DATA DICTIONARY

A data dictionary of data indicators adopted by the Center for Community Health (CCH) Steering Committee. Publication Date: February 2018

Center *for* Community Health

Center for Community Health
Data Indicators Data Dictionary

Contents

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Obesity

Center for Community Health
Data Indicators Data Dictionary

Adults who are obese

Brief description: Percentage of adults whose calculated Body Mass Index (BMI) is greater than 30
Public health significance: Obesity is a serious concern because it is associated with reduced quality of life. It contributes to many of the leading causes of death in the U.S. and worldwide, including diabetes, heart disease, stroke, and some types of cancer.
Indicator category: Obesity
Demographic group: Adults 25 and older
Numerator: Weighted number of adults 25 and older whose BMI is greater than 30
Denominator: Total number of respondents 25 and older
Unit of measure: Percent, combined with a confidence interval
Time period: Year
Frequency: every 4-6 years, varies by jurisdiction
Data source: Metro SHAPE Survey
Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites
Notes on calculation: Body mass index (BMI) is calculated from self-reported weight and height using the standard formula: BMI=(weight in kilograms)÷[(Height in meters)*(height in meters)] or BMI=703*(weight in pounds)÷[(Height in inches)*(height in pounds)]. While reporting weight, female respondents who were pregnant at the time of the survey were asked to provide their weight before they were pregnant. Classification of weight status by BMI according to national guidelines are: underweight (BMI< 18.5); normal weight (BMI = 18.5 to 24.9); overweight (BMI = 25.0 to 29.9) and obese (BMI≥ 30.0).
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: 30.5%
Healthy Minnesota 2020 Objective: 27.8%
Related indicator(s): Adults who are overweight but not obese; adults who are overweight but not obese (Clinic EHR), adults who are obese (clinic EHR); adults who do not engage in physical activity; diabetes prevalence – adult; heart disease mortality; cancer incidence by type; cancer mortality
Revision date: 12/22/2017

Adults who are overweight but not obese

Brief description: Percentage of adults 25 and older whose calculated Body Mass Index (BMI) is greater than 25 but less than 30
Public health significance: Being overweight may increase the risk of many health problems, including diabetes, heart disease, and certain cancers.
Indicator category: Obesity
Demographic group: Adults 25 and older
Numerator: Weighted number of adults 25 and older whose BMI is greater than 25 but less than 30
Denominator: Total number of respondents 25 and older
Unit of measure: Percent, combined with a confidence interval
Time period: Year
Frequency: every 4-6 years, varies by jurisdiction
Data source: Metro SHAPE Survey
Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites
Notes on calculation: Body mass index (BMI) is calculated from self-reported weight and height using the standard formula: BMI=(weight in kilograms)÷[(Height in meters)*(height in meters)] or BMI=703*(weight in pounds)÷[(Height in inches)*(height in pounds)]. While reporting weight, female respondents who were pregnant at the time of the survey were asked to provide their weight before they were pregnant. Classification of weight status by BMI according to national guidelines are: underweight (BMI< 18.5); normal weight (BMI = 18.5 to 24.9); overweight (BMI = 25.0 to 29.9) and obese (BMI≥ 30.0).
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Adults who are obese; adults who are overweight but not obese (Clinic EHR); adults who are obese (clinic EHR); adults who do not engage in physical activity; diabetes prevalence – adult; heart disease mortality; cancer incidence by type; cancer mortality
Revision date: 12/22/2017

Adults who are overweight but not obese – Clinic EHR

Brief description: Percentage of adults whose measured Body Mass Index (BMI) is greater than 25 but less than 30
Public health significance: Being overweight may increase the risk of many health problems, including diabetes, heart disease, and certain cancers.
Indicator category: Obesity
Demographic group: Adults aged 18 years and older
Numerator: Number of established adult primary care clinic patients (had at least one primary care clinic visit within the last 12 months) with a body mass index greater than 25.0 but less than 30.0 based on the most recent height and weight documented in the electronic health record (EHR) within the reporting period.
Denominator: Total number of established adult primary care clinic patients with documented height and weight in the EHR within the reporting period.
Unit of measure: Percent
Time period: Year
Frequency: Annually
Data source: Primary Care Clinic EHR
Data access/availability: Individual primary care electronic health record systems
Notes on calculation: Eligible provider types include Family Medicine, Internal Medicine, *Pediatrics, Midwifery and Obstetrics/Gynecology; eligible providers include Medical Doctor, Doctor of Osteopathy, Physician Assistant, Nurse Practitioner, Pediatrician, Advanced Practice Nurse, and Midwife. This measure excludes pregnant women (pregnancy indicated at any time during the reporting period), inpatients, ED visits, patients seen only for specialty services (imaging), and visits where only blood draws and/or phone consultations were provided.
Limitations: This data source is subject to the following limitations:

- Bias toward individuals with health insurance and those who seek routine primary care
- Missing data and errors in the calculation and documentation of height and weight are common
- The results are generalizable only to established, adult primary care patients within the healthcare organization

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Adults who are obese; adults who are overweight but not obese; adults who are obese (clinic EHR); adults who do not engage in physical activity; diabetes prevalence – adult; heart disease mortality; cancer incidence by type; cancer mortality
Revision date: 01/16/2018

*Pediatric practices may include patients 18 years of age and older

Adults who are obese – Clinic EHR

Brief description: Percentage of adults whose measured Body Mass Index (BMI) is greater than or equal to 30.
Public health significance: Obesity is a serious concern because it is associated with reduced quality of life. It contributes to many of the leading causes of death in the U.S. and worldwide, including diabetes, heart disease, stroke, and some types of cancer.
Indicator category: Obesity
Demographic group: Adults aged 18 years and older
Numerator: Number of established adult primary care clinic patients (had at least one primary care clinic visit within the last 12 months) with a body mass index greater than or equal to 30.0 based on the most recent height and weight documented in the electronic health record (EHR) during the reporting period.
Denominator: Total number of established adult primary care clinic patients with documented height and weight in the EHR within the reporting period.
Unit of measure: Percent
Time period: Year
Frequency: Annually
Data source: Primary Care Clinic EHR
Data access/availability: Individual primary care electronic health record systems
Notes on calculation: Eligible provider types include Family Medicine, Internal Medicine, *Pediatrics, Midwifery, and Obstetrics/Gynecology; eligible providers include Medical Doctor, Doctor of Osteopathy, Physician Assistant, Nurse Practitioner, Pediatrician, Advanced Practice Nurse, and Midwife. This measure excludes pregnant women (pregnancy indicated at any time during the reporting period), inpatients, ED visits, patients seen only for specialty services (imaging), and visits where only blood draws and/or phone consultations were provided.
Limitations: This data source is subject to the following limitations:

- Bias toward individuals with health insurance and those who seek routine primary care
- Missing data and errors in the calculation and documentation of height and weight are common
- The results are generalizable only to established, adult primary care patients within the healthcare organization

Healthy People 2020 Objective: 30.5%
Healthy Minnesota 2020 Objective: 27.8%
Related indicator(s): Adults who are overweight but not obese; adults who are overweight but not obese (Clinic EHR), adults who are obese; adults who do not engage in physical activity; diabetes prevalence – adult; heart disease mortality; cancer incidence by type; cancer mortality
Revision date: 1/16/2018

*Pediatric practices may include patients 18 years of age and older

Youth who are overweight or obese

Brief description: Percentage of 9th graders whose BMI (from self-reported weight and height) is in the overweight or obese category

Public health significance: Childhood obesity has both immediate and long-term impacts on health, including: increased risk for other chronic health conditions, such as asthma and type 2 diabetes; increased incidence of social isolation, depression, and low self-esteem; and a link to obesity as an adult, which contributes to the leading causes of death – heart disease and cancer.

Indicator category: Obesity

Demographic group: 9th graders

Numerator: Number of 9th graders whose calculated BMI is in the overweight or obese category

Denominator: Total number of 9th grade respondents

Unit of measure: Percent

Time period: Year

Frequency: every 3 years

Data source: Minnesota Student Survey

Data access/availability: Minnesota Department of Health website, http://www.health.state.mn.us/divs/chs/mss/

Notes on calculation: Body Mass Index (BMI) is a number calculated from a child's self-reported weight and height. BMI is calculated using the standard formula: BMI=(weight in kilograms)÷[(Height in meters)*(height in meters)] or BMI=703*(weight in pounds)÷[(Height in inches)*(height in pounds)]. BMI-for-age percentiles are used to interpret BMI numbers for children and teens. CDC BMI-for-age growth charts were used to determine weight status according to BMI for participants:

Not overweight: less than the 85th percentile
Overweight: 85th to less than the 95th percentile
Obese: equal to or greater than the 95th percentile

Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a student chooses not to respond to the survey, and those who chose to not respond are noticeably different from those who participated. Students may not complete the survey due to their own choice, not being at school on the day the survey is administered, or their parent "opting out" of their child taking the survey.
- Non-English speaking students were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.

Healthy People 2020 Objective: 16.1%

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): Youth who are overweight or obese (Clinic EHR); youth who eat the recommended number of fruits and vegetables daily; youth who meet physical activity guidelines; children with asthma-hospitalizations; adolescent mental health

Revision date: 12/22/2017

Children who are overweight or obese – Clinic EHR

Brief description: Percentage of children whose measured Body Mass Index (BMI) is at or above the 85th percentile for their age.

Public health significance: Childhood obesity has both immediate and long-term impacts on health, including: increased risk for other chronic health conditions, such as asthma and type 2 diabetes; increased incidence of social isolation, depression, and low self-esteem; and a link to obesity as an adult, which contributes to the leading causes of death – heart disease and cancer.

Indicator category: Obesity

Demographic group: Children between the ages of 2 and 17

Numerator: Number of patients with a BMI at or above the 85th percentile for their age based on the most recent documented height and weight in the clinic electronic health record (EHR) during the reporting period.

Denominator: Total number of patients with a documented height and weight in the clinic EHR during the reporting period.

Unit of measure: Percent

Time period: Year

Frequency: Annually

Data source: Primary Care Clinic EHR

Data access/availability: Individual primary care electronic health record systems

Notes on calculation: Eligible provider types include Family Medicine, Pediatrics, Midwifery, and Obstetrics/Gynecology; eligible providers include Medical Doctor, Doctor of Osteopathy, Physician Assistant, Nurse Practitioner, Pediatrician, Advanced Practice Nurse, and Midwife. This measure excludes pregnant individuals (pregnancy indicated at any time during the reporting period), inpatients, ED visits, patients seen only for specialty services (imaging), and visits where only blood draws and/or phone consultations were provided.

Limitations: This data source is subject to the following limitations:

- Bias toward families with health insurance and those who seek routine primary care
- Missing data and errors in the calculation and documentation of height and weight are common
- The results are generalizable only to established, pediatric primary care patients within the healthcare organization

Healthy People 2020 Objective: n/a

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): Youth who are overweight or obese; youth who eat the recommended number of fruits and vegetables daily; youth who meet physical activity guidelines; children with asthma-hospitalizations; adolescent mental health

Revision Date: 2/5/2018

Healthy Eating

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Youth who eat the recommended number of fruits and vegetables daily

Brief description: Percentage of 9th graders who consume fruit, 100% fruit juice, or vegetables at least 5 times daily

Public health significance: Fruits and vegetables are a source of important nutrients in the diet. They also reduce the risk of many chronic diseases and may replace higher calorie foods in the diet and help people control weight.

Indicator category: Healthy Eating

Demographic group: 9th graders

Numerator: Number of 9th graders who consumed fruit, 100% fruit juice, or vegetables at least 5 times daily

Denominator: Total number of 9th grade respondents

Unit of measure: Percent

Time period: Year

Frequency: every 3 years

Data source: Minnesota Student Survey

Data access/availability: Minnesota Department of Health website, http://www.health.state.mn.us/divs/chs/mss/

Notes on calculation: The numerator was computed by combining the responses to 3 survey questions:

- *During the last 7 days, how many times did you drink 100% fruit juices such as orange, apple or grape juice?*
- *During the last 7 days, how many times did you eat fruit?*
- *During the last 7 days, how many times did you eat green salad, potatoes, carrots or other vegetables (Do not count French fries, fried potatoes or potato chips)?*

The responses to these 3 questions were converted to an actual number as follows:

- I did NOT eat or drink this=0
- 1 to 3 times in the last 7 days=2/7 (based on the mid-point of the range), to 15 decimal places
- 4 to 6 times in the last 7 days=5/7 (based on the mid-point of the range), to 15 decimal places
- 1 time per day=1
- 2 times per day=2
- 3 times per day=3
- 4 or more times per day=4

If the sum of the numeric responses from these 3 questions was 5 or greater, the student was counted in the numerator.

Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a student chooses not to respond to the survey, and those who chose to not respond are noticeably different from those who participated. Students may not complete the survey due to their own choice, not being at school on the day the survey is administered, or their parent "opting out" of their child taking the survey.
- Non-English speaking students were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.

Healthy People 2020 Objective: n/a

Healthy Minnesota 2020 Objective: 30.0%

Related indicator(s): Youth who are overweight or obese, children who are overweight or obese (Clinic EHR)

Revision date: 12/22/2017

Physical Activity

Youth who meet physical activity guidelines

Brief description: Percentage of 9th graders who were physically active for 60 minutes or more on at least five of the last seven days

Public health significance: Regular physical activity is important for controlling weight; reducing the risk of chronic diseases, such as heart disease, type 2 diabetes, and cancer; strengthening bones and muscles; and improving mental health.

Indicator category: Physical Activity

Demographic group: 9th graders

Numerator: Number of 9th graders who were physically active for 60 minutes or more on at least five of the last seven days

Denominator: Total number of 9th grade respondents

Unit of measure: Percent

Time period: Year

Frequency: every 3 years

Data source: Minnesota Student Survey

Data access/availability: Minnesota Department of Health website, http://www.health.state.mn.us/divs/chs/mss/

Notes on calculation: The numerator consists of students who responded "5 days", "6 days", or "7 days" to the survey question: *During the last 7 days, on how many days were you physically active for a total of AT LEAST 60 MINUTES PER DAY?*

Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a student chooses not to respond to the survey, and those who chose to not respond are noticeably different from those who participated. Students may not complete the survey due to their own choice, not being at school on the day the survey is administered, or their parent "opting out" of their child taking the survey.
- Non-English speaking students were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.

Healthy People 2020 Objective: n/a

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): Youth who are overweight or obese, children who are overweight or obese (Clinic EHR); adolescent mental health

Revision date: 12/22/2017

Adults who do not engage in physical activity

Brief description: Percentage of adults 25 and older who did not participate in any leisure time physical activity during the past month.
Public health significance: Regular physical activity is important for controlling weight; reducing the risk of chronic diseases, such as heart disease, type 2 diabetes, and cancer; strengthening bones and muscles; improving mental health; and preventing falls in older adults.
Indicator category: Physical Activity
Demographic group: Adults 25 and older
Numerator: Weighted number of adults 25 and older who did not engage in any leisure time physical activity during the past month
Denominator: Total number of respondents 25 and older
Unit of measure: Percent, combined with a confidence interval
Time period: Year
Frequency: every 4-6 years, varies by jurisdiction
Data source: Metro SHAPE Survey
Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites
Notes on calculation: The numerator consists of respondents who answered "No" to the survey question: *During the past 30 days, other than your regular job, did you participate in any physical activity or exercise such as running, calisthenics, golf, gardening, or walking for exercise?*
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: 32.6%
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Adults who are obese; adults who are overweight but not obese; adults who are obese (clinic EHR); adults who are overweight but not obese (Clinic EHR); heart disease mortality; diabetes prevalence-adults; suicide rate; adult mental health; cancer incidence by type; cancer mortality; fall related deaths among adults 65+
Revision date: 12/22/2017

Tobacco Use

Youth who use tobacco products

Brief description: Percentage of 9th graders who used tobacco products on one or more days during the past 30 days

Public health significance: People who initiate tobacco use in adolescence are at a higher risk for lifelong tobacco use and its associated health problems, including heart disease, cancer and premature death.

Indicator category: Tobacco Use

Demographic group: 9th graders

Numerator: Number of 9th graders who used tobacco products on one or more days during the past 30 days

Denominator: Total number of 9th grade respondents

Unit of measure: Percent

Time period: Year

Frequency: every 3 years

Data source: Minnesota Student Survey

Data access/availability: Minnesota Department of Health website, http://www.health.state.mn.us/divs/chs/mss/

Notes on calculation: The numerator was computed by combining the responses to 3 Minnesota Student Survey questions:

- *During the last 30 days, on how many days did you smoke a cigarette?*
- *During the last 30 days, on how many days did you smoke cigars, cigarillos or little cigars?*
- *During the last 30 days, on how many days did you use chewing tobacco, snuff or dip?*

The student is counted in the numerator if they answered "1 to 2 days", "3 to 9 days", "10 to 19 days", "20 to 29 days" or "All 30 days" to any one of these three questions.

Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a student chooses not to respond to the survey, and those who chose to not respond are noticeably different from those who participated. Students may not complete the survey due to their own choice, not being at school on the day the survey is administered, or their parent "opting out" of their child taking the survey.
- Non-English speaking students were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.

Healthy People 2020 Objective: 21.0%

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): Youth who use e-cigarettes; youth who smoke cigarettes (Clinic EHR)

Revision date: 12/22/2017

Youth who use e-cigarettes

Brief description: Percentage of 9th graders who used e-cigarettes on one or more days during the past 30 days
Public health significance: E-cigarettes are increasing in popularity among adolescents and young adults and the long-term health consequences are not yet fully understood.
Indicator category: Tobacco Use
Demographic group: 9th graders
Numerator: Number of 9th graders who used e-cigarettes on one or more days during the past 30 days
Denominator: Total number of 9th grade respondents
Unit of measure: Percent
Time period: Year
Frequency: every 3 years
Data source: Minnesota Student Survey
Data access/availability: Minnesota Department of Health website, http://www.health.state.mn.us/divs/chs/mss/
Notes on calculation: The numerator consists of students who answered "1 to 2 days", "3 to 9 days", "10 to 19 days", "20 to 29 days" or "All 30 days" to the survey question: *During the last 30 days, on how many days did you use an electronic cigarette (e-cigarette, e-hookah, vaping pen)?*
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a student chooses not to respond to the survey, and those who chose to not respond are noticeably different from those who participated. Students may not complete the survey due to their own choice, not being at school on the day the survey is administered, or their parent "opting out" of their child taking the survey.
- Non-English speaking students were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Youth who use tobacco products; youth who smoke cigarettes (Clinic EHR)
Revision date: 12/22/2017

Youth who smoke cigarettes – Clinic EHR

Brief description: Percentage of adolescent patients who self-report using cigarettes
Public health significance: People who initiate tobacco use in adolescence are at a higher risk for lifelong tobacco use and its associated health problems, including heart disease, cancer and premature death.
Indicator category: Tobacco Use
Demographic group: Adolescents ≥ 13 years and <18 years
Numerator: Number of established adolescent primary care clinic patients who self-report using cigarettes during the measurement period
Denominator: Total number of established adolescent primary care clinic patients who have their smoking status assessed during the measurement period
Unit of measure: Percent
Time period: Year
Frequency: Annually
Data source: Primary Care Clinic EHR
Data access/availability: Individual primary care electronic health record systems
Notes on calculation: Eligible provider types include Family Medicine, Pediatrics, Midwifery, and Obstetrics/Gynecology; eligible providers include Medical Doctor, Doctor of Osteopathy, Physician Assistant, Nurse Practitioner, Pediatrician, Advanced Practice Nurse, and Midwife. This measure excludes inpatients, ED visits, patients seen only for specialty services (imaging), and visits where only blood draws and/or phone consultations were provided.
Limitations: This data source is subject to the following limitations:

- Bias toward individuals with health insurance and those who seek routine primary care
- The data are self-reported and may underrepresent the percentage of adolescents who smoke cigarettes
- The assessment of smoking status may be skipped or not routinely performed by eligible providers
- Missing data and/or documentation errors in the electronic health record are common
- The results are generalizable only to established adolescent primary care patients within the healthcare organization

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Youth who use e-cigarettes; youth who smoke cigarettes
Revision date: 01/16/2018

Adults who are current smokers

Brief description: Percentage of adults 25 years or older who: 1) have smoked at least 100 cigarettes in their lifetime; and 2) now smoke cigarettes every day or some days

Public health significance: Tobacco use is the single most preventable cause of death and disease in the United States. Cigarette smoking increases the likelihood of many cancers, heart disease and stroke, and lung diseases. In addition, people who don't smoke but are exposed to secondhand smoke can also suffer from serious health problems.

Indicator category: Tobacco Use

Demographic group: Adults 25 and older

Numerator: Weighted number of adults 25 and older who are current smokers

Denominator: Total number of respondents 25 and older

Unit of measure: Percent, combined with a confidence interval

Time period: Year

Frequency: every 4-6 years, varies by jurisdiction

Data source: Metro SHAPE Survey

Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites

Notes on calculation: Current smoking status was derived from the responses to the following two questions:

- *Have you smoked at least 100 cigarettes in your entire life? 100 cigarettes = 5 packs*
- *Do you now smoke cigarettes every day, some days, or not at all?*

A current smoker is defined as a person who has smoked at least 100 cigarettes in his or her lifetime and now smokes every day or some days.

Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: 12.0%

Healthy Minnesota 2020 Objective: 16.2%

Related indicator(s): Adult tobacco status and quit plan (Clinic EHR); heart disease mortality; cancer incidence by type; cancer mortality

Revision date: 12/22/2017

Adults tobacco status and quit plan – Clinic EHR

Brief description: Current tobacco and presence/type of quit plan
Public health significance: Tobacco use is the single most preventable cause of death and disease in the United States. Cigarette smoking increases the likelihood of many cancers, heart disease and stroke, lung diseases, and premature death. In addition, people who don't smoke but are exposed to secondhand smoke can also suffer from serious health problems.
Indicator category: Tobacco Use
Demographic group: Adults age 18 years and older
Numerator: Number of eligible patients who report current tobacco use AND have a documented quit plan in the electronic health record (EHR) during the reporting period
Denominator: Total number of eligible patients whose tobacco status was assessed in the EHR during the reporting period
Unit of measure: Percent
Time period: Year
Frequency: Annually
Data source: Primary Care Clinic EHR
Data access/availability: Individual primary care electronic health record systems
Notes on calculation: Eligible provider types include Family Medicine, *Pediatrics, Internal Medicine, Midwifery, Obstetrics/Gynecology; eligible providers include Medical Doctor, Doctor of Osteopathy, Physician Assistant, Nurse Practitioner, Pediatrician, Advanced Practice Nurse, and Midwife. This measure excludes inpatients, ED visits, patients seen only for specialty services (imaging), and visits where only blood draws and/or phone consultations were provided.
Limitations: This data source is subject to the following limitations:

- Biased toward individuals with health insurance and those who seek routine primary care
- The data are self-reported and may underrepresent the percentage of adults who use tobacco products.
- The assessment of smoking status may be skipped or not routinely asked by eligible providers.
- Information regarding the presence of a quit plan may be missing
- The results are generalizable only to established adult primary care patients within the health care organization

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Adults who are current smokers; heart disease mortality; cancer incidence by type; cancer mortality
Revision date: 01/16/2018

*Pediatric practices may include patients 18 years of age and older

Cardiovascular Disease & Diabetes

Blood pressure

Brief description: Percentage of adults 25 and older who report they have ever been told by a doctor/nurse/health professional that they have hypertension, also called high blood pressure
Public health significance: High blood pressure that continues for a long time can damage the heart. It increases the risk of heart disease and stroke, which are leading causes of death in the United States.
Indicator category: Cardiovascular Disease & Diabetes
Demographic group: Adults 25 and older
Numerator: Weighted number of adults 25 and older who report they have ever been told by a doctor/nurse/health professional that they have hypertension, also called high blood pressure
Denominator: Total number of respondents 25 and older
Unit of measure: Percent, combined with a confidence interval
Time period: Year
Frequency: every 4-6 years, varies by jurisdiction
Data source: Metro SHAPE Survey
Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites
Notes on calculation: The numerator consists of respondents who answered "Yes" to the survey question: *Have you ever been told by a doctor or other health professional that you had…hypertension, also called high blood pressure*
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: 26.9%
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Heart disease mortality
Revision date: 12/22/2017

Cholesterol

Brief description: Percentage of adults 25 and older who report they have ever been told by a doctor/nurse/health professional that they have high blood cholesterol
Public health significance: When there is too much cholesterol in the blood, it can attach to the walls of the arteries and increase the risk of heart disease and stroke, which are leading causes of death in the United States.
Indicator category: Cardiovascular Disease & Diabetes
Demographic group: Adults 25 and older
Numerator: Weighted number of adults 25 and older who report they have ever been told by a doctor/nurse/health professional that they have high blood cholesterol
Denominator: Total number of respondents 25 and older
Unit of measure: Percent, combined with a confidence interval
Time period: Year
Frequency: every 4-6 years, varies by jurisdiction
Data source: Metro SHAPE Survey
Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites
Notes on calculation: The numerator consists of respondents who answered "Yes" to the survey question: *Have you ever been told by a doctor or other health professional that you had…high blood cholesterol*
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: 13.5%
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Heart disease mortality
Revision date: 12/22/2017

Heart disease mortality

Brief description: Age-adjusted heart disease mortality rate per 100,000

Public health significance: Heart disease, which is largely preventable, is one of the leading causes of death in the United States and a significant contributor to health care costs.

Indicator category: Cardiovascular Disease & Diabetes

Demographic group: Entire population

Numerator: Number of deaths where cause of death = I00 to I09, I11, I13, or I20 to I51 (ICD10 codes)

Denominator: Total population

Unit of measure: Rate per 100,000 population

Time period: Year

Frequency: Annually

Data source: Minnesota Department of Health, *Vital Statistics Interactive Queries*

Data access/availability: Minnesota Department of Health website, https://pqc.health.state.mn.us/mhsq/frontPage.jsp

Notes on calculation: Deaths occur at different rates in different age groups. Mortality rates can be age adjusted to allow comparison between populations that have different age distributions. The process of age adjustment creates a rate for each population being compared that assumes that the populations all had the same age distribution as a reference population.

Adjustment is accomplished by first multiplying the age-specific death rates (number of deaths/population in that age group*100,000) by a "standard" weight. The "standard" weight is the proportion of the U.S. population in 2000 within each age group. The weighted rates are then summed across the age groups to give the age-adjusted rate for the whole population.

Limitations: This data source is subject to the following limitations:

- Data on cause of death and contributing conditions or injuries from the death certificate completed by the physician, coroner, or medical examiner are translated into ICD10 codes by the state health department.
- Certain causes of death may not have ICD10 codes with the right level of specificity to accurately reflect the death.
- In other cases, the certifier may not provide enough detail for the coder to select a more specific code.
- Specifying the underlying cause of death is especially difficult among elderly people who may have multiple conditions at the time of death.

Healthy People 2020 Objective: 103.4/100,000

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): Blood pressure; cholesterol

Revision date: 2/5/2018

Diabetes prevalence-adult

Brief description: Percentage of adults 25 and older who report they have ever been told by a doctor/nurse/health professional that they have diabetes

Public health significance: Diabetes is a leading cause of death and disability in the United States. It increases the rate of all-cause mortality, heart attack and can lead to complications, such as kidney failure, amputations, and blindness.

Indicator category: Cardiovascular Disease & Diabetes

Demographic group: Adults 25 and older

Numerator: Weighted number of adults 25 and older who report they have ever been told by a doctor/nurse/health professional that they have diabetes

Denominator: Total number of respondents 25 and older

Unit of measure: Percent, combined with a confidence interval

Time period: Year

Frequency: every 4-6 years, varies by jurisdiction

Data source: Metro SHAPE Survey

Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites

Notes on calculation: The numerator consists of respondents who answered "Yes" to the survey question: *Have you ever been told by a doctor or other health professional that you had…diabetes or sugar disease*

Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: n/a

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): Adults who are obese; adults who are overweight but not obese; adults who are obese (Clinic EHR); adults who are overweight but not obese (Clinic EHR); heart disease mortality; all-cause mortality

Revision date: 12/22/2017

Substance Use

Adult binge drinking, past 30 days

Brief description: Percentage of males 25 and older having five or more drinks on one occasion or females 25 and older having four or more drinks on one occasion.
Public health significance: Binge drinking increases the risk of health problems, such as injuries, violence, liver disease, and cancer.
Indicator category: Substance Use
Demographic group: Adults 25 and older
Numerator: Weighted number of males 25 and older who report having 5 or more drinks on one occasion or females 25 and older who report having 4 or more drinks on one occasion 1 or more times during the past 30 days
Denominator: Total number of respondents 25 and older
Unit of measure: Percent, combined with a confidence interval
Time period: Year
Frequency: every 4-6 years, varies by jurisdiction
Data source: Metro SHAPE Survey
Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites
Notes on calculation: The numerator consists of respondents who gave an answer other than "0" to the survey question: *Considering all types of alcoholic beverages, how many times during the past 30 days did you have…4 or more drinks on one occasion (for females)* OR *5 or more drinks on one occasion (for males)?*
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: 24.4%
Healthy Minnesota 2020 Objective: 15.5%
Related indicator(s): Fatal injuries; cancer incidence by type; cancer mortality
Revision date: 12/22/2017

Adolescents using alcohol, past 30 days

Brief description: Percentage of 9th graders who reported using alcohol on one or more days within the past 30 days.

Public health significance: More teens use alcohol than tobacco or other drugs and are more likely to binge drink than adults. Underage drinking increases the likelihood of health issues, including death, injury, violence, and risky sexual behavior.

Indicator category: Substance Use

Demographic group: 9th graders

Numerator: Number of 9th graders who reported using alcohol on one or more days within the past 30 days.

Denominator: Total number of 9th grade respondents

Unit of measure: Percent

Time period: Year

Frequency: every 3 years

Data source: Minnesota Student Survey

Data access/availability: Minnesota Department of Health website, http://www.health.state.mn.us/divs/chs/mss/

Notes on calculation: The numerator consists of students who answered "1 to 2 days", "3 to 5 days", "6 to 9 days", "10 to 19 days", "20 to 29 days" or "All 30 days" to the survey question: *During the last 30 days, on how many days did you drink one or more drinks of an alcoholic beverage?*

Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a student chooses not to respond to the survey, and those who chose to not respond are noticeably different from those who participated. Students may not complete the survey due to their own choice, not being at school on the day the survey is administered, or their parent "opting out" of their child taking the survey.
- Non-English speaking students were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.

Healthy People 2020 Objective: n/a

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): Adolescents using illicit drugs, past 12 months; all-cause mortality; fatal injuries; chlamydia rate; teen birth rate

Revision date: 12/22/2017

Adolescents using illicit drugs, past 12 months

Brief description: Percentage of 9th graders who reported using marijuana or other drugs (not alcohol, tobacco) during the past year

Public health significance: Use of illicit drugs has a major impact on individuals, families and communities and contributes to costly social, physical, and mental health problems, such as HIV/AIDS, motor vehicle crashes, physical fights, crime, homicide, and suicide.

Indicator category: Substance Use

Demographic group: 9th graders

Numerator: Number of 9th graders who used reported using marijuana or other drugs (not alcohol, tobacco) during the past year

Denominator: Total number of 9th grade respondents

Unit of measure: Percent

Time period: Year

Frequency: every 3 years

Data source: Minnesota Student Survey

Data access/availability: Minnesota Department of Health website, http://www.health.state.mn.us/divs/chs/mss/

Notes on calculation: The numerator was computed by combining the responses to 13 survey questions:

- *During the last 12 months, on how many occasions did you use marijuana or hashish? (Do NOT count medical marijuana prescribed for you by a doctor)*
- *During the last 12 months, on how many occasions have you used any of the following prescriptions drugs that were NOT prescribed for you or that you took ONLY to get high? Stimulants such as Benzedrine (bennies, speed, uppers, pep pills) or diet pills*
- *During the last 12 months, on how many occasions have you used any of the following prescriptions drugs that were NOT prescribed for you or that you took ONLY to get high? ADHD or ADD drugs like Ritalin (hyper pills)*
- *During the last 12 months, on how many occasions have you used any of the following prescriptions drugs that were NOT prescribed for you or that you took ONLY to get high? Pain relievers such as Oxycodone, OxyContin (oxy), Percocet, Percodan, Vicodin or others*
- *During the last 12 months, on how many occasions have you used any of the following prescriptions drugs that were NOT prescribed for you or that you took ONLY to get high? Tranquilizers such as Valium, Xanax, nerve pills or sedatives or barbiturates (downers)*
- *During the last 12 months, on how many occasions (if any) have you used…LSD (acid), PCP (wet sticks or dipped joints), or other psychedelics (mushrooms, angel dust)?*
- *During the last 12 months, on how many occasions (if any) have you used…MDMA (E, X, ecstasy), GHB (G, Liquid E, Liquid X, roofies) or Ketamine (Special K)?*
- *During the last 12 months, on how many occasions (if any) have you used…crack, coke or cocaine in any other form?*
- *During the last 12 months, on how many occasions (if any) have you used…heroin?*
- *During the last 12 months, on how many occasions (if any) have you… used methamphetamine (meth, glass, crank, crystal meth, ice)?*
- *During the last 12 months, on how many occasions (if any) have you…used over-the-counter drugs such as cough syrup, cold medicine or diet pills that you took only to get high?*
- *During the last 12 months, on how many occasions (if any) have you…used synthetic drugs such as bath salts (Ivory Wave, White Lightning) or synthetic marijuana (K2, Gold) that you took only to*

get high?

- *During the last 12 months, on how many occasions (if any) have you …sniffed glue or huffed or inhaled the contents of aerosol spray cans or other gases to get high?*

The student is counted in the numerator if they answered "1 to 2", "3 to 5", "6 to 9", "10 to 19", "20 to 39", or "40+" to the question *During the last 12 months, on how many occasions did you use marijuana or hashish? (Do NOT count medical marijuana prescribed for you by a doctor)* or "1 to 2", "3 to 5", "6 to 9", "10 to 19", "20 or more" to any of the other 12 questions.

Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a student chooses not to respond to the survey, and those who chose to not respond are noticeably different from those who participated. Students may not complete the survey due to their own choice, not being at school on the day the survey is administered, or their parent "opting out" of their child taking the survey.
- Non-English speaking students were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.

Healthy People 2020 Objective: 7.1%

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): Adolescents using alcohol, past 30 days; suicide rate; adolescent mental health

Revision date: 12/22/2017

Maternal, Infant, and Child Health

Infant deaths

Brief description: Rate of infant deaths per 1,000 live births
Public health significance: Infant deaths provide information about maternal and child health and are a key marker for the overall health of a population
Indicator category: Maternal, Infant, and Child Health
Demographic group: Infants less than 1 year
Numerator: Number of deaths of infants less than 1 year
Denominator: Live births during the same time period as the infant deaths
Unit of measure: Rate per 1,000 live births
Time period: 5 years
Frequency: Annually
Data source: Minnesota Department of Health, *Minnesota Public Health Access Portal*
Data access/availability: Minnesota Department of Health website, https://apps.health.state.mn.us/mndata/home.
Notes on calculation: Death data are calculated using the period linked approach, where all infant deaths occurring in a given year are linked to their matching birth certificates, whether the birth occurred in the same year or a previous year. For example, infant deaths occurring in 2015 are linked to their corresponding birth certificates, whether the birth occurred in 2014 or 2015. The rate is calculated using the following formula: (number of deaths/number of live births) *1,000.
Limitations: This data source is subject to the following limitations:

- Because linked birth and death data is being used, the data is not available until 364 days following the last birth in a calendar year. Infants whose deaths records are not available are not counted.
- A birth record may be amended weeks or months after it was originally processed due to adoption, correction, or out-of-state birth. Because of the time it takes to correct and amend birth records, the final birth file for a particular calendar year can take many months after the end of the calendar year to be finalized and made available for public use.
- These data are based on the mother's county of residence listed on the birth certificate. The county is not determined by geocoding. When an adoption occurs, the birth mother's address information is replaced with the adoptive mother's address information.
- The mother's place of residence during pregnancy (and, with infant death, residence during the first year of life) may not be the same as the place of residence at the time of birth (or death). These data are based on the mother's county of residence listed on the birth certificate. Also, when an adoption occurs, the birth mother's address information is replaced with the adoptive mother's address information. Accuracy of county of residence has not been verified by geocoding for these data.

Healthy People 2020 Objective: 6.0/1,000
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Prenatal care, low birth weight
Revision date: 12/22/2017

Prenatal Care

Brief description: Percentage of births to mothers who received prenatal care during the first trimester
Public health significance: Early prenatal care that occurs on a regular basis helps ensure a healthy pregnancy and birth.
Indicator category: Maternal, Infant, and Child Health
Demographic group: Babies born in a particular year
Numerator: Number of births to mothers who received prenatal care during the first trimester
Denominator: Total births
Unit of measure: Percent
Time period: 1 year
Frequency: Annually
Data source: Minnesota Department of Health, *Minnesota County Health Tables*
Data access/availability: Minnesota Department of Health website, http://www.health.state.mn.us/divs/chs/countytables/.
Notes on calculation: This information comes from the infant's birth certificate, which is entered by hospital staff at the time of birth.
Limitations: This data source is subject to the following limitations:

- A birth record may be amended weeks or months after it was originally processed due to adoption, correction, or out-of-state birth. Because of the time it takes to correct and amend birth records, the final birth file for a particular calendar year can take many months after the end of the calendar year to be finalized and made available for public use.
- Residential information is important when examining risk factors that occur before birth. The mother's place of residence during pregnancy may not be the same as her place of residence at the time of birth. These data are based on the mother's county of residence listed on the birth certificate. Also, when an adoption occurs, the birth mother's address information is replaced with the adoptive mother's address information. Accuracy of county of residence has not been verified by geocoding for these data.

Healthy People 2020 Objective: 6.0/1,000
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Infant deaths, low birth weight
Revision date: 2/5/2018

Low birth weight

Brief description: Percentage of single births weighting <2,500 grams, or 5.5 pounds
Public health significance: Low birth weight infants have an increased risk of infections and other illnesses in the first weeks of life, as well as longer-term health complications, such as developmental disabilities.
Indicator category: Maternal, Infant, and Child Health
Demographic group: Infants
Numerator: Number of single infants whose first weight obtained after birth is <2,500 grams, or 5.5 pounds
Denominator: Total births
Unit of measure: Percent
Time period: Year
Frequency: Annually
Data source: Minnesota Department of Health, *Minnesota County Health Tables*
Data access/availability: Minnesota Department of Health website, http://www.health.state.mn.us/divs/chs/countytables/.
Notes on calculation: This information comes from the infant's birth certificate, which is entered by hospital staff at the time of birth. Multiple births are very likely to occur preterm, making them more likely to be low birth weight. For this reason, they are excluded from the data.
Limitations: This data source is subject to the following limitations:

- A birth record may be amended weeks or months after it was originally processed due to adoption, correction, or out-of-state birth. Because of the time it takes to correct and amend birth records, the final birth file for a particular calendar year can take many months after the end of the calendar year to be finalized and made available for public use.
- Residential information is important when examining risk factors that occur before birth. The mother's place of residence during pregnancy may not be the same as her place of residence at the time of birth. These data are based on the mother's county of residence listed on the birth certificate. Also, when an adoption occurs, the birth mother's address information is replaced with the adoptive mother's address information. Accuracy of county of residence has not been verified by geocoding for these data.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Infant deaths; prenatal care
Revision date: 12/22/2017

Mental Health

Suicide Rate

Brief description: Age-adjusted suicide mortality rate per 100,000: adults (age 20 and older), adolescent (age 15-19)
Public health significance: Suicide is a leading cause of death among young people (15-24 years old). Suicide and suicidal behavior place a heavy emotional and financial burden on individuals, families, and communities.
Indicator category: Mental Health
Demographic group: Entire population
Numerator: Number of deaths where cause of death=X60 to 84 or Y87.0 (ICD10 codes): adolescent (age 15-19), adults (age 20 and older)
Denominator: Total population, adolescent (age 15-19), adults (age 20 and older)
Unit of measure: Rate per 100,000 population
Time period: Year
Frequency: Annually
Data source: Minnesota Department of Health, *Vital Statistics Interactive Queries*
Data access/availability: Minnesota Department of Health website, https://pqc.health.state.mn.us/mhsq/frontPage.jsp
Notes on calculation: Deaths occur at different rates in different age groups. Mortality rates can be age adjusted to allow comparison between populations that have different age distributions. The process of age adjustment creates a rate for each population being compared that assumes that the populations all had the same age distribution as a reference population.
Adjustment is accomplished by first multiplying the age-specific death rates (number of deaths/population in that age group*100,000) by a "standard" weight. The "standard" weight is the proportion of the U.S. population in 2000 within each age group. The weighted rates are then summed across the age groups to give the age-adjusted rate for the whole population.
Limitations: This data source is subject to the following limitations:

- They do not provide a complete picture of suicidal behavior. Most suicide attempts do not result in death, so they are not reflected in the death data.
- Sometimes there is not enough information to determine intent. Without conclusive evidence, potential suicides may be recorded as unintentional or undetermined on death certificates. Even if subsequent investigation determines that the death was a suicide, the death certificate may not be updated to reflect this finding.
- Medical examiners, coroners, doctors, and public safety professionals may not record a death as a suicide to spare the victim and his or her family the social stigma sometimes associated with a death by suicide (or to avoid other consequences such as voiding the victim's life insurance and thereby denying benefit's to the victim's family).

Healthy People 2020 Objective: 10.2/100,000
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Adult mental health; adolescent mental health
Revision date: 2/5/2018

Adult Mental Health

Brief description: Percentage of adults (age 25 and older) who reported their mental health was not good 14 or more days during the past 30 days

Public health significance: A report of mental health that is not good can be an indicator of unmet mental health needs and can be a reflection of the burden of mental illness.

Indicator category: Mental Health

Demographic group: Adults 25 and older

Numerator: Weighted number of adults 25 and older who reported their mental health was not good 14 or more days during the past 30 days

Denominator: Total number of respondents 25 and older

Unit of measure: Percent, combined with a confidence interval

Time period: Year

Frequency: every 4-6 years, varies by jurisdiction

Data source: Metro SHAPE Survey

Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites

Notes on calculation: The numerator consists of respondents who gave an answer of 14 or greater to the survey question: *Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?*

Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: n/a

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): Suicide rate; delay of care-mental health

Revision date: 12/22/2017

Adolescent mental health

Brief description: Percentage of 9th graders who seriously considered attempting suicide during the past year
Public health significance: Adolescents who have serious thoughts of suicide are in significant psychological distress and are at high risk for suicidal behavior.
Indicator category: Mental Health
Demographic group: 9th graders
Numerator: Number of 9th graders who reported having seriously considered attempting suicide during the last year
Denominator: Total number of 9th grade respondents
Unit of measure: Percent
Time period: Year
Frequency: every 3 years
Data source: Minnesota Student Survey
Data access/availability: Minnesota Department of Health website, http://www.health.state.mn.us/divs/chs/mss/
Notes on calculation: The numerator consists of students who answered "Yes, during the last year" to the survey question: *Have you ever seriously considered attempting suicide?*
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a student chooses not to respond to the survey, and those who chose to not respond are noticeably different from those who participated. Students may not complete the survey due to their own choice, not being at school on the day the survey is administered, or their parent "opting out" of their child taking the survey.
- Non-English speaking students were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Suicide rate
Revision date: 12/22/2017

Asthma

Children with asthma - hospitalizations

Brief description: Rate per 1,000 discharges for children 5-19 who were hospitalized for asthma
Public health significance: Asthma is one of the most common chronic conditions among children under 18. Asthma hospitalizations are costly and potentially preventable. They can be an indicator of asthma that is not well-controlled.
Indicator category: Asthma
Demographic group: Children 5-19
Numerator: Number of hospital discharges for children 5-19 where the primary discharge diagnosis is asthma
Denominator: Total number of children 5-19
Unit of measure: Rate per 1,000 discharges
Time period: Year
Frequency: Annually
Data source: Minnesota Hospital Association, *Minnesota Hospital Discharge Data*
Data access/availability: Minnesota Hospital Association
Notes on calculation: The rate is calculated as (total inpatient claims for males and females in the age groups "<1", "1-4", "5-9", "10-14", and "15-19" who had a primary discharge diagnosis of asthma (CCHPR Code=128)/total male and female population in those age groups)*1,000.
Limitations: This data source is subject to the following limitations:

- Hospital visits are defined as Minnesota residents who are discharged from a hospital in Minnesota or the bordering states of North Dakota, South Dakota, or Iowa. 99% of the hospitals in Minnesota are represented in the data.
- The data represent hospital discharge events, not individual patients. One patient may have more than one discharge event in a particular year, meaning they are counted more than once in the data.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Poor air quality days
Revision date: 12/22/2017

Cancer

Cancer incidence by type

Brief description: All cancer combined, incidence rate per 100,000 (Include specific rates for lung, colorectal cancers)
Public health significance: Cancer is the leading cause of death in Minnesota and a significant cause of morbidity in the United States. Cancer incidence is expected to grow as the United States population ages. Lung and colorectal cancer are the most common cancers diagnosed in both males and females.
Indicator category: Cancer
Demographic group: Entire population
Numerator: Number of deaths from heart disease
Denominator: Total population
Unit of measure: Rate per 100,000 population
Time period: Year
Frequency: Annually
Data source: Minnesota Department of Health, *Vital Statistics Interactive Queries*
Data access/availability: Minnesota Department of Health website, https://pqc.health.state.mn.us/mhsq/frontPage.jsp
Notes on calculation: Most health conditions occur at different rates in different age groups. When the risk of a specific health condition varies by age, rates can be age adjusted to allow comparison between populations that have different age distributions. The process of age adjustment creates a rate for each population being compared that assumes that the populations all had the same age distribution as a reference population.
Adjustment is accomplished by first multiplying the age-specific rates (number of cases/population in that age group*100,000) by a “standard” weight. The “standard” weight is the proportion of the U.S. population in 2000 within each age group. The weighted rates are then summed across the age groups to give the age-adjusted rate for the whole population.
Limitations: These data come from the Minnesota Cancer Surveillance System (MCSS), which are complete and high-quality data on cancer cases in Minnesota. Only cancer cases that are microscopically-confirmed are included. Beginning in 2012, brain, liver, and pancreatic cancers that are clinically-diagnosed (radiography, CAT scans, and MRIs) without tissue confirmation are included. This data source is subject to the following limitations:

- MCSS data are dynamic and may change. Data are always being updated and improved as new information becomes available, so cancer incidence data are considered accurate as of the analysis date.
- A small number of cancer cases among Minnesota residents are missing "county of residence" and are therefore classified as "unknown" county.
- Counts presented here are number of cancers, not number of people with cancer. A person can contribute more than one case of cancer for the purposes of these data.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Cancer mortality; adults 50 and older who have had colorectal cancer screening (Clinic EHR)
Revision date: 12/22/2017

Cancer mortality

Brief description: All cancer combined, incidence rate per 100,000 (Include specific rates for lung, colorectal cancers)

Public health significance: Cancer is the leading cause of death in Minnesota and a significant cause of morbidity in the United States. Cancer incidence is expected to grow as the United States population ages. Lung and colorectal cancer are the most common cancers diagnosed in both males and females.

Indicator category: Cancer

Demographic group: Entire population

Numerator: Number of deaths where cause of death = C00 to C97 (ICD10 codes)

Denominator: Total population

Unit of measure: Rate per 100,000 population

Time period: Year

Frequency: Annually

Data source: Minnesota Department of Health, *Minnesota Public Health Data Access*

Data access/availability: Minnesota Department of Health website, https://apps.health.state.mn.us/mndata/.

Notes on calculation: Deaths occur at different rates in different age groups. Mortality rates can be age adjusted to allow comparison between populations that have different age distributions. The process of age adjustment creates a rate for each population being compared that assumes that the populations all had the same age distribution as a reference population.

Adjustment is accomplished by first multiplying the age-specific death rates (number of deaths/population in that age group*100,000) by a "standard" weight. The "standard" weight is the proportion of the U.S. population in 2000 within each age group. The weighted rates are then summed across the age groups to give the age-adjusted rate for the whole population.

Limitations: This data source is subject to the following limitations:

- Data on cause of death and contributing conditions or injuries from the death certificate completed by the physician, coroner, or medical examiner are translated into ICD10 codes by the state health department.
- Certain causes of death may not have ICD10 codes with the right level of specificity to accurately reflect the death.
- In other cases, the certifier may not provide enough detail for the coder to select a more specific code.
- Specifying the underlying cause of death is especially difficult among elderly people who may have multiple conditions at the time of death.

Healthy People 2020 Objective: n/a

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): Cancer incidence by type; adults 50 and older who have had colorectal cancer screening (Clinic EHR)

Revision date: 2/5/2018

Adults 50 and older who have had colorectal cancer screening – Clinic EHR

Brief description: Percentage of adults age 50 and older who have been screened for colorectal cancer
Public health significance: Colorectal cancer is one of the most common cancers in both males and females in Minnesota. When screening is done according to CDC guidelines, pre-cancerous polyps can be removed in order to prevent cancer from occurring. This reduces cancer incidence and mortality.
Indicator category: Cancer
Demographic group: Adults age 50 and older
Numerator: Number of eligible patients identified in the electronic health record (EHR) as having received colorectal cancer screening performed during the reporting period
Denominator: Total number of eligible patients who have an active colorectal cancer screening health maintenance topic in the EHR during the reporting period
Unit of measure: Percent
Time period: Year
Frequency: Annually
Data source: Primary Care Clinic EHR
Data access/availability: Individual primary care electronic health record systems
Notes on calculation: This metric may produce "Null" and/or "N/A" values. "Null" means the metric does not apply to the patient (younger than age 50) and "N/A" means that none of the colorectal cancer screening health maintenance topics is active for that patient (patient age >75 years or excluded for other reasons). "Null" and/or "N/A" values are excluded from the numerator and denominator.
Eligible provider types include Family Medicine, Internal Medicine, Midwifery, and Obstetrics/Gynecology; eligible providers include Medical Doctor, Doctor of Osteopathy, Physician Assistant, Nurse Practitioner, Advanced Practice Nurse, and Midwife. This measure excludes inpatients, ED visits, patients seen only for specialty services (imaging), and visits where only blood draws and/or phone consultations were provided.
Limitations: This data source is subject to the following limitations:

- Bias toward individuals with health insurance and those who seek routine primary care
- Colorectal cancer screening information may be missing or not properly documented in the EHR
- The results are generalizable only to established primary care clinic patients within the healthcare organization

Healthy People 2020 Objective: 70.5% (50-75 years, based on current guidelines)
Healthy Minnesota 2020 Objective: 80% (50-75 years, up to date)
Related indicator(s): Cancer incidence by type; cancer mortality
Revision date: 01/16/2018

Injury and Violence

Fall-related deaths among adults 65+

Brief description: Rate per 100,000 adults 65 and older who die as a result of a fall-related injury
Public health significance: Falls are the leading cause of injury and deaths from injury among older Americans. As the population ages, the cost related to fall injuries is also expected to rise. For an older adult, a fall can often lead to a loss of independence.
Indicator category: Injury and Violence
Demographic group: Population 65 and older
Numerator: Number of deaths of people 65 and older where cause of death = W00 to W19 (ICD10 codes)
Denominator: Total population 65 and older
Unit of measure: Rate per 100,000 population 65 and older
Time period: Five years
Frequency: Annually
Data source: Minnesota Department of Health, Minnesota vital statistics records
Data access/availability: Minnesota Department of Health.
Notes on calculation: The rate is calculated as (Number of deaths/total population)*100,000
Limitations: This data source is subject to the following limitations:

- Data on cause of death and contributing conditions or injuries from the death certificate completed by the physician, coroner, or medical examiner are translated into ICD10 codes by the state health department.
- Certain causes of death may not have ICD10 codes with the right level of specificity to accurately reflect the death.
- In other cases, the certifier may not provide enough detail for the coder to select a more specific code.
- Specifying the underlying cause of death is especially difficult among elderly people who may have multiple conditions at the time of death.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: 79.0/100,000
Related indicator(s): Fatal injuries
Revision date: 2/5/2018

Fatal unintentional injuries

Brief description: Age-adjusted rate per 100,000 of unintentional injury resulting in death – children (0-19), adults (20+)
Public health significance: Unintentional injuries are a leading cause of death. Injury-related deaths frequently occur in younger age groups, creating a heavy emotional and financial burden on individuals, families, and communities.
Indicator category: Injury and Violence
Demographic group: Entire population
Numerator: Number of deaths where cause of death=V01 to X59 or Y85 to Y86 (ICD10 codes): children (age 0-19), adults (age 20 and older)
Denominator: Total population, children (age 0-19), adults (age 20 and older)
Unit of measure: Rate per 100,000 population
Time period: Year
Frequency: Annually
Data source: Minnesota Department of Health, *Vital Statistics Interactive Queries*
Data access/availability: Minnesota Department of Health website, https://pqc.health.state.mn.us/mhsq/frontPage.jsp
Notes on calculation: Deaths occur at different rates in different age groups. Mortality rates can be age adjusted to allow comparison between populations that have different age distributions. The process of age adjustment creates a rate for each population being compared that assumes that the populations all had the same age distribution as a reference population.
Adjustment is accomplished by first multiplying the age-specific death rates (number of deaths/population in that age group*100,000) by a "standard" weight. The "standard" weight is the proportion of the U.S. population in 2000 within each age group. The weighted rates are then summed across the age groups to give the age-adjusted rate for the whole population.
Limitations: This data source is subject to the following limitations:

- Data on cause of death and contributing conditions or injuries from the death certificate completed by the physician, coroner, or medical examiner are translated into ICD10 codes by the state health department.
- Certain causes of death may not have ICD10 codes with the right level of specificity to accurately reflect the death.
- In other cases, the certifier may not provide enough detail for the coder to select a more specific code.
- Specifying the underlying cause of death is especially difficult among elderly people who may have multiple conditions at the time of death.

Healthy People 2020 Objective: 36.4/100,000
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Fall-related deaths among adults 65+
Revision date: 2/5/2018

Oral Health

Dental visit in the last 12 months - adults

Brief description: Percentage of adults 25 and older who report visiting a dentist or dental clinic within the past year for any reason

Public health significance: Oral health is important to general health and well-being. Regular dental care helps prevent oral disease. Oral diseases and other chronic diseases share many common risk factors and can have a combined impact on general health.

Indicator category: Oral health

Demographic group: Adults 25 and older

Numerator: Weighted number of adults 25 and older who visited a dentist or dental clinic within the past year for any reason

Denominator: Total number of respondents 25 and older

Unit of measure: Percent, combined with a confidence interval

Time period: Year

Frequency: every 4-6 years, varies by jurisdiction

Data source: Metro SHAPE Survey

Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites

Notes on calculation: The numerator consists of respondents who answered "*Within the past year*" to the survey question: *How long has it been since you last visited a dentist or dental clinic for any reason?*

Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: n/a

Healthy Minnesota 2020 Objective: 82.8%

Related indicator(s): n/a

Revision date: 2/5/2018

Dental visit in the last 12 months - youth

Brief description: Percentage of 9th graders who report having seen a dentist or dental hygienist for a regular check-up, exam or teeth cleaning or other dental work during the last year

Public health significance: Dental caries (tooth decay) is the most common chronic condition among children under 18. Untreated it can lead to pain and infection and interfere with eating and sleeping. Access to regular dental care helps prevent tooth decay and its complications.

Indicator category: Oral Health

Demographic group: 9th graders

Numerator: Number of 9th graders who report having seen a dentist or dental hygienist for a regular check-up, exam or teeth cleaning or other dental work during the last year

Unit of measure: Percent

Time period: Year

Frequency: every 3 years

Data source: Minnesota Student Survey

Data access/availability: Minnesota Department of Health website, http://www.health.state.mn.us/divs/chs/mss/

Notes on calculation: The numerator consists of respondents who answered "*During the last year*" to the survey question: *When was the last time you saw a dentist or dental hygienist for a regular check-up, exam or teeth cleaning or other dental work during the last year?*

Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a student chooses not to respond to the survey, and those who chose to not respond are noticeably different from those who participated. Students may not complete the survey due to their own choice, not being at school on the day the survey is administered, or their parent "opting out" of their child taking the survey.
- Non-English speaking students were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.

Healthy People 2020 Objective: 49.0%

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): n/a

Revision date: 12/22/2017

Access to Health Services

Difficulty to pay

Brief description: Percentage of adults 25 and older who report it has been "somewhat difficult" or "very difficult" to pay for health insurance premiums, co-pays, and deductibles during the past year
Public health significance: Difficulty paying for out-of-pocket health care costs is associated with delaying or not receiving needed medical treatment. This results in receiving medical treatment later in the course of illness and in more costly settings, such as emergency rooms, which increases the financial burden on the health care system.
Indicator category: Access to Health Services
Demographic group: Adults 25 and older
Numerator: Weighted number of adults 25 and older who report that it has been "somewhat difficult" or "very difficult" to pay for health insurance premiums, co-pays, and deductibles during the past year
Denominator: Total number of respondents 25 and older
Unit of measure: Percent, combined with a confidence interval
Time period: Year
Frequency: every 4-6 years, varies by jurisdiction
Data source: Metro SHAPE Survey
Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites
Notes on calculation: The numerator consists of respondents who answered "*somewhat difficult*" or *"very difficult"* to the survey question: *During the past 12 months, how difficult has it been for you and your family to pay for health insurance premiums, co-pays, and deductibles?*
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Delay of care-medical; delay of care-mental health; delay of care-prescriptions
Revision date: 12/22/2017

Delay of care-medical

Brief description: Among adults 25 and older who needed medical care and delayed or did not get care, percentage who delayed or did not get care due to cost or lack of insurance during the past 12 months
Public health significance: Difficulty paying for out-of-pocket health care costs is associated with delaying or not receiving needed medical treatment. This results in receiving medical treatment later in the course of illness and in more costly settings, such as emergency rooms, which increases the financial burden on the health care system.
Indicator category: Access to Health Services
Demographic group: Adults 25 and older
Numerator: Weighted number of adults 25 and older who needed medical care and delayed or did not get care due to cost or lack of insurance during the past 12 months
Denominator: Total number of respondents 25 and older who needed medical care and delayed or did not get care
Unit of measure: Percent, combined with a confidence interval
Time period: Year
Frequency: every 4-6 years, varies by jurisdiction
Data source: Metro SHAPE Survey
Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites
Notes on calculation: The numerator consists of respondents who answered "*Yes"* to the survey question "*During the past 12 months, was there a time when you needed medical care?* and *"Yes"* to the survey question "*Did you delay or not get the care you thought you needed?"* and *"Yes"* to the survey question *"Was that because of cost or lack of insurance?"*
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: 4.2%
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Difficulty to pay
Revision date: 12/22/2017

Delay of care-mental health

Brief description: Among adults 25 and older who needed mental health care and delayed or did not get care, percentage who delayed or did not get care due to cost or lack of insurance during the past 12 months
Public health significance: Difficulty paying for out-of-pocket costs is associated with delaying or not receiving needed mental health treatment. This results in receiving mental health treatment later in the course of illness and in more costly settings, such as emergency rooms, which increases the financial burden on the health care system.
Indicator category: Access to Health Services
Demographic group: Adults 25 and older
Numerator: Weighted number of adults 25 and older who needed mental health care and delayed or did not get care due to cost or lack of insurance during the past 12 months
Denominator: Total number of respondents 25 and older who needed mental health care and delayed or did not get care
Unit of measure: Percent, combined with a confidence interval
Time period: Year
Frequency: every 4-6 years, varies by jurisdiction
Data source: Metro SHAPE Survey
Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites
Notes on calculation: The numerator consists of respondents who answered "*Yes"* to the survey question "*During the past 12 months, was there a time when you wanted to talk with or seek help from a health professional about stress, depression, a problem with emotions, excessive worrying, or troubling thoughts?* and *"Yes"* to the survey question "*Did you delay or not get the care you thought you needed?"* and *"Yes"* to the survey question *"Was that because of cost or lack of insurance?"*
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Difficulty to pay
Revision date: 12/22/2017

Delay of care-prescriptions

Brief description: Among adults 25 and older who regularly take prescriptions and delayed or did not fill a prescription, percentage who delayed or did not fill a prescription due to cost or lack of insurance during the past 12 months

Public health significance: Difficulty paying for out-of-pocket prescription costs is associated with delaying or not filling needed prescriptions. This results in unmanaged illnesses that require treatment in more costly settings, such as emergency rooms, which increases the financial burden on the health care system.

Indicator category: Access to Health Services

Demographic group: Adults 25 and older

Numerator: Weighted number of adults 25 and older who regularly take prescriptions and delayed or did not fill a prescription due to cost or lack of insurance during the past 12 months

Denominator: Total number of respondents 25 and older who needed prescriptions

Unit of measure: Percent, combined with a confidence interval

Time period: Year

Frequency: every 4-6 years, varies by jurisdiction

Data source: Metro SHAPE Survey

Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites

Notes on calculation: The numerator consists of respondents who answered "*Yes"* to the survey question "*Do you take any prescription medications on a regular basis, other than birth control pills?"* and *"Yes"* to the survey question "*During the past 12 months, was there any time you skipped doses, took smaller amounts of your prescription, or did not fill a prescription because you could not afford it"*

Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: 2.8%

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): Difficulty to pay

Revision date: 12/22/2017

Clinical Preventive Services

Immunization rates

Brief description: Percentage of children 24-35 months up-to-date with immunizations (vaccine series including DTaP, polio, MMR, Hib, Hep B, varicella, PCV, rotavirus, Hep A)
Public health significance: Immunizations are the most cost-effective means of preventing infectious diseases. They protect the immunized person from specific infectious diseases and prevent them from spreading infections to unimmunized persons. The diseases that immunizations protect against often have no treatment and/or can result in serious complications and death.
Indicator category: Clinical Preventive Services
Demographic group: Children 24-35 months
Numerator: Number of children 24-35 months who are up-to-date at 24 months for the vaccine series including DTaP, polio, MMR, Hib, Hep B, varicella, PCV, rotavirus, and Hep A.
Denominator: All children 24-35 months who have a record in the immunization registry – Minnesota Immunization Information Connection (MIIC)
Unit of measure: Percent
Time period: Year
Frequency: Annually
Data source: Minnesota Department of Health *Minnesota Immunization Information Connection (MIIC)*
Data access/availability: Minnesota Public Health Data Access Portal, https://apps.health.state.mn.us/mndata/
Notes on calculation: n/a
Limitations: MIIC data may underestimate the actual percent of children receiving vaccines due to these limitations:

- Participation in MIIC is voluntary for health care providers. Approximately 90 percent of Minnesota health care providers routinely submit immunization data to MIIC, but not all those who participate report every dose of vaccine administered, nor historical immunizations reported by the patient.
- The data in MIIC may include children who have moved elsewhere, which artificially inflates the denominator. When a child moves out of Minnesota, their MIIC record may not be updated to reflect their move, so the child may be mistakenly counted as a resident who is not up-to-date on their vaccinations.
- Cross border-state immunization data exchange is limited to Wisconsin and North Dakota. Vaccines received in Wisconsin and North Dakota by Minnesota residents are in MIIC, but there is no similar data exchange with South Dakota or Iowa at this time.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): n/a
Revision date: 12/22/2017

Environmental Quality

Childhood lead exposure

Brief description: Among children who were tested, percentage with elevated blood lead levels (above 5 mcg/dL).
Public health significance: Elevated blood lead levels (EBLLs) in young children are linked with adverse health effects, including learning and behavior problems. Children less than 6 years are most at risk for lead exposure, because their brains are still developing and their bodies absorb lead more easily.
Indicator category: Environmental Quality
Demographic group: Children 6 years and younger
Numerator: Number of children 6 years and younger who have been screened for lead exposure who have blood lead levels above 5 mcg/dL
Denominator: All children 6 years and younger who have been screened for lead exposure
Unit of measure: Percent
Time period: Year
Frequency: Annually
Data source: Minnesota Department of Health, *Blood Lead Information System (BLIS)*
Data access/availability: Minnesota Public Health Data Access Portal, https://apps.health.state.mn.us/mndata/
Notes on calculation: These data use the test year (annual method). Data for test year (annual method) determine how many children were tested in that year in the specific age and how many of those tested had an elevated blood lead level.
Limitations: This data source is subject to the following limitations:

- Results are not representative of all children living in Minnesota because blood lead testing is not universal. Statewide, about 80% of children are tested for blood lead by the time they reach 3 years. The state screening guidelines direct physicians to order blood lead tests for certain populations at higher risk for lead exposure: 1) children residing in specific geographic areas that have high rates of elevated blood lead levels; and 2) children matching specific demographic groups that tend to have higher rates of elevated blood lead levels.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): n/a
Revision date: 12/22/2017

Poor air quality days

Brief description: Number of days the Air Quality Index (AQI) exceeded 100, past year
Public health significance: Local air quality affects how you live and breathe. Air pollution is irritating to the respiratory system, can aggravate asthma and other chronic conditions, and make people more susceptible to respiratory infections. Children and older adults and people with chronic heart and lung conditions are more sensitive to the effects of air pollution.
Indicator category: Environmental Quality
Demographic group: Total population
Numerator: Number of days in a particular year that the AQI was greater than 100
Denominator: n/a
Unit of measure: Days
Time period: Year
Frequency: Annually
Data source: United States Environmental Protection Agency, *AirCompare*
Data access/availability: United States Environmental Protection Agency, https://www3.epa.gov/aircompare/
Notes on calculation: The AQI ranges from 0 to 500. The higher the AQI value, the greater the level of air pollution and the greater the health concern. When AQI values are between 101 and 150, members of sensitive population groups may experience adverse health effects. Everyone is likely to be affected when AQI values are greater than 150.
Limitations: This data source is subject to the following limitations:

- There are five outdoor air pollutants that are part of the AQI - carbon monoxide, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. The AQI does not account for pollen, mold, air toxics or indoor air quality conditions.
- Not all pollutants are monitored in every county. And the number of days each pollutant is measured may vary from one county to another. Ozone is typically monitored daily during the "ozone season" - when ozone is expected to be relatively higher. Particle pollution monitoring varies from area to area, but most areas sample every day or every three days. Carbon monoxide is monitored year-round at most monitoring sites.
- Monitored air quality data do not represent actual exposure. Therefore, monitored air quality data cannot be used to determine individual exposure levels.
- Sensitive populations can still have adverse health effects even when the AQI is below 100.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Heart disease mortality; children with asthma-hospitalizations
Revision date: 12/22/2017

Reproductive and Sexual Health

Chlamydia rate

Brief description: Rate of chlamydia infection per 100,000
Public health significance: Chlamydia is the most common sexually-transmitted disease. The rate of infections has been increasing over the past 20 years, particularly among adolescents and young people. The majority of people with chlamydia do not have symptoms but can still transmit the infection to their sex partners. Left untreated, it may lead to pelvic inflammatory disease, infertility, and poor reproductive outcomes in women.
Indicator category: Reproductive and Sexual Health
Demographic group: Total population
Numerator: Number of reported cases of chlamydia
Denominator: Total population
Unit of measure: Rate/100,000
Time period: Year
Frequency: Annually
Data source: Minnesota Department of Health, *STD Surveillance Report*
Data access/availability: Minnesota Department of Health, http://www.health.state.mn.us/divs/idepc/dtopics/stds/stats/2016/index.html
Notes on calculation: The rate is calculated as (total reported cases of chlamydia/total population reported on the 2010 U.S. Census)*100,000.
Limitations: This data source is subject to the following limitations:

- Chlamydia data under-represent the true burden of chlamydia because many cases go undetected.
- Data are only included if they are laboratory confirmed, so cases diagnosed solely based on symptoms are not counted.
- Case counts are counts of infections, not individuals. An individual who has more than one infection in a given year will be counted more than once.
- Cases diagnosed in federal or private correctional facilities are not included.
- Case reports are often missing the county of residence so they are not included in the county-level counts.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): n/a
Revision date: 2/5/2018

Teen birth rate

Brief description: Birth rate per 1,000 mothers 15-19
Public health significance: Teen mothers are more likely to drop out of school and less likely to be able to support themselves without public assistance. They often go on to have additional children outside of marriage. Children born to teen mothers are at risk of being born prematurely and to suffer adverse health effects. They may be less successful in school, are more likely to be abused or neglected, and may wind up in foster care.
Indicator category: Reproductive and Sexual Health
Demographic group: Females 15-19
Numerator: Number of births to mothers 15-19
Denominator: Total females 15-19
Unit of measure: Rate/1,000
Time period: 3-year rate
Frequency: Annually
Data source: Minnesota Department of Health, *Minnesota County Health Tables*
Data access/availability: Minnesota Department of Health, http://www.health.state.mn.us/divs/chs/countytables/
Notes on calculation: The rate is calculated as (total births to mothers 15-19/total females 15-19)*1,000.
Limitations: n/a
Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Low birth weight; high school graduation rate
Revision date: 12/22/2017

Social & Economic Factors

High school graduation rate

Brief description: Percentage of high school students who graduate with a regular diploma 4 years after starting 9th grade or transferring

Public health significance: High school education is a gateway to college. Education is a strong predictor of good health. Good education improves earning potential, which increases the ability to have stable housing, healthier food, and better medical care. These things all result in better long-term health and well-being. People with more formal education are less likely to engage in risky health behaviors, such as smoking, physical inactivity, and being overweight.

Indicator category: Social & Economic Factors

Demographic group: High school students

Numerator: Number of students in a four-year graduation cohort with a final ending classification of "graduate"

Denominator: Total students in the four-year graduation cohort

Unit of measure: Rate/1,000

Time period: 3-year rate

Frequency: Annually

Data source: Minnesota Department of Education, *Graduation Indicators*

Data access/availability: Minnesota Department of Education, http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=2

Notes on calculation: The four-year graduation rate is based on a cohort of first time ninth grade students plus transfers into the cohort within the four year period minus transfers out of the cohort within the four year period. Students are assigned to a single cohort expected to graduate in a specific year based on the earliest grade they were served. For example, students who were first served in 9th grade are expected to graduate in 4 years; students who were first served in 10th grade are expected to graduate in 3 years. The calculation is: (count of on-time graduates in year 4 where final ending status=Graduate/(first-time entering ninth graders in year 1 where final ending status=Graduate, Dropout, Continuing, or Unknown+transfers into the cohort in years 2, 3, and 4 where final ending status=Graduate, Dropout, Continuing, or Unknown-transfers out of the cohort in years 1, 2, 3, and 4))

Limitations: n/a

Healthy People 2020 Objective: 87.0%

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): n/a

Revision date: 12/22/2017

Burden of housing costs

Brief description: Percentage of households (renters and homeowners) using >30% of income on housing costs
Public health significance: High housing costs are associated with poorer health status. People who are cost-burdened with housing may have to shift financial resources from other needs, such as food and health care. In addition, the stress of having high housing costs can lead to poor mental and physical health.
Indicator category: Social & Economic Factors
Demographic group: Total population
Numerator: Number of households who spend more than 30% of their income on housing costs
Denominator: Total households
Unit of measure: Percent
Time period: Year
Frequency: Annually (based on 5-year estimates)
Data source: United States Census Bureau, *American Community Survey* (Report #S2503 – Financial Characteristics –Occupied housing units: Monthly housing costs as a percentage of household income in the past 12 months)
Data access/availability: United States Census Bureau, https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
Notes on calculation: Housing costs for homeowners include payment for mortgages, real estate taxes, various insurances, utilities, fuels, mobile home costs, and condominium fees. Housing costs for renters include contract rent plus the estimated average monthly cost of utilities (electricity, gas, and water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid for by the renter (or paid for the renter by someone else).
Limitations: This data source is subject to the following limitations:

- Households with zero or negative income and those who occupy units where no cash rent is paid are excluded.
- American Community Survey estimates are based on a sample of the population and not a full count of every person like the census.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Difficulty to pay; delay of care-medical; delay of care-mental health; delay of care prescriptions; overall health status-adult; adult mental health
Revision date: 2/5/2018

Demographics, People and Place

Center for Community Health
Data Indicators Data Dictionary

Poverty – all ages

Brief description: Percentage of all ages living at or below 100% of poverty

Public health significance:

People living in poverty are more likely to live in areas with poor environmental conditions, poor quality housing, have less access to healthy foods, or live in close proximity to traffic and crowding. These factors increase the likelihood of poor health outcomes.

Indicator category: Demographics, People and Place

Demographic group: Total population

Numerator: Number of people living at or below 100% of poverty

Denominator: Total population

Unit of measure: Percent

Time period: Year

Frequency: Annually (based on 5-year estimates)

Data source: United States Census Bureau, *American Community Survey, (*Report #S1701-Poverty Status in the Past 12 Months – Percent Below Poverty Level: Population for whom poverty status is determined*)*

Data access/availability: United States Census Bureau, https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

Notes on calculation: The U.S. Census Bureau defines "poverty" by comparing a family's annual household income to a set of federal poverty thresholds. The federal poverty thresholds are calculated using a family's household size and composition. If a household income is less than their poverty threshold, then every person living in that household is considered to be in poverty. The Census Bureau adjusts the poverty thresholds each year according to the Consumer Price Index (CPI-U), which estimates prices paid for goods and services.

Limitations: This data source is subject to the following limitations:

- American Community Survey estimates are based on a sample of the population and not a full count of every person like the census.
- Poverty status is not determined for institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old (including foster children). These groups are excluded from the numerator and denominator when calculating poverty rates.
- There are some disadvantages to the official poverty measure (the Census Bureau's poverty threshold) used to identify people living in poverty:
    - It does not reflect non-cash governmental benefit (such as housing subsidies, home energy assistance, or the "SNAP" food stamp program).
    - It does not include some expenses such as child support payments, transportation, or other work-related expenses necessary to hold a job.
    - It does not adjust for geographic differences in prices across the nation or variation in medical costs depending on insurance coverage.

Healthy People 2020 Objective: n/a

Healthy Minnesota 2020 Objective: n/a

Related indicator(s): Poverty-children; unemployment rate

Revision date: 2/5/2018

Poverty – children

Brief description: Percentage of children under 18 living at or below 100% of poverty
Public health significance: Poor children have increased infant mortality; more frequent and severe chronic diseases such as asthma; poorer nutrition and growth; less access to quality health care; lower immunization rates; and increased obesity and its complications.
Indicator category: Demographics, People and Place
Demographic group: Total population
Numerator: Number of children under 18 living at or below 100% of poverty
Denominator: Total population under 18
Unit of measure: Percent
Time period: Year
Frequency: Annually (based on 5-year estimates)
Data source: United States Census Bureau, *American Community Survey, (*Report #S1701-Poverty Status in the Past 12 Months – Percent Below Poverty Level: AGE-Under 18*)*
Data access/availability: United States Census Bureau, https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
Notes on calculation: The U.S. Census Bureau defines "poverty" by comparing a family's annual household income to a set of federal poverty thresholds. The federal poverty thresholds are calculated using a family's household size and composition. If a household income is less than their poverty threshold, then every person living in that household is considered to be in poverty. The Census Bureau adjusts the poverty thresholds each year according to the Consumer Price Index (CPI-U), which estimates prices paid for goods and services and is produced by the U.S. Department of Labor. This requires the calendar year to be complete before establishing the final poverty threshold.
Limitations: This data source is subject to the following limitations:

- American Community Survey estimates are based on a sample of the population and not a full count of every person like the census.
- Poverty status is not determined for institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old (including foster children). These groups are excluded from the numerator and denominator when calculating poverty rates.
- There are some disadvantages to the official poverty measure (the Census Bureau's poverty threshold) used to identify people living in poverty:
  - It does not reflect non-cash governmental benefit (such as housing subsidies, home energy assistance, or the "SNAP" food stamp program).
  - It does not include some expenses such as child support payments, transportation, or other work-related expenses necessary to hold a job.
  - It does not adjust for geographic differences in prices across the nation or variation in medical costs depending on insurance coverage.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Poverty-all ages; infant deaths; children with asthma-hospitalizations; children with asthma-hospitalizations; childhood lead exposure; youth who eat the recommended number of fruits and vegetables daily; immunization rates
Revision date: 2/5/2018

Unemployment rate

Brief description: Unemployment rate – annual average
Public health significance: The stress of being unemployed can lead to adverse health outcomes and adoption of risky health behaviors, such as smoking. When someone loses their job, they often lose their health insurance, which means needed medical care can be delayed. Poor health, in turn, makes it more difficult to work.
Indicator category: Demographics, People and Place
Demographic group: Total population 16 and older in the labor force
Numerator: Number of people unemployed
Denominator: Total population 16 and older in the labor force (employed and unemployed)
Unit of measure: Percent
Time period: Year
Frequency: Annually
Data source: Minnesota Department of Employment and Economic Development, *Local Area Unemployment Statistics*
Data access/availability: Minnesota Department of Employment and Economic Development, https://mn.gov/deed/data/data-tools/laus/
Notes on calculation: A model-based estimate, using data from the Current Population Survey, of people 16 and over who are not employed, are available for work, and who made a specific effort to find work in the last four weeks. It includes new entrants to the labor force, re-entrants, job losers, and job leavers. It is expressed as an annual average of monthly estimates.
Limitations: This data source is subject to the following limitations:

- Estimates are based on a sample of the population, rather than a complete count.
- The unemployment rate does not address whether workers are in positions that match their skills.
- The calculation of the unemployment rate does not include the number of discouraged workers, i.e. people who are without jobs and who have stopped looking for employment.
- People who are unemployed for longer than 4 months are excluded from the calculation.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Poverty – all ages, poverty – children; adults who are current cigarette smokers; adult tobacco status and quit plan (Clinic EHR); delay of care-medical
Revision date: 12/22/2017

Mortality and Morbidity

Overall health status - adult

Brief description: Percentage of adults 25 and older who report good or better health
Public health significance: High overall health status is associated with decreased risk of illness and injury, resilience, and longer life. People who are healthy are more productive at work and are more likely to contribute to their communities.
Indicator category: Mortality and Morbidity
Demographic group: Adults 25 and older
Numerator: Weighted number of adults 25 and older who report their health as "good" or "very good", or "excellent"
Denominator: Total number of respondents 25 and older
Unit of measure: Percent, combined with a confidence interval
Time period: Year
Frequency: every 4-6 years, varies by jurisdiction
Data source: Metro SHAPE Survey
Data access/availability: Metro SHAPE website, http://www.metroshape.us/; also available on individual jurisdiction websites
Notes on calculation: The numerator consists of respondents who answered "*Good"*, *"Very Good", or "Excellent"* to the survey question "*In general, would you say your health is…"*
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a selected adult does not complete the survey, and those who chose to not respond are noticeably different from those who participated.
- The response rate for the survey is low. Representativeness of survey respondents may be a concern when survey response is low.
- Non-English speaking residents were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.
- Results are only generalizable to adults who live in households with a residential address. Community members living in institutions, nursing homes, long-term care facilities, military installations, correctional institutions, and those experiencing homelessness were not represented.

Healthy People 2020 Objective: 79.8%
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): All-cause mortality rate
Revision date: 12/22/2017

Overall health status - youth

Brief description: Percentage of 9th graders who self-report being in "good", "very good", or "excellent" health
Public health significance: Adolescence is a critical time of transition between childhood and adulthood. Youth who are healthy do better in school and are more likely to become contributing members of society.
Indicator category: Mortality and morbidity
Demographic group: 9th graders
Numerator: Number of 9th graders who describe their health in general as "good", "very good", or "excellent"
Unit of measure: Percent
Time period: Year
Frequency: every 3 years
Data source: Minnesota Student Survey
Data access/availability: Minnesota Department of Health website, http://www.health.state.mn.us/divs/chs/mss/
Notes on calculation: The numerator consists of respondents who answered "*Good*", *"Very Good", or "Excellent"* to the survey question: *How would you describe your health in general?*
Limitations: This data source is subject to the following limitations:

- Results are subject to respondent self-selection bias. This bias occurs when a student chooses not to respond to the survey, and those who chose to not respond are noticeably different from those who participated. Students may not complete the survey due to their own choice, not being at school on the day the survey is administered, or their parent "opting out" of their child taking the survey.
- Non-English speaking students were underrepresented.
- Because the survey data are self- reported, information is subject to recall bias and, as with all surveys, potential for bias exists given the wording of and the order in which questions are presented.

Healthy People 2020 Objective: n/a
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Overall health status – adult; high school graduation rate
Revision date: 12/22/2017

All-cause mortality rate

Brief description: Age-adjusted mortality rate, all causes
Public health significance: All-cause mortality is a measurement of overall well-being of a population that can be used to compare to other populations.
Indicator category: Mortality and morbidity
Demographic group: Total population
Numerator: Total number of deaths
Denominator: Total population
Unit of measure: Rate per 100,000 population
Time period: Year
Frequency: Annually
Data source: Minnesota Department of Health, *Minnesota Vital Statistics Interactive Queries*
Data access/availability: Minnesota Department of Health website, https://pqc.health.state.mn.us/mhsq/frontPage.jsp .
Notes on calculation: Deaths occur at different rates in different age groups. Mortality rates can be age adjusted to allow comparison between populations that have different age distributions. The process of age adjustment creates a rate for each population being compared that assumes that the populations all had the same age distribution as a reference population.
Adjustment is accomplished by first multiplying the age-specific death rates (number of deaths/population in that age group*100,000) by a "standard" weight. The "standard" weight is the proportion of the U.S. population in 2000 within each age group. The weighted rates are then summed across the age groups to give the age-adjusted rate for the whole population.
Limitations: n/a
Healthy People 2020 Objective: 161.4/100,000
Healthy Minnesota 2020 Objective: n/a
Related indicator(s): Overall health status-adults, overall health status-youth, heart disease mortality, infant deaths, suicide rate, cancer mortality, fatal injuries
Revision date: 12/22/2017

Appendix A – Indicator List

Center for Community Health
Data Indicators Data Dictionary

Introduction

Data Framework for Community Health Assessment

June 2, 2016

Background and Purpose
This document is a product of the Center for Community Health's Assessment Alignment Workgroup (CCH-AA) in the Seven-County Metro Region. The CCH Steering Committee charged the CCH-AA Workgroup with developing processes and/or tools that will help cross-sectoral partners in the metro region complete Community Health Needs Assessment (CHNA/CHA) requirements more effectively and with improved collective impact to population health. This data indicator framework provides a guide for gathering community health status information.

Goals

The indicator framework was developed to achieve the following goals:

1. Provide CCH member organizations with a tool that guides the use of common population health indicators and definitions.
2. Improve consistency among CCH member organizations in using population health data to build consensus on health improvement priorities and targets.
3. Reduce duplicate efforts in Community Health Assessment and planning work across the metro region.

Guiding Principles

The CCH-AA workgroup used the following guiding principles in developing the framework:

- The framework is intended to be used/tested and continuously improved in order to achieve the above goals.
- Include indicators that are: 1) most commonly used across member organization assessments, 2) reflect current priority health topics, and 3) use a mix of data sources (primary, secondary, electronic health records).
- Use existing data sources and definitions with available state and national benchmarks to the extent possible.

Next Steps for Participating CCH Members [Need Steering Committee discussion]

- Identify which CCH member organizations will be conducting an assessment prior to June 1, 2017.
- Those organizations identified should use the shared health indicator framework in current/next assessment.
- The Assessment Alignment Committee will document lessons learned and any ways the framework was adapted/amended to serve organization needs.
- The Assessment Alignment Committee will report its findings to the Steering Committee; and
- The Steering Committee will share findings with participating CCH members no later than June 1, 2017, to prepare for 2018 assessments.

Center for Community Health
Data Indicators Data Dictionary

Indicators and Definitions

Obesity	• Adults who are obese	Percentage of adults 25 and older whose calculated Body Mass Index (BMI) is greater than 30
	• Adults who are overweight but not obese	Percentage of adults 25 and older whose calculated Body Mass Index (BMI) is greater than 25 but less than 30
	• Adults who are overweight but not obese (Clinic EHR)	Percentage of adults whose measured Body Mass Index (BMI) is greater than 25 but less than 30
	• Adults who are obese (Clinic EHR)	Percentage of adults whose measured Body Mass Index (BMI) is greater than 30
	• Youth who are overweight or obese	Percentage of 9th graders whose BMI (from self-reported weight/height) is in the overweight/obese category
	• Children who are overweight or obese (Clinic EHR)	Percentage of youth whose measured Body Mass Index (BMI) is at or above the 85th percentile
Healthy Eating	• Youth who eat the recommended number of fruits and vegetables daily	Percentage of 9th graders who consume fruit, 100% fruit juice, or vegetables at least 5 times daily
Physical Activity	• Youth who meet physical activity guidelines	Percentage of 9th graders who were physically active for 60 minutes or more on at least five of the last seven days
	• Adults who do not engage in physical activity	Percentage of adults 25 and older who did not participate in any leisure time physical activity during the past month
Tobacco Use	• Youth who use tobacco products	Percentage of 9th graders who used tobacco products (cigarettes, cigars, cigarillos, little cigars, chewing tobacco, snuff, or dip) on one or more days during the past 30 days
	• Youth who use e-cigarettes	Percentage of 9th graders who used e-cigarettes on one or more days during the past 30 days
	• Youth who smoke cigarettes (Clinic EHR)	Percentage of adolescent patients who self-report using cigarettes
	• Adults who are current cigarette smokers	Percentage of adults 25 and older who: 1) have smoked at least 100 cigarettes in their lifetime; and 2) now smoke cigarettes every day or some days
	• Adult tobacco status and quit plan (Clinic EHR)	Current tobacco use and presence/type of quit plan

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Cardiovascular Disease & Diabetes	• Blood pressure	Percentage of adults 25 and older who report they have: "Ever been told by doctor/nurse/health professional you have hypertension, also called high blood pressure"
	• Cholesterol	Percentage of adults 25 and older who report they have: "Ever been told by doctor/nurse/health professional you have high blood cholesterol"
	• Heart disease mortality	Age-adjusted heart disease mortality rate per 100,000
	• Diabetes prevalence – adult	Percentage of adults 25 and older who report they have: "Ever been told by doctor/nurse/health professional you have diabetes"
Substance Use	• Adult binge drinking, past 30 days	Percentage of males 25 and older having five or more drinks on one occasion or females 25 and older having four or more drinks on one occasion
	• Adolescents using alcohol, past 30 days	Percentage of 9th graders who reported using alcohol on one or more days within the past 30 days
	• Adolescents using illicit drugs, past 12 months	Percentage of 9th graders who reported using marijuana or other drugs (not alcohol, tobacco) during the past year
Maternal, Infant, and Child Health	• Infant deaths	Rate of infant deaths per 1,000 live births
	• Prenatal care	Percentage of births to mothers who received prenatal care during the first trimester
	• Low birth weight	Percentage of single births weighing <2500 g (5.5 lbs)
Mental Health	• Suicide rate	Age-adjusted suicide mortality per 100,000: adult (20 and older), adolescent (15-19)
	• Adult mental health	Percentage of adults (25 and older) who reported their mental health was not good 14 or more days during the past 30 days
	• Adolescent mental health	Percentage of 9th graders who seriously considered attempting suicide during the past year
Asthma	• Children with asthma – hospitalizations	Rate per 1,000 discharges for children 5-19 who were hospitalized with asthma
Cancer	• Cancer incidence by type	All cancer combined, incidence rate per 100,000 (include specific rates for lung, colorectal cancers)
	• Cancer mortality	All cancer combined, age-adjusted mortality rate per 100,000

	• Adults 50 and older who have had colorectal cancer screening (Clinic EHR)	Percentage of adults 50 and older who have been screened for colorectal cancer
Injury and Violence	• Fall-related deaths among adults 65+	Rate per 100,000 adults 65 and older who die as a result of a fall-related injury (ICD10 codes W00 to W19)
	• Fatal unintentional injuries	Age-adjusted rate per 100,000 of unintentional injury resulting in death – Children (0-19), Adults (20+)
Oral Health	• Dental visit in the last 12 months - adults	Percentage of adults 25 and older who report visiting a dentist or dental clinic within the past year for any reason
	• Dental visit in the last 12 months – youth	Percentage of 9th graders who report having seen a dentist or dental hygienist for a regular check-up, exam or teeth cleaning or other dental work during the last year
Access to Health Services	• Difficulty to pay	Percentage of adults 25 and older who report it has been "somewhat difficult" or "very difficult" to pay for health insurance premiums, co-pays, and deductibles during the past year
	• Delay of care – medical	Among adults 25 and older who needed medical care and delayed or did not get care, percentage who delayed or did not get care du to cost or lack of insurance during the past 12 months
	• Delay of care – mental health	Among adults 25 and older who needed mental health care and delayed or did not get care, percentage who delayed or did not get care due to cost or lack of insurance during the past 12 months
	• Delay of care – prescriptions	Among adults 25 and older who regularly take prescriptions, percentage who delayed or did not fill a prescription due to cost during the past 12 months
Clinical Prev Services	• Immunization rates	Percentage of children 24-35 months up to date with immunizations (vaccine series including DTaP, polio, MMR, Hib, Hep B, varicella, PCV, rotavirus, Hep A)
Environmental Quality	• Childhood lead exposure	Among children who were tested, percentage with elevated blood lead levels (above 5 mcg/dL)
	• Poor air quality days	Number of days the Air Quality Index (AQI) exceeded 100, past year
Reproductive and Sexual	• Chlamydia rate	Rate of chlamydia infection per 100,000

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Health		
	• Teen birth rate	Birth rate per 1,000 to mothers 15-19
Social & Economic Factors	• High school graduation rate	Percentage of high school students who graduate with a regular diploma 4 years after starting 9th grade or transferring
	• Burden of housing costs	Percentage of households (renters and homeowners) using >30% of income on housing costs
Demographics, People and Place	• Poverty-all ages	Percentage of all ages living at or below 100% of poverty
	• Poverty-children	Percentage of children under 18 living at or below 100% of poverty
	• Unemployment rate	Unemployment rate – annual average
Mortality and Morbidity	• Overall health status – adult	Percentage of adults 25 and older who report good or better health
	• Overall health status - youth	Percentage of 9th graders who self-report being in "good", "very good", or "excellent" health
	• All-cause mortality rate	Age-adjusted mortality rate, all causes

Second-Tier Indicators

- Pharmaceutical opioid
- Poisoning deaths
- Adults with arthritis
- Beach closings
- Food access/food deserts
- Number of FQHC clinics
- Number of nursing home & hospital beds
- Injury hospitalizations
- Asthma hospitalizations
- Mental health ER/hospital