
Adult weight - measured

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Identifying and Definitional Attributes

Data Dictionary: NHDD
Knowledgebase ID: 000365 Version number: 1
Metadata type: DATA ELEMENT
Registration Authority: NHIMG Admin status: SUPERSEDED
Effective date: 01-JAN-03
Definition: A person's measured weight (body mass) without any clothing or in light indoor clothes.

Adult weight: measured is a continuous variable measured to the nearest 0.1 kg.

In order to ensure consistency in measurement, the measurement protocol described under Data Collection Methods should be used.

Context: Public health and health care.

Weight is an overall measure of body size that does not distinguish between fat and muscle. Weight is an indicator of nutrition status and health status. Low pre-pregnancy weight is an indicator of poorer gestational outcome in women (Kramer 1988). Low weight is also associated with osteoporosis. In general, change in weight in adults is of interest because it is an indicator of changing health status.

It is used to enable the calculation of Adult body mass index which requires the measurement of height and weight.

Relational and Representational Attributes

Datatype: Numeric
Representational form: QUANTITATIVE VALUE
Representation layout: NNN.N
Minimum Size: 3
Maximum Size: 4

Guide For Use: If measured weight is not able to be collected, code 999.9

Collection Methods: Measurement protocol:

Equipment used should be described and reported. Scales should have a resolution of at least 0.1kg and should have the capacity to weigh up to at least 200 kg. Measurement intervals and labels should be clearly readable under all conditions of use of the instrument.

The subject stands over the centre of the weighing instrument, with the body weight evenly distributed between both feet.

Heavy jewellery should be removed and pockets emptied. Light indoor clothing can be worn, excluding shoes, belts, and sweater.

If the subject has had one or more limbs amputated, record this on the data collection form and weigh them as they are. If they are wearing an artificial limb, record this on the data collection form but do not ask them to remove it. Similarly, if they are not wearing the limb, record this but do not ask them to put it on.

During weighing, any variations from light indoor clothing (e.g. heavy clothing, such as kaftans or coats worn because of cultural practices) should be noted on the data collection form. Adjustments for non-standard clothing (i.e. other than light indoor clothing) should only be made in the data checking/cleaning stage prior to data analysis.

The measurement is recorded to the nearest 0.1 kg. If the scales do not have a digital readout, take a repeat measurement. If the two measurements disagree by more than 0.5 kg, then take a third measurement. All raw measurements should be recorded on the data collection form. If practical, it is preferable to enter the raw data into the database as this enables intra- and, where relevant, inter-observer errors to be assessed. The subject's measured weight is subsequently calculated as the mean of the two observations, or the mean of the two closest measurements if a third is taken, and recorded on the form. If only a mean value is entered into the database then the data collection forms should be retained.

It may be necessary to round the mean value to the nearest 0.1 kg. If so, rounding should be to the nearest even digit to reduce systematic over reporting (Armitage and Berry 1994). For example, a mean value of 72.25 kg would be rounded to 72.2 kg, while a mean value of 72.35 kg would be rounded to 72.4 kg.

It is recommended that in population surveys, sociodemographic data including ethnicity should be collected, as well as other risk factors including physiological status (e.g. pregnancy), physical activity, smoking and alcohol consumption. Summary statistics may need to be adjusted for these variables.

National health data elements currently exist for sex, date of birth, country of birth and Indigenous Status.

Validation and quality control measures:

If practical, equipment should be checked daily using one or more objects of known weight in the range to be measured.

Within- and, if relevant, between-observer variability should be reported. They can be assessed by the same (within -) or different (between-) observers repeating the measurement of weight, on the same subjects, under standard conditions after a short time interval. The standard deviation of replicate measurements (technical error of measurement) between observers should not exceed 0.5 kg and be less than 0.5 kg within observers.

Extreme values at the lower and upper end of the distribution of measured height should be checked both during data collection and after data entry. Individuals should not be excluded on the basis of true biological difference.

Last digit preference, and preference or avoidance of certain values, should be analysed in the total sample and (if relevant) by observer, survey site and over time if the survey period is long.

Related metadata: is used in the calculation of Adult body mass index version 1 has been superseded by Weight - measured version 2

Administrative Attributes

Source Document: The measurement protocol described below is that recommended by the World Health Organization (WHO Expert Committee 1995).

Source Organisation: World Health Organization (see also Comments)

Comments: Submitting organisation: The Expert Working Group on Data Standards for Indicators of Body Fatness in Australian Adults through the National Centre for Monitoring Cardiovascular Disease, Australian Institute of Health and Welfare. Date of

submission: October 1997.

Responsible organisation: National Health Data Committee (NHDC) / National Centre for Monitoring Cardiovascular Disease, Australian Institute of Health and Welfare.

This data element applies to persons aged 18 years or older. It is recommended for use in population surveys and health care settings.

Presentation of data:

Means and 95% confidence intervals, medians and centiles should be reported to one decimal place. Where the sample permits, population estimates should be presented by sex and 5-year age groups. Estimates based on sample surveys may need to take into account sampling weights.

For consistency with conventional practice, and for current comparability with international data sets, recommended centiles are 5, 10, 15, 25, 50, 75, 85, 90 and 95. To estimate the 5th and 95th centiles a sample size of at least 200 is recommended for each group for which the centiles are being specified.

For some reporting purposes, it may be desirable to present weight data in categories. It is recommended that 5 kg groupings are used for this purpose. Weight data should not be rounded before categorisation.

[Data Element Links](#)

[Information Model Entities linked to this Data Element](#)

NHIM

Physical characteristic

[Data Agreements which include this Data Element](#)
