

# **TESSy - The European Surveillance System**

# Severe Acute Respiratory Infections (SARI) Reporting Protocol Version 3.5

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# Changelog

#### **Summary of changes**

#### V3.5 (27 October 2022)

1. Updated coded value list for the variable VirusVariantCOVID for reporting of BQ.1 (Pango lineage BQ.1 and sub-lineages) and XBB (Pango lineage XBB and sub-lineages)

#### V3.4 (18 July 2022)

1. Updated coded value list for the variable VirusVariantCOVID for reporting of BA.2.75 (Omicron BA.2 sub-lineage with mutations D339H, G446S, N460K, and R493Q in the RBD, and mutations K147E, W152R, F157L, I210V, and G257S in the N-terminal domain of the Spike protein)

#### V3.3 (10 June 2022)

 Updated coded value list for the variable VirusVariantCOVID for reporting of BA.2+L452X (Omicron BA.2 and any of its sub-lineages with mutations at position 452 of the Spike protein)

#### V3.2 (13 May 2022)

1. Removed variant "B.1.1.529" (Omicron) from the coded value list for variable VirusVariantCOVID (Omicron cases should be assigned to a specific sublineage)

#### V3.1 (7 April 2022)

1. Added Omicron sublineages BA.4 and BA.5 to coded value list for variable *VirusVariantCOVID* 

#### V3.0 (18 February 2022)

- 1. SARISURV record type updated to version 3, to include additional variables: *Apnoea, NCoVVacFourthDose, NCoVVacFourthBrand, NCoVVacFourthDate, DrugUsedTreatmentCOVID*
- 2. Added "Chumakov Covi-Vac", "Novavax Covovax", "Novavax Nuvaxovid" and "Gamaleya Sputnik-Light to the coded value list for variables *NCoVVacFirstBrand*, *NCoVVacSecBrand* and *CoVVacThirdBrand*

#### V2.3 (27 January 2022)

1. Added B.1.1.529 (Omicron) and sublineages BA.1, BA.2 and BA.3 to coded value list for variable VirusVariantCOVID

#### V2.2 (10 November 2021)

- 1. Updated description of multiple variables in SARISURV
- 2. Variable names corrected in INFLSARIAGGR to match the current metadataset

#### V2.1 (1 October 2021)

1. Coded value for NCoVVacFirstBrand, NCoVVacSecBrand, NCoVVacThirdBrand "HAYATVAX" replaced by "HAYAT-VAC"

#### V2.0 (28 September 2021)

- 1. Added variables NCoVVacThirdDose, NCoVVacThirdBrand, NCoVVacThirdDate
- 2. Added CureVac and Sanofi Pasteur/GSK to the coded value list for variables NCoVVacFirstBrand, NCoVVacSecBrand, NCoVVacThirdBrand

#### How to use this document

This Reporting Protocol provides information for data managers in reporting countries in two main sections:

- Reporting to TESSy contains guidelines on how to prepare data for submission to TESSy, deadlines for reporting, subject-specific information (e.g. new changes to metadata), and links to further information.
- Annex Severe Acute Respiratory Infection (SARI) metadata contains:
  - A history of metadata changes for the subject(s) covered by this Reporting Protocol.
  - o The metadata set for the subject(s) covered by this Reporting Protocol.

# Finding further information

Paragraphs denoted by the information icon tell where you can find further information.

Updated links to all the schedules, documentation and training materials mentioned in this Reporting Protocol are included in the *TESSy Technical Guidelines & Tools* (see the menu 'Technical Guidelines and Tools' when logged in TESSy), including:

- Metadata sets and history.
- Tutorials for data transformation using respectively Excel and Access.
- TESSy user documentation.
- CSV and XML transport protocols.

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# Introduction

This Reporting Protocol describes surveillance of Severe Acute Respiratory Infections (SARI) in the countries and areas of the WHO European Region, including the 27 countries of the European Union (EU) and the additional three countries of the European Economic Area (EEA). This protocol replaces the SARI component of the *seasonal influenza Reporting Protocol*.

Data are submitted to a joint ECDC/WHO database hosted in the European Surveillance System (TESSy), including three record types:

- 1. **Case-based reporting** of SARI cases (recordtype: **SARISURV**). When possible, please report case-based data;
- 2. **Aggregated reporting** of weekly denominators for SARISURV, for countries reporting case-based data (recordtype: **SARISURVDENOM**);
- 3. **Aggregated reporting** of all SARI cases, for countries not reporting case-based data, including data for denominators (recordtype: **INFLSARIAGGR**).

For cases admitted to hospital from Monday to Sunday during the previous week, data **should be reported every Thursday by 10:00 and updated retrospectively**.

Please note that all data collected are shared weekly with the World Health Organisation – Regional Office for Europe (WHO/Europe) to fulfil Member States reporting requirements to WHO. Duplicate reporting is therefore not required.

The current reporting protocol focuses on SARI Surveillance, although the variables proposed are compatible with the vaccine effectiveness studies currently being established. The case-based record type SARISURV will be updated (or another TESSy Reporting Protocol will be created) specifically to cover the foreseen TESSy reporting in relation to vaccine effectiveness studies.

In addition to variables needed to respond to SARI surveillance objectives, a selection of variables that are currently included in the SARI Vaccine effectiveness protocol are presented. These variables should be seen as optional for reporting in relation to SARI surveillance and as preparatory work for a TESSy foreseen data collection of vaccine effectiveness studies.

# **Definitions**

The *WHO SARI case definition* will be used to allow historical comparisons in countries with existing SARI surveillance systems.

#### Case definition:

- Patient with an acute respiratory infection that requires hospitalisation AND:
- Has a history of fever or measured fever of ≥ 38 C° AND
- cough AND
- with an onset within the last 10 days.

Although the latest SARI WHO case definition (2014) is recommended, we are aware that countries may be using broader case definitions at the national level.

To ensure consistency and comparability, but also to support future discussions on updates to the SARI case definition, **countries using a broader or more sensitive case definition should provide sufficient data and describe it clearly using the variable "data source"** in the record types SARISURVDENOM and/or INFLSARIAGGR (please see below).

The same principle applies for countries using proxy SARI case definitions (for example those based on electronic records).

For the case-based reporting (SARISURV), cough, fever and any other additional symptoms should be collected and reported.

Healthcare-acquired respiratory infections are included if the severity of the respiratory infection would by itself require hospitalisation.

# Aim of this reporting protocol

The aim of this protocol is to specify the details and variables to report SARI surveillance data including the data on related respiratory pathogens.

# Surveillance Objectives

# Primary objectives

- 1. To monitor trends in severe respiratory infections and their impact on hospitalisations and inhospital mortality;
- 2. To ensure the early detection and response to unusual and unexpected events caused by common or emerging respiratory pathogens;
- 3. To assess the impact of public health interventions, including vaccination, on respiratory infections and inform disease preparedness, prevention, and control.

# Secondary objectives

- To identify risk factors for severe acute respiratory infection and death;
- To contribute to pathogen-specific SARI vaccine effectiveness monitoring.

Some of the objectives listed can only be achieved, or be partially achieved, through case-based reporting – and hence all countries are encouraged to submit case-based data whenever possible.

# Population under surveillance

The countries and areas from the WHO European region select sentinel acute care hospitals that are willing to participate and have the capacity to do so. All hospitals in a country may participate, if feasible.

The population under surveillance consists of persons of all ages living in the catchment area of the hospitals participating in the surveillance system. The catchment population of the participating sites should be representative of the underlying population (particularly their age distribution) and geography and so must be carefully selected, considering the balance between urban/rural areas, broad geographical coverage in a country, etc.

For case-based data (**SARISURV**), the denominators (hospital catchment population and overall hospital admissions) should be reported weekly using the separate record type **SARISURVDENOM**). For aggregated reporting (**INFLSARIAGGR**), the number of hospital admissions and hospital catchment population should be reported by age group directly together with the number of SARI cases and SARI deaths in the **INFLSARIAGGR** record type.

# Surveillance period

SARI surveillance should be carried out throughout the year.

# **Reporting to TESSy**

Whenever possible, countries should report weekly case-based data using the record type **SARISURV** and provide hospitalisation and population denominators using the record type **SARISURVDENOM**.

Countries that cannot provide case-based data, or cannot do so on a weekly basis, should report weekly aggregated data using the record type **INFLSARIAGGR**. A combination of weekly aggregated and less frequent case-based reporting is possible.

Submitted data may be retroactively corrected in each new submission by the reporting country.

# When, what and how to report

#### **Deadline for reporting:**

Thursday 10:00 for all record types.

#### Countries reporting case-based data should:

- Report recordtype "SARISURV". Please report on as many variables as possible. In order
  to reconstruct the aggregate dataset the following variables should be reported: Age or
  AgeClass (Age00-04;Age05-14;Age15-29;Age30-64;Age65-79;Age80+),
  DateOfHospitalisation, IntensiveCare, DateOfICUHDU, Outcome and DateOfOutcome (UNK is
  allowed for most variables);
- **Report recordtype "SARISURVDENOM"**. Please report weekly denominators (number of hospitals submitting data and their hospital catchment population, hospital admissions in that week for all causes);
- Report in a timely manner even if outcome information is not known; outcome can be updated when information becomes available;
- If case-based data can't be provided on a weekly basis, please report also "INFLSARIAGGR" (see above).

#### **Countries collecting aggregated surveillance data should:**

- **Report record type "INFLSARIAGGR"**. For this record type, data should be aggregated as indicated below:
  - Number of SARI cases by week of hospital admission
  - Number of SARI ICU cases by week of ICU admission
  - Number of SARI deaths by week of death.

# Preparing data

For all record types, data may be entered directly in TESSy for individual records ('Manually create a record'). For any batch reporting by file upload (CSV or XML format), please note that once the data have been exported from your national database it needs to be in a format that TESSy can accept (see 'checking metadata').

# Checking metadata

The TESSy metadata define the fields and valid data formats for input to TESSy for a given subject.

To ensure data can be saved correctly in TESSy, please check the data are correctly formatted according to the most recent metadata set.

Changes to the metadata for the subject of this Reporting Protocol are described in:

- Changes to current metadata changes since the last Reporting Protocol.
- Annex Metadata change history all preceding changes.

It is especially important to focus on:

#### Field formats

Many fields require that data are formatted in a specific way. For example, dates must be in the **YYYY-MM-DD** format; dates in the DD/MM/YYYY format will be rejected.

#### Coded values

Some fields only permit the use of specific values (coded values). For example, **M**, **F**, **UNK**, or **Other** are the coded values for *Gender* and any other value in a *Gender* field will be rejected.

The metadata file contains all the definitions and rules to format your data correctly for every subject (usually a disease). The file can be downloaded as an Excel file from the *TESSy documents website*.

By filtering the fields in the file by subject, you can see the fields required for your subject and the rules applying to these fields.

The *Tessy User Guide* provides an overview of how you work with the metadata file, and the TESSy user documentation provides in-depth details on metadata.

# Submitting your data

Data are submitted through the TESSy web interface (go to **Upload**). Previously reported data can be found through the review tab (see below).



The *Tessy User Guide* provides an overview of how you submit files to TESSy and in-depth descriptions of all the upload methods.

# Finalising your submission

The compliance of your data with the validation rules in the metadata is checked automatically during the data upload process.

The result of your upload – i.e. rejected or validated – is displayed immediately after the check in the **Validation details** webpage has completed. Please review the result carefully:

- If your file has been rejected, there will be a message explaining each instance of noncompliance with the metadata that you need to correct.
- If your file has been validated, there might be warnings and remarks relating to possible data quality issues or to potential overwriting of existing records that you should consider.

When your file has been validated and you are satisfied that all corrections have been made, please ensure prompt approval. Unapproved uploads can block the approval of other uploads.

- The TESSy user documentation provides information on reviewing validation results and adjusting reporting periods to avoid overwriting existing records.
- General training and guidance on reporting is available on the *TESSy website*. A training video on reporting COVID-19 data is available in the *ECDC virtual academy*.

# TESSy HelpDesk

Email: TESSy@ecdc.europa.eu

Telephone number: +46-(0)8-5860 1601

Availability: 9:00 – 16:00 Stockholm time, Monday to Friday (except ECDC Holidays)

# Changes to SARI surveillance metadata

#### Record type SARISURV Version 3: Update 2022-02

- 1. Added variable "Apnoea" to section "Clinical presentation or complications"
- 2. Added variables NCoVVacFourthDose, NCoVVacFourthBrand, NCoVVacFourthDate to section "Vaccination"
- 3. Added variable "DrugUsedTreatmentCOVID" to section "Antiviral prophylaxis/therapy"
- 4. Minor update: Coded value list for "NCoVVacFirstBrand", "NCoVVacSecBrand", "CoVVacThirdBrand" updated to include "Chumakov Covi-Vac", "Novavax Covovax", "Novavax Nuvaxovid" and "Gamaleya Sputnik-Light"

#### Record types SARISURV Version 2: Update 2021-10

- 1. Added variables NCoVVacThirdDose, NCoVVacThirdBrand, NCoVVacThirdDate
- 2. Added CureVac and Sanofi Pasteur/GSK to the coded value list for variables NCoVVacFirstBrand, NCoVVacSecBrand, NCoVVacThirdBrand
- 3. Minor update: Coded value for NCoVVacFirstBrand, NCoVVacSecBrand, NCoVVacThirdBrand "HAYATVAX" replaced by "HAYAT-VAC"
- 4. Minor update: Added B.1.1.529 (Omicron) and sublineages BA.1, BA.2 and BA.3 to coded value list for variable VirusVariantCOVID

#### **Record type SARISURVDENOM Version 1**

SARISURVDENOM had no changes since TESSy implementation on 27 August 2021.

#### Record type INFLSARIAGGR Version 3: Update 2021-04

INFLSARIAGGR record type (v3) was built on INFLSARIAGGR v2, with the following changes:

- Variables added for SARI ICU admissions. Variables added for specimens tested and positive for influenza, respiratory syncytial virus (RSV) and SARS-CoV-2, by age groups. See the section for variable descriptions.
- Information on changes to the metadata for other subjects is available on the TESSy documentation website.

# INACTIVATED variables (from INFLSARIAGGR v2):

#### Number of hospital SARI admissions age Unknown

Field: NumSariHospitalisationsAgeUnkSTL

Coding: Numeric

Number of hospital SARI admissions in patients with unknown age (numerator).

#### Number of hospital SARI deaths age Unknown

Field: NumSariDeathsAgeUnkSTL

Coding: Numeric

Total hospital SARI admissions that resulted in death in patients with unknown age (numerator).

#### Number of hospital admissions age Unknown

Field: DenomHospAdmissionsUnkSTL

Coding: Numeric

Number of hospital admissions (all causes) in patients with unknown age (denominator).

#### Population of unknown age covered by the hospitals submitting SARI data

Field: DenomHospPopulationUnkSTL

Coding: Numeric

Population of unknown age covered by the hospitals submitting aggregated SARI data (denominator).

# **Annex – Severe Acute Respiratory Infection** (SARI) metadata

# Revisions of SARI metadata set

The most recent metadata set is available from the TESSy website under the "Technical Guidelines & Tools" tab (as shown below).



# Current record type versions

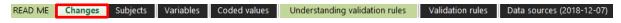
Table 1 shows the record type versions to be used when reporting SARI data to TESSy.

Table 1: SARI record type versions

Record	Type of data	Record type version
SARISURV	Case-based	3
SARISURVDENOM	Aggregated	1
INFLSARIAGGR	Aggregated	3

# SARI metadata change history

When you open a metadata set, the tab 'Changes' lists historical changes.



#### SARISURV metadata

The SARISURV metadata, **recordtype version 3**, is used for reporting weekly case-based data on SARI cases.

# Common TESSy variables

#### **Record Identifier (mandatory)**

Field: RecordId

Coding: Text (max 80 characters)

The record identifier is provided by the Member State. It should be useful for the country to identify readmission cases, by including a suffix with the date of admission with the format "\_yyyymmdd" (for example, two separate admissions of case 1234 could have as record identifiers 1234\_20210101 and 1234\_20210115).

The complete record identifier must be:

- unique within the SARISURV surveillance system;
- anonymous.

#### Record type (mandatory)

Field: RecordType

Coding: SARISURV

The record type defines the structure and the format of the data reported. The record types are defined by ECDC and are related to the subject. Only valid combinations of subject, record type and data source are accepted.

#### **Record type version**

Field: RecordTypeVersion Coding: 3

The version of the record type defines the current structure of the data reported. The current version of the SARISURV record type is 3.

This variable is not mandatory as TESSy concludes the record type version from the metadataset indicated by default. However, the variable RecordTypeVersion can override this default.

#### Subject (mandatory)

Field: Subject

Coding: SARISURV

The subject describes the disease to be reported.

#### Status (mandatory)

Field: Status

Coding: NEW/UPDATE

**DELETE** 

The field 'Status' is used for updating data; the default is 'New/Update'. By choosing 'Delete' the selected record (or batch of data) will remain in TESSy but be marked as inactive; this data can be used to reconstruct data for a given date in the past.

#### **Data source (mandatory)**

Field: DataSource

Coding: Pre-assigned as CountryCode-SARISURV to each country; CountryCode-

SARISURV-VE if data collected only in the context of vaccine effectiveness studies (relevant when VE data collection will be implemented); can be

modified by National Focal Point

The data source specifies the surveillance system from which the data originates and is generated and revised/updated by the national focal point in each Member State. The descriptions of the surveillance systems submitted to TESSy (*section Data Sources*) should include details about case definition used and should be kept up to date and will be used to assist with data interpretation.

#### Reporting country (mandatory)

Field: ReportingCountry

Coding: International organization for standardization (ISO) 3166-1-alpha-2, (two-letter code)

This variable identifies the country reporting the case.

#### **Date used for statistics (mandatory)**

Field: DateUsedForStatistics

Coding: yyyy-mm-dd (preferred)

yyyy-Www

The reference date used for standard reports that is compared to the reporting period. The date used for statistics should be date of admission to hospital or diagnosis of respiratory infection (if admitted by other cause).

# Epidemiological variables

# Demographic

#### Age

Field: Age

Coding: Numerical (0-120)

UNK = Unknown

Age of patient in years as reported in the national system at the time of hospital admission. If child aged 0 or 1, please provide age in months in the variable AgeMonths (0-23 months). If no precise age is available, please use the variable AgeGroup.

#### Age months

Field: AgeMonth

Coding: Numerical (0-23)

UNK = Unknown

Age of patient in months as reported in the national system for cases < 2 years of age at the time of hospital admission.

#### Age class (alternative)

Field: AgeClass

Coding: Age00-04 = Less than 5 years of age

Age05-14 = Between 5 and 14 years of age Age15-29 = Between 15 and 29 years of age Age30-64 = Between 30 and 64 years of age Age65-79 = Between 65 and 79 years of age

Age80+ = 80 years and older

UNK = Unknown

Age class of patient as reported in the national system at the time of hospital admission. This is an alternative variable, to be completed only if "Age" and/or "AgeMonths" not reported.

Gender

Field: Gender

Coding: F = Female

M = Male

O = Other (for example, transsexual)

UNK = Unknown

Gender of the reported case.

#### **Healthcare worker**

Field: HealthCareWorker Coding: N = No

Y = Yes

UNK = Unknown

The definition of a healthcare worker for the purposes of this reporting protocol is anyone working (paid or on a regular voluntary basis) in healthcare who has contact with any type of patient during his/her work, including (but not limited to): doctors; nurses; therapists; technicians; emergency medical personnel; medical and nursing students with patient contact; porters; and cleaners. Employees or volunteers at nursing/residential homes for the elderly also are also included as healthcare workers in this protocol.

#### **Long Term Care Facility**

Field: LTCF

Coding: N = No

Y = Yes

UNK = Unknown

Include residents of Long-Term Care Facilities.

#### Place of notification

Field: PlaceOfNotification

Coding: NUTS (see the coded values list)

Place of the first notification of the case to a regional authority. Select the most detailed NUTS level possible.

#### **Place of residence**

Field: PlaceOfResidence

Coding: NUTS (see the coded values list)

Place of residence of patient at the time of hospital admission. Select the most detailed NUTS level possible. UNK is allowed.

#### **Symptoms**

#### **Date of onset of symptoms**

Field: DateOfOnset

Coding: yyyy-mm-dd (preferred)

yyyy-Www

UNK= Unknown

Date of onset of symptoms.

#### **Fever**

Field: FEVER

Coding: N = No

Y = Yes

UNK = Unknown

History of fever or measured fever >=38 °C within the 10 days before admission to hospital.

#### Cough

Field: COUGH

Coding: N = No

Y = Yes

UNK = Unknown

History of cough within the 10 days before admission to hospital.

#### Anosmia

Field: ANOS

Coding: N = No

Y = Yes

UNK = Unknown

Anosmia.

#### Ageusia/Dysgeusia

Field: AGEUS

Coding: N = No

Y = Yes

UNK = Unknown

Ageusia or dysgeusia.

#### Diarrhoea

Field: DIARR

Coding: N = No

Y = Yes

UNK = Unknown

Diarrhoea.

#### Headache

Field: HEAD

Coding: N = No

Y = Yes

UNK = Unknown

Headache.

#### Pain - muscular

Field: PAINMUSC

Coding: N = No

Y = Yes

UNK = Unknown

Muscular pain.

#### **Runny nose**

Field: RUNOS

Coding: N = No

Y = Yes

UNK = Unknown

Runny nose.

#### **Shortness of breath**

Field: SBREATH

Coding: N = No

Y = Yes

UNK = Unknown

Shortness of breath.

#### **Sore throat**

Field: SORETHR

Coding: N = No

Y = Yes

UNK = Unknown

Sore throat.

#### Nausea/vomiting

Field: VOMIT

Coding: N = No

Y = Yes

UNK = Unknown

Nausea/vomiting.

#### **Deterioration of general condition**

Field: GENERALDETER

Coding: N = No

Y = Yes

UNK = Unknown

Deterioration of general condition, including asthenia, weight loss, anorexia, fatigue, weakness.

#### Other symptoms

Field: SymptomsOther Coding: Text

Other reported symptoms or clinical presentation not previously specified. If multiple other symptoms, separate by a semicolon (;) within the same field.

#### Hospitalisation and outcome

#### Date of admission to hospital

Field: DateOfHosp

Coding: yyyy-mm-dd (preferred)

Yyyy-Www UNK= Unknown

Date of admission to hospital.

#### Admission to Intensive care/high dependency unit

Field: ICUHDU

Coding: N = No

Y = Yes

UNK = Unknown

Case required care in an intensive care unit or high dependency unit (unit with capabilities for more intensive observation, treatment and nursing care than can be provided on a regular ward).

#### Date of admission to Intensive Care Unit/High Dependency Unit

Field: DateOfICUHDU

Coding: yyyy-mm-dd (preferred)

Yyyy-Www

UNK= Unknown

Date of admission to intensive care unit or high dependency unit. If admitted more than once to ICU/HDU, please report the date of first admission to ICU/HDU.

#### Length of stay in ICU/HDU

Field: NumberDaysICUHDU

Coding: Number

Number of days in ICU or HDU.

#### **Respiratory Support**

Field: RespSupport

Coding: NONE = No respiratory support given

OXYGEN = High-flow oxygen therapy (non-invasive ventilation)

VENT = Invasive Ventilation

ECMO = Extra Corporeal Membrane Oxygenation

O = Other respiratory support

UNK = Respiratory support given unknown

Level of respiratory support given to patient. Please indicate the most invasive that applied.

#### **Outcome**

Field: Outcome

Coding: DISCHARGED = Discharged from hospital, alive, recovered, cured

DIED = Patient deceased (as a consequence of the acute respiratory infection)

STILLTREATMENT = Still admitted or transferred (not recovered)

UNK = Unknown outcome

Outcome refers to the patient's vital status resulting from the acute respiratory infection at the time of notification (which should be reported in the variable DateOfOutcome, see below). Code DIED only if the acute respiratory infection was the main or a contributing cause of death. If the patient is still ill at the time of notification or is transferred to another hospital to continue treatment, code the

outcome as 'STILLTREATMENT' (does not apply to post-covid conditions/long COVID). The outcome should be updated when the final outcome is known.

#### Date of outcome

Field: DateOfOutcome

Coding: yyyy-mm-dd (preferred)

Yyyy-Www

UNK= Unknown

Exact date of outcome. If discharged, date of discharge from hospital. If patient still hospitalised or not applicable, please use 'UNK'.

#### **Preconditions**

#### **Asthma**

Field: ASTH

Coding: N = No

Y = Yes

UNK = Unknown

Asthma.

#### Cancer

Field: CANC

Coding: N = No

Y = Yes

UNK = Unknown

Current or history of cancer, malignancy.

#### **Cardiac disorder**

Field: CARDIACDIS

Coding: N = No

Y = Yes

UNK = Unknown

Cardiac disorder, excluding hypertension.

#### **Diabetes**

Field: DIAB

Coding: N = No

Y = Yes

UNK = Unknown

Diabetes.

#### Hypertension

Field: HYPERT

Coding: N = No

Y = Yes

UNK = Unknown

Hypertension.

#### HIV

Field: HIV

Coding: N = No

Y = Yes

UNK = Unknown

HIV infection.

#### Immunodeficiency not attributable to HIV

Field: IMMUNEOTH

Coding: N = No

Y = Yes

UNK = Unknown

Immunodeficiency not attributable to HIV, such as due to medication.

#### Any immunodeficiency (Alternative)

Field: IMMUNO

Coding: N = No

Y = Yes

UNK = Unknown

Immunodeficiency attributable to HIV or other, such as due to medication.

#### **Kidney disease**

Field: KIDNEY

Coding: N = No

Y = Yes

UNK = Unknown

Kidney-related condition, renal disease.

#### Liver disease

Field: LIVER

Coding: N = No

Y = Yes

UNK = Unknown

Liver-related condition, liver disease.

#### Lung disease

Field: LUNG

Coding: N = No

Y = Yes

UNK = Unknown

Chronic lung disease, excluding asthma.

#### **Dementia**

Field: DEMENT

Coding: N = No

Y = Yes

UNK = Unknown

Dementia.

#### Obesity

Field: OBES

Coding: N = No

Y = Yes

UNK = Unknown

Obesity, BMI 30 and above.

#### **Pregnancy**

Field: PREG

Coding: N = No

Y = Yes

UNK = Unknown

Pregnancy. If available, indicate trimester of pregnancy in the variable PREGTRIM.

#### **Pregnancy trimester**

Field: PREGTRIM

Coding: PREG1 = First trimester of pregnancy

PREG2 = Second trimester of pregnancy PREG3 = Third trimester of pregnancy

PREGUNK = Unknown trimester of pregnancy

NA = Not applicable

Trimester of pregnancy.

#### **Smoking**

Field: SMOKE

Coding: C = Current smoking

F = Former smoking N = Never smoking UNK = Unknown

Former smoker: Stopped smoking at least one year before date of admission to hospital. Current smoker: Smoking currently or having stopped less than one year before date of admission to hospital.

#### **Other**

Field: PreconditionOther Coding: Text

Details of underlying conditions, or additional preconditions not previously specified. If multiple other preconditions, separate by a semicolon (;) within the same field.

#### Clinical presentation or complications

#### **ARDS**

Field: ARDS

Coding: N = No

Y = Yes

UNK = Unknown

Acute respiratory distress syndrome.

#### **Apnoea**

Field: APNOEA

Coding: N = No

Y = Yes

UNK = Unknown

Apnoea.

#### **Bronchiolitis**

Field: BRONCH

Coding: N = No

Y = Yes

UNK = Unknown

Bronchiolitis.

#### Coagulopathy

Field: COAG

Coding: N = No

Y = Yes

UNK = Unknown

Coagulopathy. If information available, please specify using the variable "other clinical presentation or complications".

#### **Encephalitis**

Field: ENCEPH

Coding: N = No

Y = Yes

UNK = Unknown

Encephalitis.

#### Long COVID

Field: LONGCOVID

Coding: N = No

Y = Yes

UNK = Unknown

Symptoms appearing or lasting weeks or months after first being infected with SARS-CoV-2 (https://apps.who.int/iris/bitstream/handle/10665/339629/Policy-brief-39-1997-8073-eng.pdf).

### **Myocarditis**

Field: MYOCARD

Coding: N = No

Y = Yes

UNK = Unknown

Myocarditis.

#### Paediatric Inflammatory Multisystem Syndrome (PIMS)

Field: PIMS

Coding: N = No

Y = Yes

UNK = Unknown

Paediatric Inflammatory Multisystem Syndrome (PIMS), as preliminary defined by WHO (https://www.who.int/news-room/commentaries/detail/multisystem-inflammatory-syndrome-in-children-and-adolescents-with-covid-19).

#### Pneumonia

Field: PNEU

Coding: N = No

Y = Yes

UNK = Unknown

Pneumonia.

#### Sepsis

Field: SEPSIS

Coding: N = No

Y = Yes

UNK = Unknown

Sepsis/Multi-organ failure.

#### Other clinical presentation or complications

Field: PresentationComplicationOther

Coding: Text

UNK = Unknown

Other clinical presentations or complications not previously specified. If multiple, separate by a semicolon (;) within the same field.

#### Diagnosis and laboratory results

#### **Date of specimen collection**

Field: DateOfSpecCollection

Coding: yyyy-mm-dd (preferred)

Yyyy-Www UNK= Unknown

Date of specimen collection. First date of collection in the current episode if multiple swabs.

#### Laboratory results for influenza

Field: ResultInfluenza

Coding: N = Negative

NT = Not tested P = Positive

UNK = Tested but result Unknown

Result for influenza during this SARI admission episode.

#### Influenza type and subtype

Field: InfluenzaSubtype

Coding: A = A, not subtyped

AH1 = A(H1), not N subtyped PanAH1 = A(H1)pdm09

PanAH1N1 = A(H1N1)pdm09

AH1N1 = A(H1N1), other than pdm09

AH3 = A(H3), not N subtyped

AH3N2 = A(H3N2)

B = B, lineage not determined

BVic = B(Victoria) BYam = B(Yamagata)

O = Other

UNK = Unknown NA = Not applicable

Influenza virus type and subtype. If not available in the list or specific variants from a subtype, please describe in the variable "Laboratory results for other pathogens" (see below). If influenza negative, please select "NA".

#### **Previous influenza infection**

Field: PreviousInfluenza Coding: N = NoY = Yes

UNK = Unknown

Tested positive for influenza earlier in the current season or inter-season.

#### **Laboratory results for SARS-CoV-2 - PCR**

Field: ResultPCRSARSCoV2
Coding: N = Negative

NT = Not tested
P = Positive

UNDET = Undetermined/inconclusive UNK = PCR tested, but result unknown

PCR result for SARS-CoV-2 in the current SARI admission episode.

#### Ct value for SARS-CoV-2 - PCR

Field: ResultCtValuePCRSARSCoV2

Coding: Numeric

Ct value for SARS-CoV-2 PCR-positive result in the current SARI admission episode.

#### Laboratory results for SARS-CoV-2 - RADT

Field: ResultRADTSARSCoV2

Coding: N = Negative

NT = Not tested P = Positive

UNK = RADT tested, but result unknown

RADT result for SARS-CoV-2 in the current SARI admission episode.

#### **Previous SARS-CoV-2 infection**

Field: PreviousNCoV Coding: N = No

Y = Yes

UNK = Unknown

Previously infected with SARS-CoV-2.

#### **Date of previous SARS-CoV-2 infection**

Field: DateOfPreviousNCoV

Coding: yyyy-mm-dd (preferred)

yyyy-Www

UNK= Unknown

Date of previous SARS-CoV-2 infection. If no exact date available, please provide an estimate.

#### **Laboratory results for MERS-CoV**

Field: ResultMERSCoV

Coding: N = Negative

NT = Not tested

P = Positive

UNK = Tested for MERS-CoV, but result unknown

Laboratory results for Middle East respiratory syndrome coronavirus (MERS-CoV) in the current SARI admission episode.

#### **Laboratory results for RSV**

Field: ResultRSV

Coding: N = Negative

NT = Not tested P = Positive

UNK = Tested for RSV, but result unknown

Result for RSV in the current SARI admission episode.

#### **Laboratory results for Streptococcus pneumoniae**

Field: ResultPneu

Coding: N = Negative

NT = Not tested P = Positive

UNK = Tested for Streptococcus pneumoniae, but result unknown

Result for Streptococcus pneumoniae in the current SARI admission episode.

#### Laboratory results for Legionella pneumophila

Field: ResultLegi

Coding: N = Negative

NT = Not tested P = Positive

UNK = Tested for Legionella pneumophila, but result unknown

Result for Legionella pneumophila in the current SARI admission episode.

#### Laboratory results for other pathogens

Field: OtherPathResults Coding: Text

Laboratory positive results for other pathogens, other influenza subtypes (if coded as 'other' but known) or coronaviruses other than SARS-CoV-2, in the current SARI admission episode.

#### **SARS-CoV-2 Variant**

Field: VirusVariantCOVID Coding: VirusVariantNCOV:

B.1.1.7 = B.1.1.7 (mutations: del69-70, del144, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H)

B.1.351 = B.1.351 (defined by mutations: D80A, D215G, E484K, N501Y, A701V)

B.1.427/B.1.429 = B.1.427/B.1.429 (mutations: L452R, D614G)

B.1.525 = B.1.525 (mutations:E484K, D614G, Q677H)

B.1.617.2 = B.1.617.2 (mutations: L452R, T478K, D614G, P681R); B.1.617.2 and all of its sublineages including AY sublineages

B.1.621 = B.1.621 (mutations: R346K, E484K, N501Y, D614G, P681H)

BA.1 = BA.1 or B.1.1.529 with mutations del69-70, ins214EPE, S371L, G496S, T547K

BA.2 = BA.2 or B.1.1.529 with mutations V213G, T376A, R408S

BA.2.75 = BA.2 sub-lineage with mutations D339H, G446S, N460K, and R493Q in the RBD, and mutations K147E, W152R, F157L, I210V, and G257S in the N-terminal domain of the Spike protein

BA.2+L452X = BA.2 and any of its sub-lineages with mutations at position 452 of the Spike protein

BA.3 = BA.3 or B.1.1.529 with mutations del69-70, ORF1a:A3657V, ORF3a:T22V

BA.4 = BA.4 or B.1.1.529 with mutations L452R, F486V, del69-70, NSP7b: L11F, N: P151S, ORF1a: del141-143

BA.5 = BA.5 or B.1.1.529 with mutations L452R, F486V, del69-70

BQ.1 = Pango lineage BQ.1 and sub-lineages

C.37 = C.37 (mutations L452Q, F490S, D614G)

P.1 = P.1 variants (L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, H655Y, T1027I, V1176F)

S\_GENE\_DELETION = Variant virus with deletion in S-gene (defined by mutation: del 69-70 or by negative S-gene RT-PCR)

UNK = Sequence information unknown or not available

VARIANT\_OTHER = Variants not included in the coded value list, please specify

COVID-19 case with a variant virus of SARS-CoV-2 according to mutation pattern of specific concern identified by sequence analysis of the case, or in some cases by a specific RT-PCR pattern. If several apply, choose the most specific variant (highest number of matching mutations). If not listed, please indicate "VARIANT\_OTHER" and specify in "SARS-CoV-2 other variant". The variants listed should be in line with the latest *ECDC NCOV reporting protocol*.

#### **SARS-CoV-2 other variant**

Field: VirusVariantOtherCOVID

Coding: Text

Specified variant type not captured in the coded values for VirusVariantCOVID variable as indicated in VARIANT\_OTHER response for that variable.

#### **Wgs Sequence RA identifier**

Field: WgsSequenceId
Coding: Text

Sequence identifier for whole genome or gene sequence, based on which the sequence read data can be retrieved from external database such as GISAID, GenBank or other database (except ENA). GISAID isolate sequence accession number should be reported in format EPI\_ISL\_402123, GenBank MK334047.1. Please report ENAId in WgsEnaId variable. If multiple pathogens/strains detected, please separate by a semicolon (;) within the same field.

#### **Wgs ENA identifier**

Field: WgsEnaId

Coding: Text

European Nucleotide Archive (ENA) run identifier, based on which the sequence read data can be retrieved. Starts with ERR or SRR, i.e. not the sample or experiment which ERS/ERX or SRS/SRX. If multiple pathogens/strains detected, please separate by a semicolon (;) within the same field.

#### Vaccination

#### First dose of COVID-19 vaccine received

Field: NCoVVacFirstDose Coding: Y = Yes

N = No doses of COVID-19 vaccine administered

UNK = Unknown

Received a first dose of COVID-19 vaccine.

#### COVID-19 vaccine administered for first dose

Field: NCoVVacFirstBrand

Coding: AZ = AstraZeneca - AZD1222

BECNBG = Beijing CNBG - Inactivated

BHACOV = Bharat - Covaxin CHU = Chumakov - Covi-Vac

COM = Pfizer BioNTech - Comirnaty

CVAC = Curevac-CVnCOV HAYAT-VAC = Hayat-VAX

JANSS = Janssen - Ad26.COV 2.5 MOD = Moderna - mRNA-1273

NVX = Novavax - Covovax

NVXD = Novavax - Nuvaxovid

QAZVAQ = QazCovid-In

SGSK = Sanofi GSK - Subunit

SIICOV = SII - Covishield

SIN = Coronavac - Sinovac

SPU = Gamaleya - Sputnik V

SPUL = Gamaleya - Sputnik-Light

SRCVB = SRCVB - EpiVacCorona

UNK = Unknown

WUCNBG = Wuhan CNBG - Inactivated

ZFUZ = Sino-Uzbek - ZF-UZ-VAC

Type of vaccine received for first dose of vaccination course (product name/brand). Product names should be in line with the latest *ECDC NCOVVACC reporting protocol*.

#### Date of first dose of COVID-19 vaccine (if vaccinated)

Field: NCoVVacFirstDate

Coding: yyyy-mm-dd (preferred)

yyyy-Www

UNK= Unknown

Date on which the case received first dose of vaccine (preferably exact date, formatted as yyyy-mm-dd). If no exact date available, please provide an estimate.

#### Second dose COVID-19 received

Field: NCoVVacSecDose Coding: Y = Yes

N = No second dose of COVID-19 vaccine administered

UNK = Unknown

Received a second dose of a COVID-19 vaccine.

#### **COVID-19 vaccine administered for second dose**

Field: NCoVVacSecBrand

Coding: AZ = AstraZeneca - AZD1222

BECNBG = Beijing CNBG - Inactivated

BHACOV = Bharat - Covaxin

CHU = Chumakov - Covi-Vac

COM = Pfizer BioNTech - Comirnaty

CVAC = Curevac-CVnCOV

HAYAT-VAC = Hayat-VAX

JANSS = Janssen - Ad26.COV 2.5

MOD = Moderna - mRNA-1273

NVX = Novavax - Covovax

NVXD = Novavax - Nuvaxovid

QAZVAQ = QazCovid-In

SGSK = Sanofi GSK - Subunit

SIICOV = SII - Covishield

SIN = Coronavac – Sinovac

SPU = Gamaleya - Sputnik V

SPUL = Gamaleya - Sputnik-Light

SRCVB = SRCVB - EpiVacCorona

UNK = Unknown

WUCNBG = Wuhan CNBG - Inactivated

ZFUZ = Sino-Uzbek - ZF-UZ-VAC

Type of vaccine received for second dose of vaccination course (product name/brand). Product names should be in line with the latest *ECDC NCOVVACC reporting protocol*.

#### Date of second dose of COVID-19 vaccine (if vaccinated)

Field: NCoVVacSecDate

Coding: yyyy-mm-dd (preferred)

yyyy-Www UNK= Unknown NA=Not applicable

Date on which the case received second dose of vaccine (preferably exact date, formatted as yyyymm-dd). If no exact date available, please provide an estimate.

#### Third dose COVID-19 received

Field: NCoVVacThirdDose

Coding: Y = Yes

N = No third dose of COVID-19 vaccine administered

UNK = Unknown

Received a third dose of a COVID-19 vaccine.

#### **COVID-19 vaccine administered for third dose**

Field: NCoVVacThirdBrand

Coding: AZ = AstraZeneca - AZD1222

BECNBG = Beijing CNBG - Inactivated

BHACOV = Bharat - Covaxin CHU = Chumakov - Covi-Vac

COM = Pfizer BioNTech - Comirnaty

CVAC = Curevac-CVnCOV HAYAT-VAC = Hayat-VAX

JANSS = Janssen - Ad26,COV 2.5

MOD = Moderna - mRNA-1273

NVX = Novavax - Covovax

NVXD = Novavax - Nuvaxovid

QAZVAQ = QazCovid-In

SGSK = Sanofi GSK - Subunit

SIICOV = SII - Covishield

SIN = Coronavac - Sinovac

SPU = Gamaleya - Sputnik V

SPUL = Gamaleya - Sputnik-Light

SRCVB = SRCVB - EpiVacCorona

UNK = Unknown

WUCNBG = Wuhan CNBG - Inactivated

ZFUZ = Sino-Uzbek - ZF-UZ-VAC

Type of vaccine received for third dose of vaccination course (product name/brand). Product names should be in line with the latest *ECDC NCOVVACC reporting protocol*.

#### Date of third dose of COVID-19 vaccine (if vaccinated)

Field: NCoVVacThirdDate

Coding: yyyy-mm-dd (preferred)

yyyy-Www UNK= Unknown NA=Not applicable

Date on which the case received third dose of vaccine (preferably exact date, formatted as yyyy-mm-dd). If no exact date available, please provide an estimate.

#### Fourth dose COVID-19 received

Field: NCoVVacFourthDose

Coding: Y = Yes

N = No fourth dose of COVID-19 vaccine administered

UNK = Unknown

Received a fourth dose of a COVID-19 vaccine.

#### **COVID-19 vaccine administered for fourth dose**

Field: NCoVVacFourthBrand

Coding: AZ = AstraZeneca - AZD1222

BECNBG = Beijing CNBG - Inactivated

BHACOV = Bharat – Covaxin CHU = Chumakov - Covi-Vac

COM = Pfizer BioNTech - Comirnaty

CVAC = Curevac-CVnCOV

HAYAT-VAC = Hayat-VAX

JANSS = Janssen - Ad26.COV 2.5

MOD = Moderna - mRNA-1273

NVX = Novavax - Covovax

NVXD = Novavax - Nuvaxovid

QAZVAQ = QazCovid-In

SGSK = Sanofi GSK - Subunit

SIICOV = SII - Covishield

SIN = Coronavac - Sinovac

SPU = Gamaleya - Sputnik V

SPUL = Gamaleya - Sputnik-Light

SRCVB = SRCVB - EpiVacCorona

UNK = Unknown

WUCNBG = Wuhan CNBG - Inactivated

ZFUZ = Sino-Uzbek - ZF-UZ-VAC

Type of vaccine received for third dose of vaccination course (product name/brand). Product names should be in line with the latest *ECDC NCOVVACC reporting protocol*.

#### Date of fourth dose of COVID-19 vaccine (if vaccinated)

Field: NCoVVacFourthDate

Coding: yyyy-mm-dd (preferred)

yyyy-Www UNK= Unknown NA=Not applicable

Date on which the case received a fourth dose of vaccine (preferably exact date, formatted as yyyymm-dd). If no exact date available, please provide an estimate.

#### Influenza vaccination status

Field: InfluenzaVaccinated

Coding: N = No

Y = Yes

UNK = Unknown

Received influenza vaccination in the most recent influenza season.

#### Date of influenza vaccine in the most recent season (if vaccinated)

Field: InfluenzaVacDate

Coding: yyyy-mm-dd (preferred)

yyyy-Www UNK= Unknown NA=Not applicable

Date on which the case received influenza season (preferably exact date, formatted as yyyy-mm-dd).

#### **Influenza vaccine product**

Field: InfluenzaVacProduct Coding: Text

Type of vaccine received in the most recent season (product name/brand). If unknown, type "Unk".

#### Influenza vaccination season n-1

Field: InfluenzaVaccinatedPrevSeason

Coding: N = No

Y = Yes

UNK = Unknown

Seasonal influenza vaccination in the previous season (n-1). If the case is being reported during interseason (w21-w39), consider most recent season-1.

#### Influenza vaccination season n-2

Field: InfluenzaVaccinatedSecLastSeason

Coding: N = No

Y = Yes

UNK = Unknown

Seasonal influenza vaccination in the season two years before (n-2). If the case is being reported during interseason (w21-w39), consider most recent season-2.

#### **Pneumococcal vaccination**

Field: PneumoVaccinated Coding: N = No Y = Yes

UNK = Unknown

Pneumococcal vaccination received (any type, ever).

#### Year of last PCV10/13 vaccination

Field: YearLastPCV Coding: yyyy

UNK = Unknown

NA = Never administered

Year of administration of the last PCV10/13 vaccine.

#### Year of last PPV23 pneumococcal vaccination

Field: YearLastPPV Coding: yyyy

UNK = Unknown

NA = Never administered

Year of administration of the last PPV23 vaccine.

#### Antiviral prophylaxis/therapy

#### Drugs used for prophylaxis

Field: DrugUsedProphylaxis

Coding: BALO = Baloxavir

NONE = None

O = Other (or combinations with other)

OSEL = Oseltamivir

OSELZANA = Oseltamivir and Zanamivir

UNK = Unknown ZANA = Zanamivir

Antivirals used as prophylaxis in the 14 days before onset of illness.

#### **Drugs used for influenza treatment**

Field: DrugUsedTreatment

Coding: BALO = Baloxavir

M2 = M2 inhibitors NONE = None

O = Other (or any other combination)

OSEL = Oseltamivir

OSELZANA = Oseltamivir and Zanamivir

UNK = Unknown ZANA = Zanamivir Antivirals used for influenza treatment of the case during illness phase.

#### **Drugs used for COVID-19 treatment**

(Repeatable)

Coding: DrugUsedTreatmentCOVID

NONE = None

CAS = Casirivimab/imdevimab (Ronapreve)

MOL = Molnupiravir (Lagevrio)

PF = PF-07321332 / ritonavir (Paxlovid)

REG = Regdanvimab (Regkirona)

REM = Remdesivir (Veklury)

SOT = Sotrovimab (Xevudy)

O = Other (or any other combination)

UNK = Unknown

Antivirals used for COVID-19 treatment of the case during illness phase. If more than one, please repeat variable.

#### Other drugs used for prophylaxis or treatment

Field: DrugsOther Coding: Text

UNK = Unknown

Other drugs used for prophylaxis or treatment not previously specified. If multiple, separate by a semicolon (;) within the same field.

#### SARISURVDENOM metadata

The SARISURVDENOM metadata, **record type version 1**, is used for reporting of **weekly denominators for the record type SARISURV** (hospital catchment population and admissions, by age group).

Several options may be used to determine the proportion of the population covered by the selected sentinel hospitals:

- 1. If the information on the hospitals' catchment population is available, it should be provided directly.
- 2. If the information on hospitals' catchment population is not available, it should be estimated. Two approaches to calculating denominators are provided below.
  - a) Estimate based on the median weekly number of all-cause hospitalisations in the previous years: Proportion of patients discharged from the selected hospitals among all hospitals in the region multiplied by the region population. Catchment population = region population \* (number patients discharged from selected hospitals/number of patients discharged from all hospitals in region). The catchment population estimation should first be done for each hospital and estimates from hospitals should be summed up, so that the estimates apply to the full surveillance system.
  - b) Estimate based on the number of beds: in an urban area, the catchment population can be estimated by taking into account the population of the city, the number of hospitals in the city and the number of beds in a hospital. Coefficients should be attributed to each hospital in the city depending on their activity estimated by the number of beds. For example, in a city with 3 hospitals, if hospital A has 50 beds, the coefficient to be applied will be 0.5, if hospital B has 125 beds, the coefficient will be 1.25 and if hospital C has 75 beds, the coefficient will be 0.75, so:

Catchment population = City population\*coefficient (based on the number of beds)/Number of hospitals in the city.

In this approach, the estimation of population coverage of hospitals should first be done for each hospital and estimates from hospitals should be summed up, so that the estimates apply to the full surveillance system.

# Common TESSy variables

#### Record type (mandatory)

Field: RecordType

Coding: SARISURVDENOM

The record type defines the structure and the format of the data reported. The record types are defined by ECDC and are related to the subject. Only valid combinations of subject, record type and data source are accepted.

#### **Record type version**

Field: RecordTypeVersion Coding: 1

The version of the record type defines the current structure of the data reported. The current version of the SARISURVDENOM record type is 1.

This variable is not mandatory as TESSy concludes the record type version from the metadataset indicated by default. However, the variable RecordTypeVersion can override this default.

#### Subject (mandatory)

Field: Subject

Coding: SARISURVDENOM

The subject describes the disease to be reported.

#### **Data source (mandatory)**

Field: DataSource

Coding: Pre-assigned as CountryCode-SARISURV to each country; can be modified by

National Focal Point.

The data source specifies the surveillance system from which the data originates and is generated and revised/updated by the national focal point in each Member State. The descriptions of the surveillance systems submitted to TESSy should be kept up to date and will be used to assist with data interpretation. The code should be the same as used for SARISURV.

#### Reporting country (mandatory)

Field: ReportingCountry

Coding: International organization for standardization (ISO) 3166-1-alpha-2, (two-letter code)

This variable identifies the country reporting the case.

#### **Date used for statistics (mandatory)**

Field: DateUsedForStatistics Coding: yyyy-Www

The date used for statistics should match the case-based SARISURV submissions, in order to provide the denominators needed to calculate rates and proportions.

#### Denominator variables

#### **Total number of SARI reporting sites**

Field: NumSariRepSites Coding: Numeric

Total number of sites reporting SARI hospitalisations. Should be adjusted according to the number of hospitals reporting case-based data in the current week. (E.g. if a country has 2 hospitals each with 50,000 catchment population and in week X only 1 hospital reports, please report NumSariRepSites = 1 and the variable TotalDenominator = 50,000 and not 100,000)

#### Required: True (warning)

#### **Description of SARISURV**

Field: DescriptionSARISURV

Coding: Text

Additional information regarding the current week's case-based SARISURV data, not captured by the

variable Data Source.

#### SARI admissions by age group

#### Number of hospital SARI admissions age 0-4

Field: NumSariHospitalisationsAge00-04

Coding: Numeric

Number of hospital SARI admissions in patients aged 0-4 (numerator) in the indicated reporting

period.

#### Number of hospital SARI admissions age 5-14

Field: NumSariHospitalisationsAge05-14

Coding: Numeric

Number of hospital SARI admissions in patients aged 05-14 (numerator) in the indicated reporting

period.

#### Number of hospital SARI admissions age 15-29

Field: NumSariHospitalisationsAge15-29

Coding: Numeric

Number of hospital SARI admissions in patients aged 15-29 (numerator) in the indicated reporting

period.

#### Number of hospital SARI admissions age 30-64

Field: NumSariHospitalisationsAge30-64

Coding: Numeric

Number of hospital SARI admissions in patients aged 30-64 (numerator) in the indicated reporting

period.

#### Number of hospital SARI admissions age 65-79

Field: NumSariHospitalisationsAge65-79

Coding: Numeric

Number of hospital SARI admissions in patients aged 65-79 (numerator) in the indicated reporting

period.

#### Number of hospital SARI admissions age 80+

Field: NumSariHospitalisationsAge80+

Codina: Numeric

Number of hospital SARI admissions in patients aged 80+ (numerator) in the indicated reporting

period.

#### Number of hospital SARI admissions age 15-64 (alternative)

Field: NumSariHospitalisationsAge15-64

Coding: Numeric

Number of hospital SARI admissions in patients aged 15-64 (numerator), to submit if data for the age

groups 15-29 and 30-64 are not available in the indicated reporting period.

#### Number of hospital SARI admissions age 65+ (alternative)

Field: NumSariHospitalisationsAge65+

Coding: Numeric

Number of hospital SARI admissions in patients aged 65+ (numerator), to submit if data for the age

groups 65-79 and 80+ are not available in the indicated reporting period.

#### Total number of hospital SARI admissions (all ages)

Field: NumSariHospitalisations

Coding: Numeric

Total number of hospital SARI admissions (numerator) in the indicated reporting period.

#### All-cause admissions to hospital by age group

#### Number of patients aged 0-4 admitted to hospital

Field: HospAdmissionsAge00-04

Coding: Numeric

Number of all-cause hospital admissions in patients aged 0-4 in the indicated reporting period.

#### Number of patients aged 5-14 admitted to hospital

Field: HospAdmissionsAge05-14

Coding: Numeric

Number of all-cause hospital admissions in patients aged 5-14 in the indicated reporting period.

#### Number of patients aged 15-29 admitted to hospital

Field: HospAdmissionsAge15-29

Coding: Numeric

Number of all-cause hospital admissions in patients aged 15-29 in the indicated reporting period.

#### Number of patients aged 30-64 admitted to hospital

Field: HospAdmissionsAge30-64

Coding: Numeric

Number of all-cause hospital admissions in patients aged 30-64 in the indicated reporting period.

#### Number of patients aged 65-79 admitted to hospital

Field: HospAdmissionsAge65-79

Coding: Numeric

Number of all-cause hospital admissions in patients aged 65-79 in the indicated reporting period.

#### Number of patients aged 80+ admitted to hospital

Field: HospAdmissionsAge80+

Coding: Numeric

Number of all-cause hospital admissions in patients aged 80+ in the indicated reporting period.

#### Number of patients aged 15-64 admitted to hospital (alternative)

Field: HospAdmissionsAge15-64

Coding: Numeric

Number of all-cause hospital admissions in patients aged 15-64 in the indicated reporting period. Alternative, to submit if data for the age groups 15-29 and/or 30-64 are not available.

## Number of patients aged 65+ admitted to hospital (alternative)

Field: HospAdmissionsAge65+

Coding: Numeric

Number of all-cause hospital admissions in patients aged 65+ in the indicated reporting period.

Alternative, to submit if data for the age groups 65-79 and/or 80+ are not available.

# Total number of all-cause admissions (all ages)

Field: HospAdmissionsTotal Coding: Number

Total number of all-cause hospital admissions at the participating sites in the indicated reporting

period.

# Hospital catchment population by age group

## Population aged 0-4 served by the participating hospitals

Field: DenomHospPopulationAge00-04

Coding: Numeric

Population with less than five years of age under surveillance by participating hospitals (catchment

population).

# Population aged 5-14 served by the participating hospitals

Field: DenomHospPopulationAge05-14

Coding: Numeric

Population aged 5-14 under surveillance by participating hospitals (catchment population).

# Population aged 15-29 served by the participating hospitals

Field: DenomHospPopulationAge15-29

Coding: Numeric

Population aged 15-29 under surveillance by participating hospitals (catchment population).

#### Population aged 30-64 served by the participating hospitals

Field: DenomHospPopulationAge30-64

Coding: Numeric

Population aged 30-64 under surveillance by participating hospitals (catchment population).

#### Population aged 65-79 served by the participating hospitals

Field: DenomHospPopulationAge65-79

Coding: Numeric

Population aged 65-79 under surveillance by participating hospitals (catchment population).

# Population aged 80+ served by the participating hospitals

Field: DenomHospPopulationAge80+

Coding: Numeric

Population aged 80+ under surveillance by participating hospitals (catchment population).

## Population aged 15-64 served by the participating hospitals (alternative)

Field: DenomHospPopulationAge15-64

Coding: Numeric

Population aged 15-64 under surveillance by participating hospitals (catchment population). Alternative, to submit if data for the age groups 15-29 and/or 30-64 are not available.

# Population aged 65+ served by the participating hospitals (alternative)

Field: DenomHospPopulationAge65+

Coding: Numeric

Population aged 65+ under surveillance by participating hospitals (catchment population). Alternative, to submit if data for the age groups 65-79 and/or 80+ are not available.

# Total population served by the participating hospitals (all ages) (mandatory)

Field: DenomHospPopulationTotal

Coding: Number

Total population under surveillance by participating hospitals in indicated reporting period (catchment population).

# INFLSARIAGGR metadata recordtype version 3

The INFLSARIAGGR metadata, **record type version 3**, is used for reporting of aggregated data on SARI cases and underlying population denominators for calculation of total and age-specific notification rates and proportions. Aggregated data should be reported weekly.

The epidemiological variables to collect include:

- All-cause hospital admissions, total and by age group (denominator);
- Hospital catchment population, total and by age group (denominator);
- SARI hospitalisations, total and by age group (numerator);
- SARI hospitalisation deaths, total and by age group (numerator);
- SARI admissions to intensive care, total and by age group (numerator);
- SARI specimens tested for influenza, respiratory syncytial virus (RSV) and SARS-CoV-2, total and by age group (denominator);
- SARI specimens positive for influenza, RSV and SARS-CoV-2, total and by age group (numerator);
- SARI specimens positive for influenza by virus (sub)type and lineage (numerator).

For this record type, data should be aggregated as below:

- Number of SARI cases by week of hospital admission;
- Number of SARI ICU cases by week of ICU admission;
- · Number of SARI deaths by week of death;

# Common TESSy variables

#### Record type (mandatory)

Field: RecordType

Coding: INFLSARIAGGR

The record type defines the structure and the format of the data reported. The record types are defined by ECDC and are related to the subject. Only valid combinations of subject, record type and data source are accepted.

#### **Record type version**

Field: RecordTypeVersion Coding: 3

The version of the record type defines the current structure of the data reported. The current version of the INFLSARIAGGR record type is 3.

This variable is not mandatory as TESSy concludes the record type version from the metadata set indicated by default. However, the variable RecordTypeVersion can override this default.

# Subject (mandatory)

Field: Subject

Coding: INFLSARI

The subject describes the disease to be reported.

#### Data source (mandatory)

Field: DataSource

Coding:

Pre-assigned as CountryCode-INFLSARIAGGR to each country; can be modified by National Coordinator; countries reporting aggregated data through the new SARI surveillance stream should change data source to

"CountryCode-SARISURVAGGR"

The data source specifies the surveillance system from which the data originate and is generated and revised/updated by the national focal point in each Member State. The descriptions of the surveillance systems submitted to TESSy (section Data Sources) should include details about case definition used and should be kept up to date and will be used to assist with data interpretation. If country is reporting cases that do not follow strict WHO case definition (see *Definitions*), that should be stated in DataSource.

# Reporting country (mandatory)

Field: ReportingCountry

International organization for standardization (ISO) 3166-1-alpha-2, (two-letter code) Coding:

This variable identifies the country reporting the aggregate dataset.

## **Date used for statistics (mandatory)**

Field: DateUsedForStatistics Coding: yyyy-Www

The reference date used for standard reports that is compared to the reporting period. The date used for statistics should be preferably the week of admission to hospital, but can be any date that the reporting country finds applicable, e.g. date of admission, date of notification, date of diagnosis or any other date.

# **Epidemiological variables**

# **Total number of SARI reporting sites**

Field: NumSariRepSites Coding: Numeric

Total number of sites reporting SARI hospitalisations. Should be adjusted according to the number of hospitals reporting. (E.g. if a country has 2 hospitals each with 50,000 catchment population and in week X only 1 hospital reports, please report NumSariRepSites = 1 and the denominator to be 50,000 and not 100,000)

Required: True (warning)

#### **Reporting fraction (alternative)**

Field: ReportingFraction

Numeric (decimal) Coding:

Proportion of SARI admissions at the participating hospitals that are reported in the current week. This is an alternative variable, to account for the fact that some hospitals might report only a fraction of the SARI cases (eq. Only cases admitted on two specific days of the week). Catchment population and all-cause admissions should not be adjusted for this reporting fraction (e.g., if a hospital has a catchment population of 50,000, the reported catchment population should be 50,000, even if SARI admissions reported cover only specific days of the week).

## **Description of SARI system**

Field: DescriptionSARI Coding: Text

Description of SARI surveillance system.

# SARI admissions by age group

## Number of hospital SARI admissions age 0-4

Field: NumSariHospitalisationsAge00-04STL

Coding: Numeric

Number of hospital SARI admissions in patients aged 0-4 (numerator).

## Number of hospital SARI admissions age 5-14

Field: NumSariHospitalisationsAge05-14STL

Coding: Numeric

Number of hospital SARI admissions in patients aged 05-14 (numerator).

## Number of hospital SARI admissions age 15-29

Field: NumSariHospitalisationsAge15-29STL

Coding: Numeric

Number of hospital SARI admissions in patients aged 15-29 (numerator).

#### Number of hospital SARI admissions age 30-64

Field: NumSariHospitalisationsAge30-64STL

Coding: Numeric

Number of hospital SARI admissions in patients aged 30-64 (numerator).

#### Number of hospital SARI admissions age 65-79 (NEW)

Field: NumSariHospitalisationsAge65-79STL

Coding: Numeric

Number of hospital SARI admissions in patients aged 65-79 (numerator).

## Number of hospital SARI admissions age 80+ (NEW)

Field: NumSariHospitalisationsAge80+STL

Coding: Numeric

Number of hospital SARI admissions in patients aged 80+ (numerator).

## **Number of hospital SARI admissions age 15-64 (alternative)**

Field: NumSariHospitalisationsAge15-64STL

Coding: Numeric

Number of hospital SARI admissions in patients aged 15-64 (numerator), to submit if data for the age groups 15-29 and 30-64 are not available.

## Number of hospital SARI admissions age 65+ (alternative)

Field: NumSariHospitalisationsAge65+STL

Coding: Numeric

Number of hospital SARI admissions in patients aged 65+ (numerator), to submit if data for the age groups 65-79 and 80+ are not available.

## Total number of hospital SARI admissions (all ages)

Field: NumSariHospitalizationsSTL

Coding: Numeric

Total number of hospital SARI admissions (numerator).

Required: True (warning)

# SARI admissions to ICU/HDU by age group (NEW)

# Number of hospital SARI admissions to ICU/HDU age 0-4 (NEW)

Field: NumSariICUadmissionsAge00-04

Coding: Numeric

Number of hospital SARI admissions to Intensive Care/High Dependency Care Units in patients aged 0-4 (numerator).

# Number of hospital SARI admissions to ICU/HDU age 5-14 (NEW)

Field: NumSariICUadmissionsAge05-14

Coding: Numeric

Number of hospital SARI admissions to Intensive Care/High Dependency Care Units in patients aged 05-14 (numerator).

#### Number of hospital SARI admissions to ICU/HDU age 15-29 (NEW)

Field: NumSariICUadmissionsAge15-29

Coding: Numeric

Number of hospital SARI admissions to Intensive Care/High Dependency Care Units in patients aged 15-29 (numerator).

# Number of hospital SARI admissions to ICU/HDU age 30-64 (NEW)

Field: NumSariICUadmissionsAge30-64

Coding: Numeric

Number of hospital SARI admissions to Intensive Care/High Dependency Care Units in patients aged 30-64 (numerator).

#### Number of hospital SARI admissions to ICU/HDU age 65-79 (NEW)

Field: NumSariICUadmissionsAge65-79

Coding: Numeric

Number of hospital SARI admissions to Intensive Care/High Dependency Care Units in patients aged 65-79 (numerator).

## Number of hospital SARI admissions to ICU/HDU age 80+ (NEW)

Field: NumSariICUadmissionsAge80+

Coding: Numeric

Number of hospital SARI admissions to Intensive Care/High Dependency Care Units in patients aged 80+ (numerator).

Number of hospital SARI admissions to ICU/HDU age 15-64 (Alternative) (NEW)

Field: NumSariICUadmissionsAge15-64

Coding: Numeric

Number of hospital SARI admissions to Intensive Care/High Dependency Care Units in patients aged 15-64 (numerator), to submit if data for the age groups 15-29 and 30-64 are not available.

Number of hospital SARI admissions to ICU/HDU age 65+ (Alternative) (NEW)

Field: NumSariICUadmissionsAge65+

Coding: Numeric

Number of hospital SARI admissions to Intensive Care/High Dependency Care Units in patients aged 65+ (numerator), to submit if data for the age groups 65-79 and 80+ are not available.

Total number of hospital SARI admissions to ICU/HDU (all ages) (NEW)

Field: NumSariICUadmissions

Coding: Numeric

Total number of hospital SARI admissions to ICU/HDU in patients of all ages (numerator).

Required: True (warning)

# SARI deaths by age group

## Number of hospital SARI deaths aged 0-4

Field: NumSariDeathsAge00-04STL

Coding: Numeric

Total hospital SARI admissions that resulted in death in patients aged 0-4 (numerator).

#### Number of hospital SARI deaths aged 5-14

Field: NumSariDeathsAge05-14STL

Coding: Numeric

Total hospital SARI admissions that resulted in death in patients aged 05-14 (numerator).

#### Number of hospital SARI deaths aged 15-29

Field: NumSariDeathsAge15-29STL

Coding: Numeric

Total hospital SARI admissions that resulted in death in patients aged 15-29 (numerator).

## Number of hospital SARI deaths aged 30-64

Field: NumSariDeathsAge30-64STL

Coding: Numeric

Total hospital SARI admissions that resulted in death in patients aged 30-64 (numerator).

# Number of hospital SARI deaths aged 65-79 (NEW)

Field: NumSariDeathsAge65-79STL

Coding: Numeric

Total hospital SARI admissions that resulted in death in patients aged 65-79 (numerator).

Number of hospital SARI deaths aged 80+ (NEW)

Field: NumSariDeathsAge80+STL

Coding: Numeric

Total hospital SARI admissions that resulted in death in patients aged 80+ (numerator).

# Number of hospital SARI deaths aged 15-64 (Alternative)

Field: NumSariDeathsAge15-64STL

Coding: Numeric

Total hospital SARI admissions that resulted in death in patients aged 15-64 (numerator), to submit if data for the age groups 15-29 and 30-64 are not available.

## Number of hospital SARI deaths aged 65+ (Alternative)

Field: NumSariDeathsAge65+STL

Coding: Numeric

Total hospital SARI admissions that resulted in death in patients aged 65+ (numerator), to submit if data for the age groups 65-79 and 80+ are not available.

## **Total number of hospital SARI deaths (all ages)**

Field: NumSariHospitalisationsDeathsSTL

Coding: Numeric

Total number of SARI hospitalisation deaths (numerator).

Required: True (warning)

## Hospital admission denominators by age group

#### Number of hospital admissions age 0-4

Field: DenomHospAdmissionsAge00-04STL

Coding: Numeric

Number of hospital admissions (all causes) in patients aged 0-4 (denominator).

#### Number of hospital admissions age 5-14

Field: DenomHospAdmissionsAge05-14STL

Coding: Numeric

Number of hospital admissions (all causes) in patients aged 5-14 (denominator).

## Number of hospital admissions age 15-29

Field: DenomHospAdmissionsAge15-29STL

Coding: Numeric

Number of hospital admissions (all causes) in patients aged 15-29 (denominator).

# Number of hospital admissions age 30-64

Field: DenomHospAdmissionsAge30-64STL

Coding: Numeric

Number of hospital admissions (all causes) in patients aged 30-64 (denominator).

# Number of hospital admissions age 65-79 (NEW)

Field: DenomHospAdmissionsAge65-79STL

Coding: Numeric

Number of hospital admissions (all causes) in patients aged 65-79 (denominator).

Number of hospital admissions age 80+ (NEW)

Field: DenomHospAdmissionsAge80+STL

Coding: Numeric

Number of hospital admissions (all causes) in patients aged 80+ (denominator).

# Number of hospital admissions age 15-64 (Alternative)

Field: DenomHospAdmissionsAge15-64STL

Coding: Numeric

Number of hospital admissions (all causes) in patients aged 15-64 (denominator), to submit if data for the age groups 15-29 and 30-64 are not available.

## Number of hospital admissions age 65+ (Alternative)

Field: DenomHospAdmissionsAge65+STL

Coding: Numeric

Number of hospital admissions (all causes) in patients aged 65+ (denominator), to submit if data for the age groups 65-79 and 80+ are not available.

## Total number of hospital admissions (all ages)

Field: DenomHospAdmissionsSTL

Coding: Numeric

Total number of hospital admissions in patients of all ages (denominator). This includes all-cause hospital admissions.

Required: True (warning)

#### Catchment population denominators by age group

#### Population aged 0-4 covered by the hospitals submitting SARI data

Field: DenomHospPopulationAge00-04STL

Coding: Numeric

Population aged 0-4 covered by the hospitals submitting aggregated SARI data (denominator).

## Population aged 5-14 covered by the hospitals submitting SARI data

Field: DenomHospPopulationAge05-14STL

Coding: Numeric

Population aged 5-14 covered by the hospitals submitting aggregated SARI data (denominator).

## Population aged 15-29 covered by the hospitals submitting SARI data

Field: DenomHospPopulationAge15-29STL

Coding: Numeric

Population aged 15-29 covered by the hospitals submitting aggregated SARI data (denominator).

# Population aged 30-64 covered by the hospitals submitting SARI data

Field: DenomHospPopulationAge30-64STL

Codina: Numeric

Population aged 30-64 covered by the hospitals submitting aggregated SARI data (denominator).

Population aged 65-79 covered by the hospitals submitting SARI data (NEW)

Field: DenomHospPopulationAge65-79STL

Coding: Numeric

Population aged 65-79 covered by the hospitals submitting aggregated SARI data (denominator).

Population aged 80+ covered by the hospitals submitting SARI data (NEW)

Field: DenomHospPopulationAge80+STL

Coding: Numeric

Population aged 80+ covered by the hospitals submitting aggregated SARI data (denominator).

Population aged 15-64 covered by the hospitals submitting data (alternative)

Field: DenomHospPopulationAge15-64STL

Coding: Numeric

Population aged 15-64 covered by the hospitals submitting aggregated SARI data (denominator), to submit if data for the age groups 15-29 and 30-64 are not available.

Population aged 65+ covered by the hospitals submitting data (alternative)

Field: DenomHospPopulationAge65+STL

Coding: Numeric

Population aged 65+ covered by the hospitals submitting aggregated SARI data (denominator), to submit if data for the age groups 65-79 and 80+ are not available.

Total population covered by the hospitals submitting SARI data (all ages)

Field: DenomHospPopulationSTL

Coding: Numeric

Total population covered by the hospitals submitting aggregated SARI data (denominator).

Required: True (warning)

Specimens tested for influenza

Number of SARI specimens <u>tested</u> for influenza age 0-4 (NEW)

Field: NumSpecimensTestedFluAge00-04

Coding: Numeric

Number of SARI specimens tested for influenza from patients aged 0-4.

Number of SARI specimens <u>tested</u> for influenza age 5-14 (NEW)

Field: NumSpecimensTestedFluAge05-14

Coding: Numeric

Number of SARI specimens tested for influenza from patients aged 5-14.

Number of SARI specimens <u>tested</u> for influenza age 15-29 (NEW)

Field: NumSpecimensTestedFluAge15-29

Coding: Numeric

Number of SARI specimens tested for influenza from patients aged 15-29.

Number of SARI specimens <u>tested</u> for influenza age 30-64 (NEW)

Field: NumSpecimensTestedFluAge30-64

Coding: Numeric

Number of SARI specimens tested for influenza from patients aged 30-64.

Number of SARI specimens <u>tested</u> for influenza age 65-79 (NEW)

Field: NumSpecimensTestedFluAge65-79

Coding: Numeric

Number of SARI specimens tested for influenza from patients aged 65-79.

Number of SARI specimens <u>tested</u> for influenza age 80+ (NEW)

Field: NumSpecimensTestedFluAge80+

Coding: Numeric

Number of SARI specimens tested for influenza from patients aged 80+.

Number of SARI specimens <u>tested</u> for influenza age 15-64 (Alternative) (NEW)

Field: NumSpecimensTestedFluAge15-64

Coding: Numeric

Number of SARI specimens tested for influenza from patients aged 15-64, to submit if data for the age groups 15-29 and 30-64 are not available.

Number of SARI specimens <u>tested</u> for influenza age 65+ (Alternative) (NEW)

Field: NumSpecimensTestedFluAge65+

Coding: Numeric

Number of SARI specimens tested for influenza from patients aged 65+, to submit if data for the age groups 65-79 and 80+ are not available.

**Total number of SARI specimens <u>tested</u> for influenza** 

Field: NumSpecimensTotSARI

Coding: Numeric

Total number of SARI specimens tested for influenza.

Specimens positive for influenza

Number of SARI specimens <u>positive</u> for influenza age 0-4 (NEW)

Field: NumSpecimensFluDetectAge00-04

Coding: Numeric

Number of SARI specimens positive for influenza from patients aged 0-4.

Number of SARI specimens <u>positive</u> for influenza age 5-14 (NEW)

Field: NumSpecimensFluDetectAge05-14

Coding: Numeric

Number of SARI specimens positive for influenza from patients aged 5-14.

Number of SARI specimens <u>positive</u> for influenza age 15-29 (NEW)

Field: NumSpecimensFluDetectAge15-29

Coding: Numeric

Number of SARI specimens positive for influenza from patients aged 15-29.

Number of SARI specimens <u>positive</u> for influenza age 30-64 (NEW)

Field: NumSpecimensFluDetectAge30-64

Coding: Numeric

Number of SARI specimens positive for influenza from patients aged 30-64.

Number of SARI specimens <u>positive</u> for influenza age 65-79 (NEW)

Field: NumSpecimensFluDetectAge65-79

Codina: Numeric

Number of SARI specimens positive for influenza from patients aged 65-79.

Number of SARI specimens positive for influenza age 80+ (NEW)

Field: NumSpecimensFluDetectAge80+

Coding: Numeric

Number of SARI specimens positive for influenza from patients aged 80+.

Number of SARI specimens <u>positive</u> for influenza age 15-64 (Alternative) (NEW)

Field: NumSpecimensFluDetectAge15-64

Coding: Numeric

Number of SARI specimens positive for influenza from patients aged 15-64, to submit if data for the age groups 15-29 and 30-64 are not available.

Number of SARI specimens <u>positive</u> for influenza age 65+ (Alternative) (NEW)

Field: NumSpecimensFluDetectAge65+

Coding: Numeric

Number of SARI specimens positive for influenza from patients aged 65+, to submit if data for the age groups 65-79 and 80+ are not available.

Total number of SARI specimens <u>positive</u> for influenza (NEW)

Field: NumSpecimensTotFluDetect

Coding: Numeric

Total number of SARI specimens positive for influenza (all ages).

Number of SARI specimens positive for influenza A not subtyped

Field: NumSpecimensAUnkDetectSARI

Coding: Numeric

Number of SARI specimens positive for influenza A (not subtyped).

Number of SARI specimens positive for influenza A(H1) not N subtyped

Field: NumSpecimensAH1DetectSARI

Coding: Numeric

Number of SARI specimens positive for influenza A(H1) (not N subtyped).

Number of SARI specimens positive for influenza A(H1N1) other than pdm09 (MODIFIED)

Field: NumSpecimensAH1N1DetectSARI

Coding: Numeric

Number of SARI specimens positive for influenza A(H1N1) other than pdm09.

## Number of SARI specimens positive for influenza A(H1)pdm09

Field: NumSpecimensSWOAH1DetectSARI

Coding: Numeric

Number of SARI specimens positive for influenza A(H1)pdm09.

## Number of SARI specimens positive for influenza A(H1N1)pdm09

Field: NumSpecimensSWOAH1N1DetectSARI

Coding: Numeric

Number of SARI specimens positive for influenza A(H1N1)pdm09.

## Number of SARI specimens positive for influenza A(H3) not N subtyped

Field: NumSpecimensAH3DetectSARI

Coding: Numeric

Number of SARI specimens positive for influenza A(H3) (not N subtyped).

# Number of SARI specimens <u>positive</u> for influenza A(H3N2)

Field: NumSpecimensAH3N2DetectSARI

Coding: Numeric

Number of SARI specimens positive for influenza A(H3N2).

# Number of SARI specimens <u>positive</u> for influenza B (no lineage determined) (MODIFIED)

Field: NumSpecimensBDetectSARI

Coding: Numeric

Number of SARI specimens positive for influenza type B without lineage determination.

## Number of SARI specimens <u>positive</u> for influenza B Victoria (MODIFIED)

Field: NumSpecimensBVICDetectSARI

Coding: Numeric

Number of SARI specimens positive for influenza B/Victoria.

# **Number of SARI specimens positive for influenza B Yamagata** (MODIFIED)

Field: NumSpecimensBYAMDetectSARI

Coding: Numeric

Number of SARI specimens positive for influenza B/Yamagata.

## Specimens tested for SARS-CoV-2

## Number of SARI specimens tested for SARS-CoV-2 age 0-4

Field: SARITestedSARSCoV2Age00-04

Coding: Numeric

Number of tests for SARS-CoV-2 in hospitalised SARI patients aged 0-4.

# Number of SARI specimens tested for SARS-CoV-2 age 5-14

Field: SARITestedSARSCoV2Age05-14

Coding: Numeric

Number of tests for SARS-CoV-2 in hospitalised SARI patients aged 5-14.

Number of SARI specimens <u>tested</u> for SARS-CoV-2 age 15-29 (NEW)

Field: SARITestedSARSCoV2Age15-29

Coding: Numeric

Number of tests for SARS-CoV-2 in hospitalised SARI patients aged 15-29.

Number of SARI specimens <u>tested</u> for SARS-CoV-2 age 30-64 (NEW)

Field: SARITestedSARSCoV2Age30-64

Coding: Numeric

Number of tests for SARS-CoV-2 in hospitalised SARI patients aged 30-64.

Number of SARI specimens <u>tested</u> for SARS-CoV-2 age 65-79 (NEW)

Field: SARITestedSARSCoV2Age65-79

Coding: Numeric

Number of tests for SARS-CoV-2 in hospitalised SARI patients aged 65-79.

Number of SARI specimens <u>tested</u> for SARS-CoV-2 age 80+ (NEW)

Field: SARITestedSARSCoV2Age80+

Coding: Numeric

Number of tests for SARS-CoV-2 in hospitalised SARI patients aged 80+.

Number of SARI specimens <u>tested</u> for SARS-CoV-2 age 15-64 (Alternative) (NEW)

Field: SARITestedSARSCoV2Age15-64

Coding: Numeric

Number of tests for SARS-CoV-2 in hospitalised SARI patients aged 15-64, to submit if data for the age groups 15-29 and 30-64 are not available.

Number of SARI specimens <u>tested</u> for SARS-CoV-2 age 65+ (Alternative) (NEW)

Field: SARITestedSARSCoV2Age65+

Coding: Numeric

Number of tests for SARS-CoV-2 in hospitalised SARI patients aged 65+, to submit if data for the age groups 65-79 and 80+ are not available.

Total number of SARI specimens <u>tested</u> for SARS-CoV-2

Field: SARITestedSARSCoV2Total

Coding: Numeric

Total number of tests for SARS-CoV-2 in hospitalised SARI patients (all ages).

Specimens positive for SARS-CoV-2

Number of SARI specimens positive for SARS-CoV-2 aged 0-4

Field: NumSpecimensSARSCoV2DetectSARIAge00-04

Coding: Numeric

Number of SARI specimens positive for SARS-CoV-2 in patients aged 0-4.

Number of SARI specimens positive for SARS-CoV-2 aged 5-14

Field: NumSpecimensSARSCoV2DetectSARIAge05-14

Coding: Numeric

Number of SARI specimens positive for SARS-CoV-2 in patients aged 5-14.

## Number of SARI specimens positive for SARS-CoV-2 aged 15-29 (NEW)

Field: NumSpecimensSARSCoV2DetectSARIAge15-29

Coding: Numeric

Number of SARI specimens positive for SARS-CoV-2 in patients aged 15-29.

# Number of SARI specimens positive for SARS-CoV-2 aged 30-64 (NEW)

Field: NumSpecimensSARSCoV2DetectSARIAge30-64

Coding: Numeric

Number of SARI specimens positive for SARS-CoV-2 in patients aged 30-64.

## Number of SARI specimens positive for SARS-CoV-2 age 65-79 (NEW)

Field: NumSpecimensSARSCoV2DetectSARIAge65-79

Coding: Numeric

Number of SARI specimens positive for SARS-CoV-2 in patients aged 65-79.

## Number of SARI specimens <u>positive</u> for SARS-CoV-2 age 80+ (NEW)

Field: NumSpecimensSARSCoV2DetectSARIAge80+

Coding: Numeric

Number of SARI specimens positive for SARS-CoV-2 in patients aged 80+.

#### Number of SARI specimens positive for SARS-CoV-2 age 15-64 (Alternative) (NEW)

Field: NumSpecimensSARSCoV2DetectSARIAge15-64

Coding: Numeric

Number of SARI specimens positive for SARS-CoV-2 in patients aged 15-64, to submit if data for the age groups 15-29 and 30-64 are not available.

## Number of SARI specimens <u>positive</u> for SARS-CoV-2 age 65+ (Alternative) (NEW)

Field: NumSpecimensSARSCoV2DetectSARIAge65+

Coding: Numeric

Number of SARI specimens positive for SARS-CoV-2 in patients aged 65+, to submit if data for the age groups 65-79 and 80+ are not available.

## Total number of SARI specimens positive for SARS-CoV-2

Field: NumSpecimensSARSCoV2DetectSARITotal

Coding: Numeric

Total number of SARI specimens positive for SARS-CoV-2 in patients of all ages.

# Specimens tested for MERS-CoV

# Number of SARI specimens <u>tested</u> for MERS-CoV (NEW)

Field: NumSpecimensTestedMERS

Coding: Numeric

Number of SARI specimens tested for MERS-CoV.

# Specimens positive for MERS-CoV

Number of SARI specimens <u>positive</u> for MERS-CoV (NEW)

Field: NumSpecimensMERSDetectSARI

Coding: Numeric

Total number of SARI specimens positive for MERS-CoV.

# Specimens tested for RSV

Number of SARI specimens <u>tested</u> for RSV age 0-4 (NEW)

Field: NumSpecimensTestedRSVAge00-04

Coding: Numeric

Number of SARI specimens tested for RSV from patients aged 0-4.

Number of SARI specimens <u>tested</u> for RSV age 5-14 (NEW)

Field: NumSpecimensTestedRSVAge05-14

Coding: Numeric

Number of SARI specimens tested for RSV from patients aged 5-14.

Number of SARI specimens <u>tested</u> for RSV age 15-29 (NEW)

Field: NumSpecimensTestedRSVAge15-29

Coding: Numeric

Number of SARI specimens tested for RSV from patients aged 15-29.

Number of SARI specimens <u>tested</u> for RSV age 30-64 (NEW)

Field: NumSpecimensTestedRSVAge30-64

Coding: Numeric

Number of SARI specimens tested for RSV from patients aged 30-64.

Number of SARI specimens <u>tested</u> for RSV age 65-79 (NEW)

Field: NumSpecimensTestedRSVAge65-79

Coding: Numeric

Number of SARI specimens tested for RSV from patients aged 65-79.

Number of SARI specimens <u>tested</u> for RSV age 80+ (NEW)

Field: NumSpecimensTestedRSVAge80+

Coding: Numeric

Number of SARI specimens tested for RSV from patients aged 80+.

Number of SARI specimens <u>tested</u> for RSV age 15-64 (Alternative) (NEW)

Field: NumSpecimensTestedRSVAge15-64

Coding: Numeric

Number of SARI specimens tested for RSV from patients aged 15-64, to submit if data for the age groups 15-29 and 30-64 are not available.

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Number of SARI specimens <u>tested</u> for RSV age 65+ (Alternative) (NEW)

Field: NumSpecimensTestedRSVAge65+

Coding: Numeric

Number of SARI specimens tested for RSV from patients aged 65+, to submit if data for the age

groups 65-79 and 80+ are not available.

Total number of SARI specimens <u>tested</u> for RSV (NEW)

Field: NumSpecimensTotRSV

Coding: Numeric

Total number of SARI specimens tested for RSV (all ages).

Specimens positive for RSV

Number of SARI specimens <u>positive</u> for RSV age 0-4 (NEW)

Field: NumSpecimensRSVDetectAge00-04

Coding: Numeric

Number of SARI specimens positive for RSV from patients aged 0-4.

Number of SARI specimens <u>positive</u> for RSV age 5-14 (NEW)

Field: NumSpecimensRSVDetectAge05-14

Coding: Numeric

Number of SARI specimens positive for RSV from patients aged 5-14.

Number of SARI specimens <u>positive</u> for RSV age 15-29 (NEW)

Field: NumSpecimensRSVDetectAge15-29

Coding: Numeric

Number of SARI specimens positive for RSV from patients aged 15-29.

Number of SARI specimens positive for RSV age 30-64 (NEW)

Field: NumSpecimensRSVDetectAge30-64

Coding: Numeric

Number of SARI specimens positive for RSV from patients aged 30-64.

Number of SARI specimens <u>positive</u> for RSV age 65-79 (NEW)

Field: NumSpecimensRSVDetectAge65-79

Coding: Numeric

Number of SARI specimens positive for RSV from patients aged 65-79.

Number of SARI specimens <u>positive</u> for RSV age 80+ (NEW)

Field: NumSpecimensRSVDetectAge80+

Codina: Numeric

Number of SARI specimens positive for RSV from patients aged 80+.

Number of SARI specimens <u>positive</u> for RSV age 15-64 (Alternative) (NEW)

Field: NumSpecimensRSVDetectAge15-64

Coding: Numeric

Number of SARI specimens positive for RSV from patients aged 15-64, to submit if data for the age groups 15-29 and 30-64 are not available.

## Number of SARI specimens <u>positive</u> for RSV age 65+ (Alternative)

Field: NumSpecimensRSVDetectAge65+

Coding: Numeric

Number of SARI specimens positive for RSV from patients aged 65+, to submit if data for the age

(NEW)

groups 65-79 and 80+ are not available.

## Total number of SARI specimens positive for RSV

Field: NumSpecimensRSVDetectSARI

Coding: Numeric

Total number of SARI specimens positive for RSV (all ages).

# INACTIVATED variables (from INFLSARIAGGR v2):

# Number of hospital SARI admissions age Unknown

Field: NumSariHospitalisationsAgeUnkSTL

Coding: Numeric

Number of hospital SARI admissions in patients with unknown age (numerator).

## Number of hospital SARI deaths age Unknown

Field: NumSariDeathsAgeUnkSTL

Coding: Numeric

Total hospital SARI admissions that resulted in death in patients with unknown age (numerator).

# Number of hospital admissions age Unknown

Field: DenomHospAdmissionsUnkSTL

Coding: Numeric

Number of hospital admissions (all causes) in patients with unknown age (denominator).

# Population of unknown age covered by the hospitals submitting SARI data

Field: DenomHospPopulationUnkSTL

Coding: Numeric

Population of unknown age covered by the hospitals submitting aggregated SARI data (denominator).