

# Package ‘childhoodmortality’

February 1, 2018

**Type** Package

**Title** Calculating Childhood Mortality Rates

**Version** 0.2.0

**Author** Casey Breen

**Depends** R(>= 2.10.0)

**Maintainer** Casey Breen <cbreen@umn.edu>

**Description** Calculates childhood (neonatal, postneonatal, infant, child, and under-five) mortality rates using Demographic and Health Survey (DHS) microdata. The 'childhoodmortality' package was developed in accordance to the methodology outlined in the "DHS Guide to Statistics" (Rutstein 2006, <[http://dhsprogram.com/pubs/pdf/DHSG1/Guide\\_to\\_DHS\\_Statistics\\_29Oct2012\\_DHSG1.pdf](http://dhsprogram.com/pubs/pdf/DHSG1/Guide_to_DHS_Statistics_29Oct2012_DHSG1.pdf)>) Specifically, the package uses a synthetic cohort life table approach, combining mortality probabilities for age segments with actual cohort mortality experience into more common age segments. Standard errors for mortality estimates are computed using the jackknife repeated replication method outlined in the "Estimates of Sampling Errors" appendix of DHS Final Reports (DHS 2004, <<http://dhsprogram.com/pubs/pdf/FR175/19AppendixB.pdf>>). This methodology controls for sample design.

**License** GPL-3

**Encoding** UTF-8

**LazyData** true

**Imports** plyr, matrixStats

**RoxygenNote** 6.0.1

**Suggests** knitr, rmarkdown

**VignetteBuilder** knitr

**NeedsCompilation** no

**Repository** CRAN

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childhoodmortality	<i>Calculates childhood mortality</i>
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### Description

calculates childhood mortality & SE's

### Usage

```
childhoodmortality(data, grouping, rate_type = "underfive")
```

### Arguments

data	dataframe object containing DHS variables YEAR, PSU, PERWEIGHT, KID-DOBCMC, INTDATECMC, KIDAGEDIEDIMP, and grouping var.
grouping	This character string gives the variable name of the variable denoting groups.
rate_type	This character string gives the type of mortality rate to be calculated (neonatal, postneonatal, infant, child, under-five)

### Examples

```
data("model_ipums_dhs_dataset")
underfive_mortality_rates <- childhoodmortality(
  model_ipums_dhs_dataset,
  grouping = "wealthq",
  rate_type = "underfive"
)
```

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model_ipums_dhs_dataset	<i>Model DHS dataset</i>
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### Description

A model open-use dataset created by the DHS program for users to become familiar with datasets without having to register for access.

### Usage

model\_ipums\_dhs\_dataset

### Format

A data frame with 8348 rows and 9 variables:

**KIDDOBCMC** KIDDOBCMC (B3) reports the century month code for the date of birth of the child.

**YEAR** YEAR reports the year when the survey was fielded

**PSU** PSU (V021) is the variable indicating the primary sampling unit or PSU

**PERWEIGHT** PERWEIGHT (V005) is a weighting factor to produce representative estimates

**KIDAGEDIEDIMP** KIDAGEDIEDIMP (B7) reports the age of the child at death in months (including imputed ages)

**INTDATECMC** INTDATECMC (V008) reports century month code for the date on which the interview took place)

**WEALTHQ** WEALTHQ (V190) refers to the relative wealth of the household where the woman lives, divided into quintiles from the poorest (code 1) to the richest (code 5)) ...

### Source

<https://www.dhsprogram.com/data/Model-Datasets.cfm>

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