

# Package ‘datasus’

May 16, 2018

**Type** Package

**Title** An Interface to DATASUS System

**Version** 0.4.1

**Description** It allows the user to retrieve the data from the systems of DATASUS (SUS IT department related to the Brazilian Ministry of Health, see <<http://datasus.saude.gov.br/informacoes-de-saude/tabnet/>> for more information) much in the same way that is done in the online portal. For now the package allows access to the SINASC and SIM's (ICD-10) systems, that is, the 'Estatísticas Vitais'.

**License** GPL-3

**Encoding** UTF-8

**URL** <http://github.com/rpradosiqueira/datasus>

**BugReports** <http://github.com/rpradosiqueira/datasus/issues>

**Imports** dplyr, httr, magrittr, RCurl, readr, rvest, stringi, stringr, xml2

**LazyData** true

**RoxygenNote** 6.0.1

**Suggests** knitr, rmarkdown

**VignetteBuilder** knitr

**NeedsCompilation** no

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**Repository** CRAN

**Date/Publication** 2018-05-16 04:29:23 UTC

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sim_evita10_bruf	<i>Scrapes SIM's ICD-10 evitale causes data from regions</i>
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### Description

This function allows the user to retrieve data from SIM's ICD-10 database much in the same way that is done by the online portal. The argument options refer to evitable causes data focused on the regions and states.

### Usage

```
sim_evita10_bruf(linha = "Região", coluna = "Não ativa",
  conteudo = 1, periodo = "last", regioao = "all", unidade_da_federacao = "all",
  causas_evitaveis = "all", capitulo_cid10 = "all", categoria_cid10 = "all",
  faixa_etaria = "all", sexo = "all", cor_raca = "all", escolaridade = "all",
  estado_civil = "all", local_ocorrencia = "all")
```

### Arguments

linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Região".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
regiao	"all" or a numeric vector with the IBGE's region codes to filter the data. Defaults to "all".
unidade_da_federacao	"all" or a numeric vector with the IBGE's state codes to filter the data. Defaults to "all".

causas_evitaveis	"all" or a character vector with the evitable cause code (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
capitulo_cid10	"all" or a numeric vector with the ICD-10 chapter to filter the data. Defaults to "all".
categoria_cid10	"all" or a character vector with the ICD-10 category codes (capital letter and two numbers) to filter the data. Defaults to "all".
faixa_etaria	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
escolaridade	"all" or a character vector with the instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
estado_civil	"all" or a character vector with the marital status (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
local_ocorrencia	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".

**Value**

The function returns a data frame printed by parameters input.

**Author(s)**

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

**See Also**

[sinasc\\_nv\\_uf](#)

**Examples**

```
## Not run:  
## Requesting data from Midwest region  
sim_evita10_bruf(regiao = 5)  
  
## End(Not run)
```

---

sim\_evita10\_mun      *Scrapes SIM's ICD-10 evitable causes data from cities*

---

### Description

This function allows the user to retrieve data from SIM's ICD-10 database much in the same way that is done by the online portal. The argument options refer to evitable causes data focused on Brazilian cities.

### Usage

```
sim_evita10_mun(linha = "Município", coluna = "Não ativa",
  conteudo = 1, periodo = "last", municipio = "all", capital = "all",
  cir = "all", macrorregiao_de_saude = "all", microrregiao_ibge = "all",
  ride = "all", territorio_da_cidadania = "all", mesorregiao_pndr = "all",
  amazonia_legal = "all", semiarido = "all", faixa_de_frenteira = "all",
  zona_de_frenteira = "all", municipio_de_extrema_pobreza = "all",
  causas_evitaveis = "all", capitulo_cid10 = "all", categoria_cid10 = "all",
  faixa_etaria = "all", sexo = "all", cor_raca = "all", escolaridade = "all",
  estado_civil = "all", local_ocorrencencia = "all")
```

### Arguments

linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Município".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
municipio	"all" or a numeric vector with the IBGE's city codes to filter the data. Defaults to "all".
capital	"all" or a numeric vector with the IBGE's cities codes to filter the data. Defaults to "all".
cir	"all" or a numeric vector with the CIR's codes to filter the data. Defaults to "all".
macrorregiao_de_saude	"all" or a numeric vector with the Health macro-region's codes to filter the data. Defaults to "all".
microrregiao_ibge	"all" or a numeric vector with the IBGE's micro-region codes to filter the data. Defaults to "all".
ride	"all" or a numeric vector with the IBGE's metropolitan-region codes to filter the data. Defaults to "all".
territorio_da_cidadania	"all" or a numeric vector with the territory of citizenship codes to filter the data. Defaults to "all".

mesorregiao_pndr	"all" or a numeric vector with the PNDR's mesoregion codes to filter the data. Defaults to "all".
amazonia_legal	"all" or a character ("Sim" or "Não") indicating if only the Legal Amazon region must be included. Defaults to "all".
semiario	"all" or a character ("Sim" or "Não") indicating if only the semiarid region must be included. Defaults to "all".
faixa_de_frenteira	"all" or a character ("Sim" or "Não") indicating if only the border area must be included. Defaults to "all".
zona_de_frenteira	"all" or a character ("Sim" or "Não") indicating if only the border strip must be included. Defaults to "all".
municipio_de_extrema_pobreza	"all" or a character ("Sim" or "Não") indicating if only the municipalities of extreme poverty must be included. Defaults to "all".
causas_evitaveis	"all" or a character vector with the evitable cause code (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
capitulo_cid10	"all" or a numeric vector with the ICD-10 chapter to filter the data. Defaults to "all".
categoria_cid10	"all" or a character vector with the ICD-10 category codes (capital letter and two numbers) to filter the data. Defaults to "all".
faixa_etaria	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
escolaridade	"all" or a character vector with the instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
estado_civil	"all" or a character vector with the marital status (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
local_ocorrencia	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".

**Value**

The function returns a data frame printed by parameters input.

**Author(s)**

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

**See Also**

[sinasc\\_nv\\_uf](#)

**Examples**

```
## Not run:
## Requesting data from the city of Campo Grande/MS
sim_evita10_mun(municipio = 500270)

## End(Not run)
```

---

sim_evita10_uf	<i>Scrapes SIM's ICD-10 evitable causes data from ufs</i>
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---

**Description**

This function allows the user to retrieve data from SIM's ICD-10 database much in the same way that is done by the online portal. The argument options refer to evitable causes in 0-4 age group data from the states unities.

**Usage**

```
sim_evita10_uf(uf, linha = "Município", coluna = "Não ativa",
  conteudo = 1, periodo = "last", municipio = "all", cir = "all",
  macrorregiao_de_saude = "all", divisao_admnist_estadual = "all",
  microrregiao_ibge = "all", ride = "all", causas_evitaveis = "all",
  capitulo_cid10 = "all", categoria_cid10 = "all", faixa_etaria = "all",
  sexo = "all", cor_raca = "all", escolaridade = "all", estado_civil = "all",
  local_ocorrencia = "all")
```

**Arguments**

uf	A character of length = 1 with the state's acronym of interest.
linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Município".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
municipio	"all" or a numeric vector with the IBGE's city codes codes to filter the data. Defaults to "all".

cir	"all" or a numeric vector with the CIR's codes to filter the data. Defaults to "all".
macrorregiao_de_saude	"all" or a numeric vector with the Health macro-region's codes to filter the data. Defaults to "all".
divisao_admnist_estadual	"all" or a numeric vector with the State administrative division's codes to filter the data. Defaults to "all".
microrregiao_ibge	"all" or a numeric vector with the IBGE's micro-region codes to filter the data. Defaults to "all".
ride	"all" or a numeric vector with the IBGE's metropolitan-region codes to filter the data. Defaults to "all".
causas_evitaveis	"all" or a character vector with the evitable cause code (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
capitulo_cid10	"all" or a numeric vector with the ICD-10 chapter to filter the data. Defaults to "all".
categoria_cid10	"all" or a character vector with the ICD-10 category codes (capital letter and two numbers) to filter the data. Defaults to "all".
faixa_etaria	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
escolaridade	"all" or a character vector with the instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
estado_civil	"all" or a character vector with the marital status (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
local_ocorrencia	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".

**Value**

The function returns a data frame printed by parameters input.

**Author(s)**

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

**See Also**[sim\\_obt10\\_mun](#)**Examples**

```
## Not run:
## Requesting data from the state of Mato Grosso do Sul
sim_evita10_uf(uf = "ms")

## End(Not run)
```

---

sim_evitb10_bruf	<i>Scrapes SIM's ICD-10 evitale causes data from regions</i>
------------------	--

---

**Description**

This function allows the user to retrieve data from SIM's ICD-10 database much in the same way that is done by the online portal. The argument options refer to evitable causes data focused on the regions and states and age ranging between 5-74 years old.

**Usage**

```
sim_evitb10_bruf(linha = "Região", coluna = "Não ativa",
  conteudo = 1, periodo = "last", regioao = "all", unidade_da_federacao = "all",
  causas_evitaveis = "all", capitulo_cid10 = "all", categoria_cid10 = "all",
  faixa_etaria = "all", faixa_etaria_detalhada = "all", sexo = "all",
  cor_raca = "all", escolaridade = "all", estado_civil = "all",
  local_ocorrencia = "all")
```

**Arguments**

linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Região".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
regiao	"all" or a numeric vector with the IBGE's region codes to filter the data. Defaults to "all".
unidade_da_federacao	"all" or a numeric vector with the IBGE's state codes to filter the data. Defaults to "all".
causas_evitaveis	"all" or a character vector with the evitable cause code (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".



capitulo_cid10	"all" or a numeric vector with the ICD-10 chapter to filter the data. Defaults to "all".
categoria_cid10	"all" or a character vector with the ICD-10 category codes (capital letter and two numbers) to filter the data. Defaults to "all".
faixa_etaria	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_detalhada	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
escolaridade	"all" or a character vector with the instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
estado_civil	"all" or a character vector with the marital status (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
local_ocorrencia	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".

**Value**

The function returns a data frame printed by parameters input.

**Author(s)**

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

**See Also**

[sim\\_evita10\\_bruf](#)

**Examples**

```
## Not run:  
## Requesting data from Midwest region  
sim_evitb10_bruf(region = 5)  
  
## End(Not run)
```

---

 sim\_evitb10\_mun

*Scrapes SIM's ICD-10 evitable causes data from cities*


---

### Description

This function allows the user to retrieve data from SIM's ICD-10 database much in the same way that is done by the online portal. The argument options refer to evitable causes data focused on Brazilian cities and age ranging between 5-74 years old.

### Usage

```
sim_evitb10_mun(linha = "Município", coluna = "Não ativa",
  conteudo = 1, periodo = "last", municipio = "all", capital = "all",
  cir = "all", macrorregiao_de_saude = "all", microrregiao_ibge = "all",
  ride = "all", territorio_da_cidadania = "all", mesorregiao_pndr = "all",
  amazonia_legal = "all", semiarido = "all", faixa_de_frenteira = "all",
  zona_de_frenteira = "all", municipio_de_extrema_pobreza = "all",
  causas_evitaveis = "all", capitulo_cid10 = "all", categoria_cid10 = "all",
  faixa_etaria = "all", faixa_etaria_detalhada = "all", sexo = "all",
  cor_raca = "all", escolaridade = "all", estado_civil = "all",
  local_ocorrencia = "all")
```

### Arguments

linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Município".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
municipio	"all" or a numeric vector with the IBGE's city codes to filter the data. Defaults to "all".
capital	"all" or a numeric vector with the IBGE's cities codes to filter the data. Defaults to "all".
cir	"all" or a numeric vector with the CIR's codes to filter the data. Defaults to "all".
macrorregiao_de_saude	"all" or a numeric vector with the Health macro-region's codes to filter the data. Defaults to "all".
microrregiao_ibge	"all" or a numeric vector with the IBGE's micro-region codes to filter the data. Defaults to "all".
ride	"all" or a numeric vector with the IBGE's metropolitan-region codes to filter the data. Defaults to "all".

territorio_da_cidadania	"all" or a numeric vector with the territory of citizenship codes to filter the data. Defaults to "all".
mesorregiao_pndr	"all" or a numeric vector with the PNDR's mesoregion codes to filter the data. Defaults to "all".
amazonia_legal	"all" or a character ("Sim" or "Não") indicating if only the Legal Amazon region must be included. Defaults to "all".
semiarido	"all" or a character ("Sim" or "Não") indicating if only the semiarid region must be included. Defaults to "all".
faixa_de_frenteira	"all" or a character ("Sim" or "Não") indicating if only the border area must be included. Defaults to "all".
zona_de_frenteira	"all" or a character ("Sim" or "Não") indicating if only the border strip must be included. Defaults to "all".
municipio_de_extrema_pobreza	"all" or a character ("Sim" or "Não") indicating if only the municipalities of extreme poverty must be included. Defaults to "all".
causas_evitaveis	"all" or a character vector with the evitable cause code (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
capitulo_cid10	"all" or a numeric vector with the ICD-10 chapter to filter the data. Defaults to "all".
categoria_cid10	"all" or a character vector with the ICD-10 category codes (capital letter and two numbers) to filter the data. Defaults to "all".
faixa_etaria	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_detalhada	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
escolaridade	"all" or a character vector with the instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
estado_civil	"all" or a character vector with the marital status (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

local\_ocorrencia

"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".

### Value

The function returns a data frame printed by parameters input.

### Author(s)

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

### See Also

[sim\\_evita10\\_mun](#)

### Examples

```
## Not run:  
## Requesting data from the city of Campo Grande/MS  
sim_evitb10_mun(municipio = 500270)  
  
## End(Not run)
```

---

sim\_evitb10\_uf

*Scrapes SIM's ICD-10 evitable causes data from ufs*

---

### Description

This function allows the user to retrieve data from SIM's ICD-10 database much in the same way that is done by the online portal. The argument options refer to evitable causes in 5-74 age group data from the states unities.

### Usage

```
sim_evitb10_uf(uf, linha = "Município", coluna = "Não ativa",  
contendo = 1, periodo = "last", municipio = "all", cir = "all",  
macrorregiao_de_saude = "all", divisao_admnist_estadual = "all",  
microrregiao_ibge = "all", ride = "all", causas_evitaveis = "all",  
capitulo_cid10 = "all", categoria_cid10 = "all", faixa_etaria = "all",  
faixa_etaria_detalhada = "all", sexo = "all", cor_raca = "all",  
escolaridade = "all", estado_civil = "all", local_ocorrencia = "all")
```

**Arguments**

uf	A character of length = 1 with the state's acronym of interest.
linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Município".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
municipio	"all" or a numeric vector with the IBGE's city codes codes to filter the data. Defaults to "all".
cir	"all" or a numeric vector with the CIR's codes to filter the data. Defaults to "all".
macrorregiao_de_saude	"all" or a numeric vector with the Health macro-region's codes to filter the data. Defaults to "all".
divisao_admnist_estadual	"all" or a numeric vector with the State administrative division's codes to filter the data. Defaults to "all".
microrregiao_ibge	"all" or a numeric vector with the IBGE's micro-region codes to filter the data. Defaults to "all".
ride	"all" or a numeric vector with the IBGE's metropolitan-region codes to filter the data. Defaults to "all".
causas_evitaveis	"all" or a character vector with the evitable cause code (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
capitulo_cid10	"all" or a numeric vector with the ICD-10 chapter to filter the data. Defaults to "all".
categoria_cid10	"all" or a character vector with the ICD-10 category codes (capital letter and two numbers) to filter the data. Defaults to "all".
faixa_etaria	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_detalhada	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

escolaridade "all" or a character vector with the instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

estado\_civil "all" or a character vector with the marital status (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

local\_ocorrencia "all" or a character vector with the place of occurrence to filter the data. Defaults to "all".

### Value

The function returns a data frame printed by parameters input.

### Author(s)

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

### See Also

[sim\\_evita10\\_uf](#)

### Examples

```
## Not run:
## Requesting data from the state of Mato Grosso do Sul
sim_evitb10_uf(uf = "ms")

## End(Not run)
```

---

sim\_inf10\_bruf

*Scrapes SIM's ICD-10 child mortality data from regions*

---

### Description

This function allows the user to retrieve data from SIM's ICD-10 database much in the same way that is done by the online portal. The argument options refer to child mortality data focused on focused on the regions and states.

### Usage

```
sim_inf10_bruf(linha = "Região", coluna = "Não ativa",
  conteudo = 1, periodo = "last", regioao = "all",
  unidade_da_federacao = "all", capitulo_cid10 = "all",
  categoria_cid10 = "all", lista_mort_cid10 = "all",
  causa_mal_definidas = "all", causas_evitaveis_0a4anos = "all",
  faixa_etaria_1 = "all", faixa_etaria_2 = "all", faixa_etaria_3 = "all",
```

```

faixa_etaria_4 = "all", faixa_etaria_5 = "all",
faixa_etaria_detalhada = "all", sexo = "all", cor_raca = "all",
local_ocorrencia = "all", idade_mae = "all", escolaridade_mae = "all",
duracao_gestacao = "all", tipo_gravidez = "all", tipo_parto = "all",
peso_ao_nascer = "all", obito_relacao_parto = "all",
obito_investigado = "all")

```

## Arguments

linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Município".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
regiao	"all" or a numeric vector with the IBGE's region codes to filter the data. Defaults to "all".
unidade_da_federacao	"all" or a numeric vector with the IBGE's state codes to filter the data. Defaults to "all".
capitulo_cid10	"all" or a numeric vector with the ICD-10 chapter to filter the data. Defaults to "all".
categoria_cid10	"all" or a character vector with the ICD-10 category codes (capital letter and two numbers) to filter the data. Defaults to "all".
lista_mort_cid10	"all" or a character vector with the mortality type (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
causa_mal_definidas	"all" or a character vector with the ill-defined causes (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
causas_evitaveis_0a4anos	"all" or a character vector with the evitable cause code (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_1	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_2	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_3	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

faixa_etaria_4	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_5	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_detalhada	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
local_ocorrenca	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".
idade_mae	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
escolaridade_mae	"all" or a character vector with the mother's instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
duracao_gestacao	"all" or a character vector with the marital status of the mother (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_gravidez	"all" or a character vector with the type of pregnancy (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_parto	"all" or a character vector with the Parturition type (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
peso_ao_nascer	"all" or a character vector with the birth weight (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
obito_relacao_parto	"all" or a character vector with period of child mortality in relation to childbirth (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
obito_investigado	"all" or a character vector indicating if the death was investigated (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".



**Value**

The function returns a data frame printed by parameters input.

**Author(s)**

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

**See Also**

[sim\\_evita10\\_mun](#)

**Examples**

```
## Not run:
## Requesting data from Midwest region
sim_inf10_bruf(regiao = 5)

## End(Not run)
```

---

sim\_inf10\_mun

*Scrapes SIM's ICD-10 child mortality data from cities*

---

**Description**

This function allows the user to retrieve data from SIM's ICD-10 database much in the same way that is done by the online portal. The argument options refer to child mortality data focused on Brazilian cities.

**Usage**

```
sim_inf10_mun(linha = "Município", coluna = "Não ativa",
  conteudo = 1, periodo = "last", municipio = "all", capital = "all",
  cir = "all", macrorregiao_de_saude = "all", microrregiao_ibge = "all",
  ride = "all", territorio_da_cidadania = "all", mesorregiao_pndr = "all",
  amazonia_legal = "all", semiarido = "all", faixa_de_frenteira = "all",
  zona_de_frenteira = "all", municipio_de_extrema_pobreza = "all",
  capitulo_cid10 = "all", categoria_cid10 = "all", lista_mort_cid10 = "all",
  causa_mal_definidas = "all", causas_evitaveis_0a4anos = "all",
  faixa_etaria_1 = "all", faixa_etaria_2 = "all", faixa_etaria_3 = "all",
  faixa_etaria_4 = "all", faixa_etaria_5 = "all", faixa_etaria_detalhada = "all",
  sexo = "all", cor_raca = "all", local_ocorrencia = "all", idade_mae = "all",
  escolaridade_mae = "all", duracao_gestacao = "all", tipo_gravidez = "all",
  tipo_parto = "all", peso_ao_nascer = "all", obito_relacao_parto = "all",
  obito_investigado = "all")
```

**Arguments**

linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Município".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
municipio	"all" or a numeric vector with the IBGE's city codes codes to filter the data. Defaults to "all".
capital	"all" or a numeric vector with the IBGE's cities codes to filter the data. Defaults to "all".
cir	"all" or a numeric vector with the CIR's codes to filter the data. Defaults to "all".
macrorregiao_de_saude	"all" or a numeric vector with the Health macro-region's codes to filter the data. Defaults to "all".
microrregiao_ibge	"all" or a numeric vector with the IBGE's micro-region codes to filter the data. Defaults to "all".
ride	"all" or a numeric vector with the IBGE's metropolitan-region codes to filter the data. Defaults to "all".
territorio_da_cidadania	"all" or a numeric vector with the territory of citizenship codes to filter the data. Defaults to "all".
mesorregiao_pndr	"all" or a numeric vector with the PNDP's mesoregion codes to filter the data. Defaults to "all".
amazonia_legal	"all" or a character ("Sim" or "Não") indicating if only the Legal Amazon region must be included. Defaults to "all".
semiario	"all" or a character ("Sim" or "Não") indicating if only the semiarid region must be included. Defaults to "all".
faixa_de_frenteira	"all" or a character ("Sim" or "Não") indicating if only the border area must be included. Defaults to "all".
zona_de_frenteira	"all" or a character ("Sim" or "Não") indicating if only the border strip must be included. Defaults to "all".
municipio_de_extrema_pobreza	"all" or a character ("Sim" or "Não") indicating if only the municipalities of extreme poverty must be included. Defaults to "all".
capitulo_cid10	"all" or a numeric vector with the ICD-10 chapter to filter the data. Defaults to "all".
categoria_cid10	"all" or a character vector with the ICD-10 category codes (capital letter and two numbers) to filter the data. Defaults to "all".

lista_mort_cid10	"all" or a character vector with the mortality type (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
causa_mal_definidas	"all" or a character vector with the ill-defined causes (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
causas_evitaveis_0a4anos	"all" or a character vector with the evitable cause code (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_1	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_2	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_3	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_4	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_5	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_detalhada	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
local_ocorrenca	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".
idade_mae	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
escolaridade_mae	"all" or a character vector with the mother's instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

duracao_gestacao	"all" or a character vector with the marital status of the mother (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_gravidez	"all" or a character vector with the type of pregnancy (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_parto	"all" or a character vector with the Parturition type (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
peso_ao_nascer	"all" or a character vector with the birth weight (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
obito_relacao_parto	"all" or a character vector with period of child mortality in relation to childbirth (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
obito_investigado	"all" or a character vector indicating if the death was investigated (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

**Value**

The function returns a data frame printed by parameters input.

**Author(s)**

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

**See Also**

[sim\\_evita10\\_mun](#)

**Examples**

```
## Not run:  
## Requesting data from the city of Campo Grande/MS  
sim_inf10_mun(municipio = 500270)  
  
## End(Not run)
```

---

sim\_inf10\_uf                      *Scrapes SIM's ICD-10 child mortality data from ufs*

---

### Description

This function allows the user to retrieve data from SIM's ICD-10 database much in the same way that is done by the online portal. The argument options refer to child mortality data from the states unities.

### Usage

```
sim_inf10_uf(uf, linha = "Município", coluna = "Não ativa",
  conteudo = 1, periodo = "last", municipio = "all", cir = "all",
  macrorregiao_de_saude = "all", divisao_admnist_estadual = "all",
  microrregiao_ibge = "all", ride = "all", capitulo_cid10 = "all",
  categoria_cid10 = "all", lista_mort_cid10 = "all",
  causa_mal_definidas = "all", faixa_etaria_1 = "all",
  faixa_etaria_2 = "all", faixa_etaria_3 = "all", faixa_etaria_4 = "all",
  faixa_etaria_5 = "all", faixa_etaria_detalhada = "all",
  sexo = "all", cor_raca = "all", local_ocorrencia = "all",
  idade_mae = "all", escolaridade_mae = "all",
  duracao_gestacao = "all", tipo_gravidez = "all", tipo_parto = "all",
  peso_ao_nascer = "all", obito_relacao_parto = "all",
  obito_investigado = "all")
```

### Arguments

uf	A character of length = 1 with the state "all".
linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Município".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
municipio	"all" or a numeric vector with the IBGE's city codes codes to filter the data. Defaults to "all".
cir	"all" or a numeric vector with the CIR's codes to filter the data. Defaults to "all".
macrorregiao_de_saude	"all" or a numeric vector with the Health macro-region's codes to filter the data. Defaults to "all".
divisao_admnist_estadual	"all" or a numeric vector with the State administrative division's codes to filter the data. Defaults to "all".
microrregiao_ibge	"all" or a numeric vector with the IBGE's micro-region codes to filter the data. Defaults to "all".

ride	"all" or a numeric vector with the IBGE's metropolitan-region codes to filter the data. Defaults to "all".
capitulo_cid10	"all" or a numeric vector with the ICD-10 chapter to filter the data. Defaults to "all".
categoria_cid10	"all" or a character vector with the ICD-10 category codes (capital letter and two numbers) to filter the data. Defaults to "all".
lista_mort_cid10	"all" or a character vector with the mortality type (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
causa_mal_definidas	"all" or a character vector with the ill-defined causes (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_1	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_2	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_3	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_4	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_5	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_detalhada	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
local_ocorrenca	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".
idade_mae	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

escolaridade_mae	"all" or a character vector with the mother's instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
duracao_gestacao	"all" or a character vector with the marital status of the mother (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_gravidez	"all" or a character vector with the type of pregnancy (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_parto	"all" or a character vector with the Parturition type (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
peso_ao_nascer	"all" or a character vector with the birth weight (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
obito_relacao_parto	"all" or a character vector with period of child mortality in relation to childbirth (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
obito_investigado	"all" or a character vector indicating if the death was investigated (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

**Value**

The function returns a data frame printed by parameters input.

**Author(s)**

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

**See Also**

[sim\\_evita10\\_uf](#)

**Examples**

```
## Not run:  
## Requesting data from the state of Mato Grosso do Sul  
sim_inf10_uf(uf = "ms")  
  
## End(Not run)
```

sim\_obt10\_bruf

*Scrapes SIM's ICD-10 data from regions***Description**

This function allows the user to retrieve data from SIM's ICD-10 database much in the same way that is done by the online portal. The argument options refer to data focused on the regions and states.

**Usage**

```
sim_obt10_bruf(linha = "Região", coluna = "Não ativa",
  conteudo = 1, periodo = "last", regioao = "all", unidade_da_federacao = "all",
  capitulo_cid10 = "all", grupo_cid10 = "all", categoria_cid10 = "all",
  causa_br_cid10 = "all", causa_mal_definida = "all", faixa_etaria = "all",
  faixa_etaria_ops = "all", faixa_etaria_det = "all", faixa_etaria_menor1a = "all",
  sexo = "all", cor_raca = "all", escolaridade = "all", estado_civil = "all",
  local_ocorrencia = "all")
```

**Arguments**

linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Região".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
regiao	"all" or a numeric vector with the IBGE's region codes to filter the data. Defaults to "all".
unidade_da_federacao	"all" or a numeric vector with the IBGE's state codes to filter the data. Defaults to "all".
capitulo_cid10	"all" or a numeric vector with the ICD-10 chapter to filter the data. Defaults to "all".
grupo_cid10	"all" or a character vector with the ICD-10 group (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
categoria_cid10	"all" or a character vector with the ICD-10 category codes (capital letter and two numbers) to filter the data. Defaults to "all".
causa_br_cid10	"all" or a character vector with the ICD-10 cause codes to filter the data. Defaults to "all".
causa_mal_definida	"all" or a character vector with the ill-defined causes (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".



faixa_etaria	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_ops	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all". "ops" in the argument name stands for Pan American Health Organization.
faixa_etaria_det	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_menor1a	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
escolaridade	"all" or a character vector with the instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
estado_civil	"all" or a character vector with the marital status (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
local_ocorrenci	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".

**Value**

The function returns a data frame printed by parameters input.

**Author(s)**

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

**See Also**

[sinasc\\_nv\\_uf](#)

**Examples**

```
## Not run:
## Requesting data from Midwest region
```

```
sim_obt10_bruf(region = 5)

## End(Not run)
```

---

 sim\_obt10\_mun

*Scrapes SIM's ICD-10 data from cities*


---

## Description

This function allows the user to retrieve data from SIM's ICD-10 database much in the same way that is done by the online portal. The argument options refer to data focused on Brazilian cities.

## Usage

```
sim_obt10_mun(linha = "Município", coluna = "Não ativa",
  conteudo = 1, periodo = "last", municipio = "all", capital = "all",
  cir = "all", macrorregiao_de_saude = "all", microrregiao_ibge = "all",
  ride = "all", territorio_da_cidadania = "all", mesorregiao_pndr = "all",
  amazonia_legal = "all", semiarido = "all", faixa_de_frenteira = "all",
  zona_de_frenteira = "all", municipio_de_extrema_pobreza = "all",
  capitulo_cid10 = "all", grupo_cid10 = "all", categoria_cid10 = "all",
  causa_br_cid10 = "all", causa_mal_definida = "all", faixa_etaria = "all",
  faixa_etaria_ops = "all", faixa_etaria_det = "all", faixa_etaria_menor1a = "all",
  sexo = "all", cor_raca = "all", escolaridade = "all", estado_civil = "all",
  local_ocorrencia = "all")
```

## Arguments

linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Município".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
municipio	"all" or a numeric vector with the IBGE's city codes codes to filter the data. Defaults to "all".
capital	"all" or a numeric vector with the IBGE's cities codes to filter the data. Defaults to "all".
cir	"all" or a numeric vector with the CIR's codes to filter the data. Defaults to "all".
macrorregiao_de_saude	"all" or a numeric vector with the Health macro-region's codes to filter the data. Defaults to "all".
microrregiao_ibge	"all" or a numeric vector with the IBGE's micro-region codes to filter the data. Defaults to "all".

ride	"all" or a numeric vector with the IBGE's metropolitan-region codes to filter the data. Defaults to "all".
territorio_da_cidadania	"all" or a numeric vector with the territory of citizenship codes to filter the data. Defaults to "all".
mesorregiao_pndr	"all" or a numeric vector with the PNDR's mesoregion codes to filter the data. Defaults to "all".
amazonia_legal	"all" or a character ("Sim" or "Não") indicating if only the Legal Amazon region must be included. Defaults to "all".
semiario	"all" or a character ("Sim" or "Não") indicating if only the semiarid region must be included. Defaults to "all".
faixa_de_frenteira	"all" or a character ("Sim" or "Não") indicating if only the border area must be included. Defaults to "all".
zona_de_frenteira	"all" or a character ("Sim" or "Não") indicating if only the border strip must be included. Defaults to "all".
municipio_de_extrema_pobreza	"all" or a character ("Sim" or "Não") indicating if only the municipalities of extreme poverty must be included. Defaults to "all".
capitulo_cid10	"all" or a numeric vector with the ICD-10 chapter to filter the data. Defaults to "all".
grupo_cid10	"all" or a character vector with the ICD-10 group (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
categoria_cid10	"all" or a character vector with the ICD-10 category codes (capital letter and two numbers) to filter the data. Defaults to "all".
causa_br_cid10	"all" or a character vector with the ICD-10 cause codes to filter the data. Defaults to "all".
causa_mal_definida	"all" or a character vector with the ill-defined causes (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_ops	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all". "ops" in the argument name stands for Pan American Health Organization.
faixa_etaria_det	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

faixa_etaria_menor1a	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
escolaridade	"all" or a character vector with the instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
estado_civil	"all" or a character vector with the marital status (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
local_ocorrencia	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".

### Value

The function returns a data frame printed by parameters input.

### Author(s)

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

### See Also

[sinasc\\_nv\\_uf](#)

### Examples

```
## Not run:  
## Requesting data from the city of Campo Grande/MS  
sim_obt10_mun(municipio = 500270)  
  
## End(Not run)
```

---

sim\_obt10\_uf                      *Scrapes SIM's ICD-10 data from UF's*

---

### Description

This function allows the user to retrieve data from SIM's ICD-10 database much in the same way that is done by the online portal. The argument options refer to data from the states unities.

### Usage

```
sim_obt10_uf(uf, linha = "Município", coluna = "Não ativa",
  conteudo = 1, periodo = "last", municipio = "all", cir = "all",
  macrorregiao_de_saude = "all", divisao_admnist_estadual = "all",
  microrregiao_ibge = "all", ride = "all", capitulo_cid10 = "all",
  grupo_cid10 = "all", categoria_cid10 = "all", causa_br_cid10 = "all",
  causa_mal_definida = "all", faixa_etaria = "all", faixa_etaria_ops = "all",
  faixa_etaria_det = "all", faixa_etaria_menor1a = "all", sexo = "all",
  cor_raca = "all", escolaridade = "all", estado_civil = "all",
  local_ocorrencia = "all")
```

### Arguments

uf	A character of length = 1 with the state's acronym of interest.
linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Município".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
municipio	"all" or a numeric vector with the IBGE's city codes codes to filter the data. Defaults to "all".
cir	"all" or a numeric vector with the CIR's codes to filter the data. Defaults to "all".
macrorregiao_de_saude	"all" or a numeric vector with the Health macro-region's codes to filter the data. Defaults to "all".
divisao_admnist_estadual	"all" or a numeric vector with the State administrative division's codes to filter the data. Defaults to "all".
microrregiao_ibge	"all" or a numeric vector with the IBGE's micro-region codes to filter the data. Defaults to "all".
ride	"all" or a numeric vector with the IBGE's metropolitan-region codes to filter the data. Defaults to "all".
capitulo_cid10	"all" or a numeric vector with the ICD-10 chapter to filter the data. Defaults to "all".

grupo_cid10	"all" or a character vector with the ICD-10 group (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
categoria_cid10	"all" or a character vector with the ICD-10 category codes (capital letter and two numbers) to filter the data. Defaults to "all".
causa_br_cid10	"all" or a character vector with the ICD-10 cause codes to filter the data. Defaults to "all".
causa_mal_definida	"all" or a character vector with the ill-defined causes (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_ops	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all". "ops" in the argument name stands for Pan American Health Organization.
faixa_etaria_det	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
faixa_etaria_menor1a	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
escolaridade	"all" or a character vector with the instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
estado_civil	"all" or a character vector with the marital status (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
local_ocorrenci	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".

### Value

The function returns a data frame printed by parameters input.

**Author(s)**

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

**See Also**

[sim\\_obt10\\_mun](#)

**Examples**

```
## Not run:
## Requesting data from the state of Mato Grosso do Sul
sim_obt10_uf(uf = "ms")

## End(Not run)
```

---

sinasc\_nv\_bruf

*Scrapes SINASC data from regions*

---

**Description**

This function allows the user to retrieve data from SINASC database much in the same way that is done by the online portal. The argument options refer to data focused on the regions and states.

**Usage**

```
sinasc_nv_bruf(linha = "Região", coluna = "Não ativa",
  conteudo = 1, periodo = "last", regioao = "all", unidade_da_federacao = "all",
  local_ocorrencia = "all", idade_da_mae = "all", instrucao_da_mae = "all",
  estado_civil_mae = "all", duracao_gestacao = "all", tipo_de_gravidez = "all",
  tipo_de_parto = "all", consult_pre_natal = "all", sexo = "all",
  cor_raca = "all", apgar_1_minuto = "all", apgar_5_minuto = "all",
  peso_ao_nascer = "all", anomalia_congenita = "all", tipo_anomal_congen = "all")
```

**Arguments**

linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Município".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
regiao	"all" or a numeric vector with the IBGE's region codes to filter the data. Defaults to "all".
unidade_da_federacao	"all" or a numeric vector with the IBGE's state codes to filter the data. Defaults to "all".

local_ocorrencia	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".
idade_da_mae	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
instrucao_da_mae	"all" or a character vector with the mother's instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
estado_civil_mae	"all" or a character vector with the marital status of the mother (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
duracao_gestacao	"all" or a character vector with the marital status of the mother (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_de_gravidez	"all" or a character vector with the type of pregnancy (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_de_parto	"all" or a character vector with the Parturition type (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
consult_pre_natal	"all" or a character vector with the amount of prenatal consultation (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
apgar_1_minuto	"all" or a character vector with the value of the apgar exam of the first minute (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
apgar_5_minuto	"all" or a character vector with the value of the apgar exam of the fifth minute (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
peso_ao_nascer	"all" or a character vector with the birth weight (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
anomalia_congenita	"all" or a character vector with the indicative of congenital anomaly (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".



tipo\_anomal\_congen

"all" or a character vector with the congenital anomaly type (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

### Value

The function returns a data frame printed by parameters input.

### Author(s)

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

### See Also

[sinasc\\_nv\\_uf](#)

### Examples

```
## Not run:
## Requesting data from Midwest region
sinasc_nv_bruf(region = 5)

## End(Not run)
```

---

sinasc\_nv\_mun

*Scrapes SINASC data from cities*

---

### Description

This function allows the user to retrieve data from SINASC database much in the same way that is done by the online portal. The argument options refer to data focused on Brazilian cities.

### Usage

```
sinasc_nv_mun(linha = "Município", coluna = "Não ativa",
  conteudo = 1, periodo = "last", municipio = "all", capital = "all",
  cir = "all", macrorregiao_de_saude = "all", microrregiao_ibge = "all",
  ride = "all", territorio_da_cidadania = "all", mesorregiao_pndr = "all",
  amazonia_legal = "all", semiarido = "all", faixa_de_frenteira = "all",
  zona_de_frenteira = "all", municipio_de_extrema_pobreza = "all",
  local_ocorrencia = "all", idade_da_mae = "all", instrucao_da_mae = "all",
  estado_civil_mae = "all", duracao_gestacao = "all", tipo_de_gravidez = "all",
  tipo_de_parto = "all", consult_pre_natal = "all", sexo = "all", cor_raca = "all",
  apgar_1_minuto = "all", apgar_5_minuto = "all", peso_ao_nascer = "all",
  anomalia_congenita = "all", tipo_anomal_congen = "all")
```

**Arguments**

linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Município".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".
conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
municipio	"all" or a numeric vector with the IBGE's city codes codes to filter the data. Defaults to "all".
capital	"all" or a numeric vector with the IBGE's cities codes to filter the data. Defaults to "all".
cir	"all" or a numeric vector with the CIR's codes to filter the data. Defaults to "all".
macrorregiao_de_saude	"all" or a numeric vector with the Health macro-region's codes to filter the data. Defaults to "all".
microrregiao_ibge	"all" or a numeric vector with the IBGE's micro-region codes to filter the data. Defaults to "all".
ride	"all" or a numeric vector with the IBGE's metropolitan-region codes to filter the data. Defaults to "all".
territorio_da_cidadania	"all" or a numeric vector with the territory of citizenship codes to filter the data. Defaults to "all".
mesorregiao_pndr	"all" or a numeric vector with the PNDP's mesoregion codes to filter the data. Defaults to "all".
amazonia_legal	"all" or a character ("Sim" or "Não") indicating if only the Legal Amazon region must be included. Defaults to "all".
semiarido	"all" or a character ("Sim" or "Não") indicating if only the semiarid region must be included. Defaults to "all".
faixa_de_frenteira	"all" or a character ("Sim" or "Não") indicating if only the border area must be included. Defaults to "all".
zona_de_frenteira	"all" or a character ("Sim" or "Não") indicating if only the border strip must be included. Defaults to "all".
municipio_de_extrema_pobreza	"all" or a character ("Sim" or "Não") indicating if only the municipalities of extreme poverty must be included. Defaults to "all".
local_ocorrencia	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".
idade_da_mae	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

instrucao_da_mae	"all" or a character vector with the mother's instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
estado_civil_mae	"all" or a character vector with the marital status of the mother (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
duracao_gestacao	"all" or a character vector with the marital status of the mother (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_de_gravidez	"all" or a character vector with the type of pregnancy (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_de_parto	"all" or a character vector with the Parturition type (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
consult_pre_natal	"all" or a character vector with the amount of prenatal consultation (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
apgar_1_minuto	"all" or a character vector with the value of the apgar exam of the first minute (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
apgar_5_minuto	"all" or a character vector with the value of the apgar exam of the fifth minute (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
peso_ao_nascer	"all" or a character vector with the birth weight (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
anomalia_congenita	"all" or a character vector with the indicative of congenital anomaly (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_anomal_congen	"all" or a character vector with the congenital anomaly type (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

**Value**

The function returns a data frame printed by parameters input.

**Author(s)**

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

**See Also**

[sinasc\\_nv\\_uf](#)

**Examples**

```
## Not run:
## Requesting data from the city of Campo Grande/MS
sinasc_nv_mun(municipio = 500270)

## End(Not run)
```

---

sinasc\_nv\_uf

*Scrapes SINASC data from ufs*

---

**Description**

This function allows the user to retrieve data from SINASC database much in the same way that is done by the online portal. The argument options refer to data from the states unities.

**Usage**

```
sinasc_nv_uf(uf, linha = "Município", coluna = "Não ativa",
  conteudo = 1, periodo = "last", municipio = "all", cir = "all",
  macrorregiao_de_saude = "all", divisao_admnist_estadual = "all",
  microrregiao_ibge = "all", ride = "all", local_ocorrencia = "all",
  idade_da_mae = "all", instrucao_da_mae = "all", estado_civil_mae = "all",
  duracao_gestacao = "all", tipo_de_gravidez = "all", tipo_de_parto = "all",
  consult_pre_natal = "all", sexo = "all", cor_raca = "all", apgar_1_minuto = "all",
  apgar_5_minuto = "all", peso_ao_nascer = "all", anomalia_congenita = "all",
  tipo_anomal_congen = "all")
```

**Arguments**

uf	A character of length = 1 with the state's acronym of interest.
linha	A character describing which element will be displayed in the rows of the data.frame. Defaults to "Município".
coluna	A character describing which element will be displayed in the columns of the data.frame. Defaults to "Não ativa".

conteudo	A character of length = 1 with the state's acronym of interest.
periodo	A character vector describing the period of data. Defaults to the last available.
municipio	"all" or a numeric vector with the IBGE's city codes codes to filter the data. Defaults to "all".
cir	"all" or a numeric vector with the CIR's codes to filter the data. Defaults to "all".
macrorregiao_de_saude	"all" or a numeric vector with the Health macro-region's codes to filter the data. Defaults to "all".
divisao_admnist_estadual	"all" or a numeric vector with the State administrative division's codes to filter the data. Defaults to "all".
microrregiao_ibge	"all" or a numeric vector with the IBGE's micro-region codes to filter the data. Defaults to "all".
ride	"all" or a numeric vector with the IBGE's metropolitan-region codes to filter the data. Defaults to "all".
local_ocorrencia	"all" or a character vector with the place of occurrence to filter the data. Defaults to "all".
idade_da_mae	"all" or a character vector with the age range (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
instrucao_da_mae	"all" or a character vector with the mother's instruction (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
estado_civil_mae	"all" or a character vector with the marital status of the mother (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
duracao_gestacao	"all" or a character vector with the marital status of the mother (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_de_gravidez	"all" or a character vector with the type of pregnancy (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_de_parto	"all" or a character vector with the Parturition type (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
consult_pre_natal	"all" or a character vector with the amount of prenatal consultation (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

sexo	"all" or a character vector with the gender (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
cor_raca	"all" or a character vector with the color/race (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
apgar_1_minuto	"all" or a character vector with the value of the apgar exam of the first minute (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
apgar_5_minuto	"all" or a character vector with the value of the apgar exam of the fifth minute (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
peso_ao_nascer	"all" or a character vector with the birth weight (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
anomalia_congenita	"all" or a character vector with the indicative of congenital anomaly (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".
tipo_anomal_congen	"all" or a character vector with the congenital anomaly type (written in the same way) or the number corresponding to the order of the option in the online layout to filter the data. Defaults to "all".

### Value

The function returns a data frame printed by parameters input.

### Author(s)

Renato Prado Siqueira <<rpradosiqueira@gmail.com>>

### See Also

[sinasc\\_nv\\_mun](#)

### Examples

```
## Not run:  
## Requesting data from the state of Mato Grosso do Sul  
sinasc_nv_uf(uf = "ms")  
  
## End(Not run)
```

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