

# Package ‘EAVA’

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**Type** Package

**Title** Deterministic Verbal Autopsy Coding with Expert Algorithm Verbal Autopsy

**Version** 1.0.0

**Maintainer** Emily Wilson <wilsonem@gmail.com>

**Description** Expert Algorithm Verbal Autopsy assigns causes of death to 2016 WHO Verbal Autopsy Questionnaire data. `odk2EAVA()` converts data to a standard input format for cause of death determination building on the work of Thomas (2021) <<https://cran.r-project.org/src/contrib/Archive/CrossVA/>>. `codEAVA()` uses the presence and absence of signs and symptoms reported in the Verbal Autopsy interview to diagnose common causes of death. A deterministic algorithm assigns a single cause of death to each Verbal Autopsy interview record using a hierarchy of all common causes for neonates or children 1 to 59 months of age.

**License** GPL-2

**Encoding** UTF-8

**LazyData** true

**Imports** stringi, stringr

**RoxygenNote** 7.3.2

**BugReports** <https://github.com/emilybrownwilson/EAVA/issues>

**Depends** R (>= 2.10)

**Suggests** knitr, rmarkdown, testthat (>= 3.0.0)

**VignetteBuilder** knitr

**Config/testthat/edition** 3

**NeedsCompilation** no

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**Repository** CRAN

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### Description

Assigns cause of death by Verbal Autopsy Expert Algorithm

### Usage

```
codEAVA(df, age_group)
```

### Arguments

df	A data frame with 2016 WHO VA responses in openVA input format
age_group	Age group input, either "neonate" or "child"

### Value

A two-column data frame with unique identifier and cause of death

### Examples

```
{
# load embedded example data or data from WHO 2016 Verbal Autopsy Questionnaire
data <- as.data.frame(data_public)
# first run odk2EAVA()
output <- odk2EAVA(data, id_col = "comsa_id")
# run codEAVA() for neonates and children 1-to-59 months of age
EAVA_neonate <- codEAVA(output, "neonate")
EAVA_child <- codEAVA(output, "child")
head(EAVA_neonate)
head(EAVA_child)
}
```

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 data\_public

*Example Data*


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**Description**

A subset of mortality surveillance data from the Countrywide Mortality Surveillance for Action project

**Usage**

```
data_public
```

**Format**

'data\_public' is example data frame with 10 rows and 511 columns

**Source**

<<https://comsamozambique.org/data-access>>

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 odk2EAVA

*odk2EAVA*


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**Description**

Converts 2016 WHO verbal autopsy (VA) data to an input file for Expert Algorithm Verbal Autopsy cause of death assignment by the codEAVA() function

**Usage**

```
odk2EAVA(odk, id_col)
```

**Arguments**

odk            A data frame which used open data kit (odk) to obtain 2016 WHO VA questionnaire responses

id\_col        A unique identifier for each record within the odk data frame

**Value**

A data frame that contains variable names and values which have been converted to openVA convention

## References

Thomas J, Choi E, Li Z, Maire N, McCormick T, Byass P, Clark S (2021). CrossVA: Verbal Autopsy Data Transformation for InSilicoVA and InterVA5 Algorithms\_. R package version 1.0.0, <<https://CRAN.R-project.org/package=CrossVA>>.

## Examples

```
{  
# load embedded example data or data from WHO 2016 Verbal Autopsy Questionnaire  
data <- as.data.frame(data_public)  
# run odk2EAVA()  
output <- odk2EAVA(data, id_col = "comsa_id")  
# view data converted for use in codEAVA()  
head(output)  
}
```

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