

# Package ‘directAgeStd’

January 23, 2026

**Type** Package

**Title** Direct Age Standardisation with Confidence Intervals

**Version** 0.0.2

**Description** Provides tools to compute directly age-standardised rates using the 2013 European Standard Population. Includes variance estimation and 95% confidence intervals for population health applications. Functions are flexible to handle any grouping variable and age bands, allowing reproducible and automated analyses.

**License** MIT + file LICENSE

**Encoding** UTF-8

**RoxygenNote** 7.3.3

**LazyData** true

**Imports** dplyr, rlang, magrittr, stats

**Depends** R (>= 3.5)

**URL** <https://github.com/JoeBlackford/directAgeStd/>

**BugReports** <https://github.com/JoeBlackford/directAgeStd/issues>

**NeedsCompilation** no

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**Repository** CRAN

**Date/Publication** 2026-01-23 20:40:02 UTC

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**direct\_age\_standardise***Direct Age Standardisation with Confidence Intervals*

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**Description**

Computes directly age-standardised rates with 95% confidence intervals using the 2013 European Standard Population and Byar's method.

**Usage**

```
direct_age_standardise(
  data,
  var,
  ageband,
  observed,
  population,
  multiplier = 1000
)
```

**Arguments**

data	Dataframe with observed values and population
var	One or more grouping variables (quoted or unquoted)
ageband	Column specifying age bands
observed	Column with observed counts
population	Column with denominator population
multiplier	Scale for rates (default = 1,000)

**Value**

A tibble with directly standardised rates and 95% confidence intervals

**Examples**

```
example_data <- data.frame(
  variable = c("A", "A", "B", "B"),
  ageband = c("0-4", "5-9", "0-4", "5-9"),
  observed = c(10, 20, 15, 25),
  population = c(1000, 1200, 1100, 1300)
)

direct_age_standardise(
  data = example_data,
  var = "variable",
  ageband = "ageband",
  observed = "observed",
```

```
population = "population"  
)
```

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ref_population	<i>European Standard Population 2013 (abridged)</i>
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## Description

A dataset containing abridged ESP 2013 standard population counts for use in age standardisation.

## Usage

```
ref_population
```

## Format

A data frame with 19 rows and 2 variables:

**AgeBand** Age group (character, e.g. "0-4", "5-9")

**StdPopulation** Standard population count for that age band

## Source

Eurostat ESP 2013

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