for that timeframe. For more information on cases classification please see https://www.cdc.gov/hiv/default.html
- https://www.cdc.gov/hiv/ of HIV must incorporate any limitations on timeframe or scope as described in the individual data elements.
- The residence of a case reflects where the individual was living when reported, not necessarily where the individual acquired their infection.

PHD Matching Rate: Level 1 Matching Rate: | Overall Matching Rate:

More information: <u>https://www.mass.gov/hiv</u>

https://www.mass.gov/infectious-disease-surveillance-reporting-and-control

## Human Immunodeficiency Syndrome (HIV) Prevalence Surveillance

#### PHDHIV.HIV\_PREV

**Brief Description:** Persons who test positive for HIV and are living in Massachusetts are included in this dataset. Tests indicating the presence of the human immunodeficiency syndrome (HIV) virus , or antibodies produced in response to this virus, have been reportable in Massachusetts since 1985. These

data are housed in the Massachusetts Virtual Epidemiologic Network (MAVEN), a person-based, fully integrated, Web-based disease surveillance and case management system. Information on residence, demographics, clinical picture, vaccine history, and history are collected by the state and/or local health departments from the laboratory, healthcare, or service provider(s), and/or the case themselves.

**Data Owner:** Bureau of Infectious Disease and Laboratory Sciences, Integrated Surveillance, and Informatics Services

**Population:** Massachusetts residents with confirmed HIV virus infection, reported to the surveillance system between 2011 and 2019.

#### **Important Data Notes:**

- Data includes residents of Massachusetts who have tested positive for HIV or AIDS current as of X/X/XXXX and are subject to change
- Cases are classified according to the appropriate national classification guidelines for that timeframe. For more information on cases classification please see <a href="https://www.cdc.gov/hiv/default.html">https://www.cdc.gov/hiv/default.html</a>
- https://www.cdc.gov/hiv/ of HIV must incorporate any limitations on timeframe or scope as described in the individual data elements.
- The residence of a case reflects where the individual was living when reported, not necessarily where the individual acquired their infection.

PHD Matching Rate: Level 1 Matching Rate: | Overall Matching Rate:

More information: <a href="https://www.mass.gov/hiv">https://www.mass.gov/hiv</a>

https://www.mass.gov/infectious-disease-surveillance-reporting-and-control

# MA Ambulance Trip Record Information System (MATRIS)

#### **PHDEMS.MATRIS**

**Brief Description:** Under EMS System regulations, ambulance services are required to document each EMS call and include the data elements pertaining to the call specifically referenced in an administrative requirement issued by OEMS governing the statewide EMS minimum data set. MATRIS data elements are based on the National Emergency Medical Service Information System (NEMSIS).

Data Owner: Office of Emergency Medical Services (OEMS)

Population: All ambulance encounters considered an emergency and where patient contact occurred

#### Important Data Notes:

• Whether a specific ambulance trip involves an opioid overdose is not a simple judgment, as the NEMSIS standard does not specifically identify incidents as being opioid-related .The

classification of opioid trips was based on an algorithm developed in conjunction with the Centers for Disease Control and Prevention

- Data are not uniformly reported by EMS providers
- From February through June 2019, a large EMS service provider was experiencing technology issues that make it impossible to distinguish emergency calls from non-emergency calls. As a result, this database only includes opioid-related calls from this service. Towns where the total EMS calls would most heavily be impacted by this include: Brockton, Quincy, Taunton, Plymouth, and Braintree.
- Beginning in 2017 and continuing through 2020, NEMSIS (data system behind MATRIS) transitioned from Version 2 to Version 3. Some variables have changed formats. All data has been modified to make analysis possible across versions. The largest change is that Version 3 utilizes ICD 10 codes for EMS provider impressions, whereas Version 2 uses free text.
- MATRIS data starts in 2013
- Unmatched EMS runs are more likely to be from Berkshire, Dukes, or Bristol County. This is
  related to some EMS services having less complete reporting of the patient identifiers needed
  for matching to the PHD spine (and those services having higher concentrations in the 3
  counties above). Additionally, unmatched EMS runs are more likely to occur in earlier years of
  data rather than later years although 2016 was an anomaly and represented the second highest
  year of unmatched records after 2013.

PHD Matching Rate: Level 1 Matching Rate: 78.7% | Overall Matching Rate: 87.9%

More information: <u>https://www.mass.gov/info-details/massachusetts-ambulance-trip-record-information-system-matris</u>

# MA Cancer Registry (MCR)

#### PHDMCR.MCR

**Brief Description:** The MCR is a population-based registry that tracks the incidence of cancer within the Commonwealth

Data Owner: Massachusetts Cancer Registry (MCR)

Population: All incident cancer diagnoses to MA residents

#### Important Data Notes:

• Defining the stage of a cancer is not an exact science. It is based on a number of written reports and laboratory tests.

PHD Matching Rate: Level 1 Matching Rate: 89.7% | Overall Matching Rate: 95.5%

More information: <u>https://www.mass.gov/massachusetts-cancer-registry</u>

# **Prescription Monitoring Program (PMP)**

#### PHDPMP.PMP

**Brief Description:** Information about filled prescriptions for schedule II through V medications is reported electronically each business day by all Massachusetts community, hospital outpatient and clinic pharmacies as well as from out-of-state mail order pharmacies that deliver to patients in Massachusetts. Schedules II through V medications consist of those prescription drug products with recognized potential for abuse or dependence (e.g., narcotics, stimulants, sedatives).

Data Owner: Office of Prescription Monitoring and Drug Control

Population: All schedule II-V prescriptions filled by MA residents

#### **Important Data Notes:**

- Methadone clinics do not report to the Massachusetts PMP as they are exempt by statutory language. Methadone prescriptions found in PMP are for pain (not addiction treatment)
- A filled prescription should not be interpreted to mean that an individual took all or even any of that medication
- Prescriptions filled via the VA system were not reported prior to 1/1/2014
- Tramadol was added to the PMP on 8/18/2014
- Gabapentin was added to the PMP on 8/1/2017; Gabapentin records are available in PHD data starting 1/1/2018
- Prescriptions through the State Office of Pharmacy Services (SOPS, operates the pharmacies in MA jails and prisons, the Soldiers' Home, and public health hospitals) are only recorded in the PMP if they are given as a discharge medication. Medications administered by SOPS while individuals are still in-patient are not recorded in the PMP.
- Specialty and role information for prescribing providers will be made available via a separate lookup table (PHDPMP.PMP\_RS). Users will be able to reference this table utilizing the provider's DEA number. Please note: 1) the lookup table excludes hospital/facility DEA numbers; specialty and roll information for prescribers who do not possess (such as medical residents) or otherwise do not use their own DEA number will not be available and 2) role and specialty information reflects the latest information entered into MassPAT by the provider and may not reflect the role/specialty at the time of an earlier prescription.
- Matched records had a mean age of 49.6 years whereas unmatched records had a mean age of 57.2 years (p< 0.0001 t test of means)</li>

PHD Matching Rate: Level 1 Matching Rate: 91.3% | Overall Matching Rate: 98.2%

More information: <u>https://www.mass.gov/orgs/prescription-monitoring-program</u>

# **Office of the Chief Medical Examiner (OCME)**

#### DEATH.DEATH\_PHD

**Brief Description:** Included in the death files are several variables that come directly from the OCME's intake form and are not part of the official death certificate. Included is a brief narrative that describes the setting and environment of an unattended death. It is often written by the State Police in the case of acute opioid-related overdoses. These narratives are analyzed by searching for the presence of key words. These key words are included in the death file.

Data Owner: Office of the Chief Medical Examiner (OCME)

Population: Deaths to MA residents that are referred to the OCME

Important Data Notes:

PHD Matching Rate: See death file matching rates

More information: https://www.mass.gov/orgs/office-of-the-chief-medical-examiner

#### TOX.TOX\_PHD

**Brief Description:** The toxicology reports describe the presence of hundreds of specific chemical compounds that might be found in the body of a decedent.

Data Owner: Office of the Chief Medical Examiner (OCME)

Population: Deaths to MA residents that are referred to the OCME

**Important Data Notes:** 

- Results only indicate the presence or absence of a substance; presence does not necessarily mean that the substance contributed to the death
- Toxicology reports are not available until 2015

PHD Matching Rate: See death file matching rates

More information: https://www.mass.gov/orgs/office-of-the-chief-medical-examiner

# The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

#### PHDWIC.WIC\_KID

**Brief Description:** The USDA federal WIC nutrition program provides healthy foods, nutrition education, breastfeeding support, and referrals to healthcare and other services for eligible low-income pregnant women and mothers up to the first year postpartum, infants and children up to age five. The PHD

includes information on participants of the MA WIC program, including breastfeeding status, nutritionrelated anthropometrics, health behaviors, prenatal care, and demographics.

Data Owner: WIC Program, Nutrition Division, BFHN

#### Population: Important Data Notes:

- MA resident infants and children up to age five, who meet income eligibility requirements. Foster children up to age five are also eligible.
- WIC adjunctive eligibility available for infants and children who currently receive SNAP, Transitional Aid to Families with Dependent Children (TAFDC) or cash assistance, and specific MassHealth insurance plans.
- Date of birth is verified with birth certificate/hospital discharge form and Mass Health EVS portal. Race is self-reported.
- Each child has a WIC\_KID\_ID that may be linked to their mother's WIC\_MOM\_ID if the mom is on WIC. The system was implemented in 2011; Matching Rates between mother and child by year:

YEAR	% Unique KIDS linked
	to MOM
2011	74.7
2012	81.7
2013	82.5
2014	81.3
2015	81.6
2016	80.6
2017	80.3
2018	81.5

PHD Matching Rate: Level 1 Matching Rate: 92.2% | Overall Matching Rate: 97.8%

More information: https://www.mass.gov/service-details/check-eligibility-for-wic

#### PHDWIC.WIC\_MOM

**Brief Description:** The USDA federal WIC nutrition program provides healthy foods, nutrition education, breastfeeding support, and referrals to healthcare and other services for eligible low-income pregnant women and mothers up to the first year postpartum, infants and children up to age five. The PHD includes information on participants of the MA WIC program, including breastfeeding status, nutrition-related anthropometrics, health behaviors, prenatal care, and demographics.

Data Owner: WIC Program, Nutrition Division, BFHN

#### **Population: Important Data Notes:**

- MA resident pregnant women and mothers up to the first year postpartum who meet income eligibility requirements.
- WIC adjunctive eligibility available for pregnant and postpartum women who currently receive SNAP, Transitional Aid to Families with Dependent Children (TAFDC) or cash assistance, and specific MassHealth insurance plans.
- Linkage variables between KIDS and MOMs on WIC were established in 2010 and are summarized above in WIC\_KID.
- All data is asked and filled in by the staff (like the doctor's office). Birth date is verified, and race is self-reported.

PHD Matching Rate: Level 1 Matching Rate: 94.7% | Overall Matching Rate: 98.0%

More information: <u>https://www.mass.gov/service-details/check-eligibility-for-wic</u>

# Geographic-Level Datasets

## **Overdose Education and Naloxone Distribution Program (OEND)**

**Brief Description:** The Overdose Education and Naloxone Distribution (OEND) program is the primary overdose prevention effort funded by the Department of Public Health (DPH). OEND is a targeted intervention program designed for the people who are the highest risk of experiencing or witnessing an opioid overdose. The OEND programs operate out of state-funded Syringe Services Programs (SSPs) and other community-based organizations. A local pilot helped lay the foundation for DPH to establish OEND pilot programs in 2007. Today, the Department funds 20 OEND programs with over \$9 million, serving a network of communities throughout Massachusetts.

OEND programs operate out of fixed sites, mobile sites, street outreach, and other venues such as dropin centers, shelters, and substance use disorder treatment programs. In addition to training and naloxone access, OEND programs offer access and referrals to infectious disease prevention education, risk and harm reduction counseling and education, screening for HIV/HCV/STIs, referrals to substance use disorder treatment, referrals to primary care services, and infectious disease case management.

Since 2007, data collection and evaluation has been a critical element of the OEND program. When a bystander is trained and provided a naloxone kit, the individual is enrolled in the program and an enrollment questionnaire is completed by OEND staff. When that person returns to the OEND program to receive a refill and/or report a rescue, a refill questionnaire is completed. All participants have a unique identifier that ensures that there is no duplication and allow the linking of enrollment and refill forms at the individual level but preserving participant anonymity. Several studies have been completed using the OEND program data that have shown that communities where naloxone rescue kits are

distributed have lower rates of opioid overdose death, naloxone rescue kits distribution is feasible among people in methadone maintenance programs, naloxone rescue kits are used successfully to save lives by both people who are trained and not trained, and families of people who use opioids are an important group to equip with naloxone rescue kits.

## **Small Area Population Estimates for 2011 through 2020**

**Brief Description:** The Environmental Public Health Tracking (EPHT) Program contracted with the UMASS Donahue Institute (UMDI) to develop a set of small-area population estimates for the years 2011 through 2020. These estimates were created by a highly knowledgeable team of expert demographers using novel modifications of an existing and well-accepted methodology. UMDI created estimates by sex, age, race, and ethnicity at the census tract and community levels. These estimates are controlled to the annual county level Census estimates1 on a yearly basis, so they become more accurate over time. To read the full methodology, please refer to the report created by UMDI. Resident Population by Sex, Race, and Hispanic Origin Population Estimates, and each age/sex/race cohort is also broken down by Hispanic or Non-Hispanic origin.3 Finally, UMDI has produced error ranges by age and cohort size, which are incorporated into the estimates as low-to-high values for each cohort estimate, making each a range-of-values rather than a single-value estimate.

**Data Owner:** The Environmental Public Health Tracking (EPHT)

#### Population: Important Data Notes:

- Estimates for single year age groups and 5-year age groups are created separately. It is best to avoid combining single year and 5-year estimates.
- Due to the methodology for estimating error for small areas, census tracts should not be aggregated to create larger geographies. However, communities may be aggregated to create larger geographies, such as counties, EOHHS regions, etc.
- The sum of individual race/ethnicity/age breakdowns will not be equal to the "All races/all ethnicities" or the "total" (if selected) category for a given geography for 2010-2020.
   "Unknown" race is included in the total, but not in the sub-groups, which is the primary cause of the discrepancy between the total race and the individual races summed. Furthermore, rounding contributes to some of the discrepancy as well, and this is what causes all differences between Hispanic + Non-Hispanic and "All Ethnicities" for the same race group.
- The UMDI projections are "controlled" annually with the latest vintage of the Annual County Census Estimates (Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin Population Estimates for Massachusetts Counties): Census Vintage Files.
- More information: <u>S:\Population Estimates for MA 2010-present</u>.

# The Public Health Disparities Geocoding Project

# Brief Description: Datasets downloaded from The Public Health Disparities Geocoding Project <u>https://www.hsph.harvard.edu/thegeocodingproject/</u>.

Area-based socioeconomic measures with public health surveillance data, based on the work of the Public Health Disparities Geocoding Project at the Harvard T. H Chan School of Public Health, Department of Social and Behavioral Sciences.

The Public Health Disparities Geocoding Project was launched to ascertain which ABSMs, at which geographic level (census block group [BG], census tract [CT], or ZIP Code [ZC]), would be suitable for monitoring US socioeconomic inequalities in the health. Drawing on 1990 census data and public health surveillance systems of 2 New England states, Massachusetts, and Rhode Island, they analyzed data for: (a) 7 types of outcomes: mortality (all cause and cause-specific), cancer incidence (all-sites and site-specific), low birth weight, childhood lead poisoning, sexually transmitted infections, tuberculosis, and non-fatal weapons-related injuries, and (b) 18 different ABSMs. They conducted these analyses for both the total population and diverse racial/ethnic-gender groups, at all 3 geographic levels.

#### **Population: Important Data Notes:**

- Based on U.S. Census Bureau, 2014-2018 American Community Survey 5-Year Estimates.
- The Index of Concentration at the Extremes [12] measure captures the extent to which the population in a given area is concentrated at either extreme of a social metric and ranges from 1 (everyone in the worst category) to 1 (everyone in the best category). For our analyses, we set the extremes for this ICE as: (a) high-income White Non-Hispanic population, versus (b) low-income population of color (i.e., not white non-Hispanic) [12]. For analysis purposes, we defined categories of ABSMs using *a priori* cut-points for % below poverty (0-4.9%, 5-9.9%, 10-14.9%, 15-19.9%, and 20-100%) and quintile cut-points based on the distribution of ZCTA or city/town attributes in Massachusetts (weighted by population size).
- Limitations of the data: Since the data from a community or a zip code is applied to all residents of that community or zip code, it can help in understanding the context in which an individual lives but not whether that data applies to any specific individual in the data set.

## 2014-2018 American Community Survey 5-Year Estimates

**Brief Description:** The American Community Survey (ACS) is an ongoing survey that provides vital information on a yearly basis about our nation and its people. Information from the survey generates data that help determine how more than \$675 billion in federal and state funds are distributed each year.

Through the ACS, we know more about jobs and occupations, educational attainment, veterans, whether people own or rent their homes, and other topics. Public officials, planners, and entrepreneurs use this information to assess the past and plan the future. When you respond to the ACS, you are doing your part to help your community plan for hospitals and schools, support school lunch programs, improve emergency services, build bridges, and inform businesses looking to add jobs and expand to new markets, and more.

#### **Population: Important Data Notes:**

- Conducted every month, every year
- Sent to a sample of addresses (about 3.5 million) in the 50 states, District of Columbia, and Puerto Rico
- Asks about topics not on the 2020 Census, such as education, employment, internet access, and transportation
- Provides current information to communities every year. It also provides local and national leaders with the information they need for programs, economic development, emergency management, and understanding local issues and conditions.
- Limitations of the data: Since the data from a community is applied to all residents of that community it can help in understanding the context in which an individual lives but not whether that data applies to any specific individual in the data set.