

FY 2016 NWPG Measure Definitions Fish and Shellfish

Measure Code: FS-SP6.N11



Measure Language: Percent of women of childbearing age having mercury levels in blood above the level of concern.

Type of Measure: Target measure; annually reported (data available biennially)

Measure Contact: Denise Hawkins, EPA Office of Science and Technology

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Measure Definition

Methodology for computation of results: The Center for Disease Control and Prevention's (CDC) National Center for Health Statistics conducts the National Health and Nutrition Examination Survey (NHANES) in which chemicals or their metabolites are measured in blood and urine samples from a random sample of participants. NHANES is a series of surveys designed to collect data on the health and nutritional status of the U.S. population. CDC reports the NHANES results in the *National Report on Human Exposure to Environmental Chemicals*. The *Second National Report on Human Exposure to Environmental Chemicals* was released in 2003 and presented biomonitoring exposure data for 116 environmental chemicals for the civilian, non-institutionalized U.S. population over the 2-year period 1999–2000. The *Third National Report on Human Exposure to Environmental Chemicals* presents similar exposure data for the U.S. population for 148 environmental chemicals over the period 2001–2002. The Fourth Report, which includes the data from the Second and Third Reports, measures 212 chemicals over the period 2003–2004, and was published in December 2009.

Methods and Assumptions: Biomonitoring measurements for the Report were from samples from participants in NHANES. NHANES collects information about a wide range of health-related behaviors, performs a physical examination and collects samples for laboratory tests. Beginning in 1999, NHANES became a continuous survey, sampling the U.S. population annually and releasing the data in two-year cycles. (Note, however, that the Fourth Report was issued four years after the Third Report.) The sampling plan follows a complex, stratified, multistage, probability-cluster design to select a representative sample of the civilian, noninstitutionalized population in the United States. Additional detailed information on the design and conduct of the NHANES survey is available at <http://www.cdc.gov/nchs/nhanes.htm>. The CDC National Center for Health Statistics (NCHS) provides guidelines for the analysis of NHANES data at http://www.cdc.gov/nchs/data/nhanes/nhanes_general_guidelines_june_04.pdf. Other details about the methodology including statistical methods are reported in the *Fourth National Report on Human Exposure to Environmental Chemicals*.

Units: Women of childbearing age (expressed as a percentage).

Universe: n/a; women of childbearing age.

Baseline: The percent of women of childbearing age having mercury level above the level of concern at a point in time. Data from the Third National Report on Human Exposure to Environmental Chemicals for the sampling period 1999–2002.

Measure Code: FS-1a

Measure Language: Percent of river miles where fish tissue were assessed to support waterbody-specific or regional consumption advisories or a determination that no consumption advice is necessary. (Great Lakes measured separately; Alaska not included) (Report every two years)

Type of Measure: Indicator measure; cumulative measure

Measure Contact: Jeff Bigler, EPA Office of Science and Technology

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Measure Definition

Terms and phrases: *Consumption advisories* are fish consumption advisories issued by state/territory/tribal or local government entities to the public to protect people from the risks of eating contaminated fish caught in local waters. A consumption advisory may recommend limiting the amount or avoiding eating certain fish from specific waters or from specific water types (like "all lakes").

Methodology for computation of results: This is a cumulative measure of the extent of river lengths that are under a fish consumption advisory, or if not, have been assessed by states/territories/tribes as not needing such an advisory.

As part of its biennial fish advisory program survey, the EPA Office of Science and Technology (Headquarters) uses its National Listing of Fish Advisories database to collect information on fish advisories from states/territories/tribes. For computational purposes, the national percentages are calculated using the total number of river miles (3,547,000 miles) in the National Hydrography Database.

In developing targets, EPA Headquarters starts with the previous year's information on the percent of river miles that are under a fish advisory issued by a state, territory, or tribe. To this number, Headquarters adds 1% for river miles based on the trends from previous years.

Reporting is now every other year, which means that the reporting in even-numbered years will be an estimate based on the previous year report adjusted for any significant change (such as a new state-wide advisory) of which we become aware.

This is an EPA Headquarters computed and reported measure.

Units: River miles

Universe: Total river miles in the National Hydrography Database

Baseline: Percent of river miles from rivers based on state/territory/tribal reported advisories to EPA Headquarters in 2006.

Measure Code: FS-1b

Measure Language: Percent of lake acres where fish tissue were assessed to support waterbody-specific or regional consumption advisories or a determination that no consumption advice is necessary. (Great Lakes measured separately; Alaska not included) (Report every two years)

Type of Measure: Indicator measure; cumulative measure

Measure Contact: Jeff Bigler, EPA Office of Science and Technology

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Measure Definition

Terms and phrases: *Consumption advisories* fish consumption advisories issued by state/territory/tribal or local government entities to the public to protect people from the risks of eating contaminated fish caught in local waters. A consumption advisory may recommend limiting the amount or avoiding eating certain fish from specific waters or from specific water types (like "all lakes").

Methodology for computation of results: This is a cumulative measure of the extent of lake areas that are under a fish consumption advisory, or if not, have been assessed by states/ territories/ tribes as not needing such an advisory.

As part of its biennial fish advisory program survey, the EPA Office of Science and Technology (Headquarters) uses its National Listing of Fish Advisories database to collect information on fish advisories from states/territories/tribes. For computational purposes, the national percentages are calculated using the total number of lake acres (40,826,000 acres excluding the Great Lakes) in the National Hydrography Database.

In developing targets, EPA Headquarters starts with the previous year's information on the percent of lake acres that are under a fish advisory issued by a state, territory, or tribe. To this number, EPA Headquarters adds 2% for lake based on the trends from previous years. EPA Headquarters does not

include the Great Lakes or their connecting waters in this report. (All of these waters are under fish consumption advisories.)

Reporting is now every other year, which means that the reporting in even-numbered years will be an estimate based on the previous year report adjusted for any significant change (such as a new state-wide advisory) of which we become aware.

This is an EPA Headquarters computed and reported measure.

Units: Lake acres

Universe: The total number of lake acres (excluding the Great Lakes) in the National Hydrography Database.

Baseline: The percent of lake acres in lakes based on state/territory/tribal reported advisories to EPA Headquarters in 2006.