# Package 'AsthmaNHANES'

### April 13, 2021

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Title Asthma Data Sets from NHANES
Version 1.1.0
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Description  Data sets and examples from National Health and Nutritional Examination Survey (NHANES).
License GPL-3
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AsthmaNHANES-package Asthma Data Sets from National Health and Nutritional Examination Survey (NHANES)

#### **Description**

This package provides two datasets (metal and percent) that are related to the work of "Serum cadmium and lead, current wheeze, and lung function in a nationwide study of adults in the United States" (Journal of Allergy and Clinical Immunology: In Practice, DOI:10.1016/j.jai-p.2019.05.029).

#### Author(s)

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- Zihan Qian
- Yang Li

#### **Source**

Centers for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). National Health and Nutrition Examination Survey Data. Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, [2021][https://www. cdc.gov/nchs/nhanes/].

metal metal

#### **Description**

The metal data frame has 30,442 rows and 27 columns.

#### Usage

data(metal)

#### **Format**

This data frame contains the following columns:

**RIAGENDR** Gender of the sample person

**RIDAGEYR** Best age in years of the sample person at time of screening

**RIDRETH1** Recode of reported race and ethnicity information

WTMEC5YR Both interviewed and MEC examined sample persons

SDMVPSU Masked Variance Unit Pseudo-PSU variable for variance estimation

metal 3

SDMVSTRA Masked variance unit pseudo-stratum variable for variance estimation

**BMXBMI** Body mass index (kg/m<sup>2</sup>)

LBXBPB Lead (ug/dL)

LBXBCD Cadmium (ug/L)

LBXCOT Cotinine (ng/mL)

MCQ010 Ever been told you have asthma

RDQ070 Wheezing or whistling in chest - past year

SMQ040 Do you now smoke cigarettes?

SMQ020 Smoked at least 100 cigarettes in life

MCQ035 Still have asthma?

OCD390G Kind of work you have done the longest

HIQ011 Covered by health insurance

MCQ300B Close relative had asthma?

INDHHIN2 Annual household income

**ENO090** Close relative had asthma?

**ENXTR1Q** Trial 1 FENO measurement (ppb)

SPXNFVC Baseline 1st test spirometry, forced vital capacity

SPXNFEV1 Baseline 1st test spirometry, forced expiratory volume in the first 1 second

SPDBRONC Best test FEV1/FVC ratio below Lower Limit of Normal and/or less than 0.7

SPXBFVC Bronchodilator 2nd test spirometry, forced vital capacity

SPXBFEV1 Bronchodilator 2nd test spirometry, forced expiratory volume in the first 1 second

LBXVIDMS 25-hydroxyvitamin D2 and D3

#### Source

Centers for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). National Health and Nutrition Examination Survey Data. Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, [2021][https://www.cdc.gov/nchs/nhanes/].

#### **Examples**

# Load data
data(metal)
# View data
summary(metal)

4 percent

percent

percent

#### **Description**

The percent data frame has 40,979 rows and 6 columns.

#### Usage

```
data(percent)
```

#### **Format**

This data frame contains the following columns:

FEV1FVC\_percent\_predicted Percent predicted FEV1/FVC

FEV1FVC\_z\_score Z score of FEV1/FVC

FEV1\_percent\_predicted Percent predicted FEV1

FEV1\_z\_score Z score of FEV1

FVC\_percent\_predicted Percent predicted FVC

FVC\_z\_score Z score of FVC

#### **Source**

Centers for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). National Health and Nutrition Examination Survey Data. Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, [2021][https://www.cdc.gov/nchs/nhanes/].

#### **Examples**

```
# Load data
data(percent)
# View data
summary(percent)
```

## **Index**

```
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