

Global Influenza Hospital Surveillance Network

Core questionnaire: Patients of all ages

Version 12 December 2024

QUESTIONNAIRE TO BE FINALIZED FOR ALL ENROLLED PATIENTS

for all eligible patients hospitalized in the previous **72** hours and overnight hospitalization, who are able to communicate (alt. through a proxy), who have given consent to participate in the study **and** who are experiencing symptoms in the last 10 days prior to admission

In the following questions, "do not know" answers apply for unknown information or not collected variables

Screening

1) How was patient identified as a potential surveillance case?

	1.a. Case finding based on pre-defined admission diagnosis (<i>Refer to Annex1</i>)			O No
	1.b. Case finding based on hospital admission logs for acute respiratory illness		O Yes	O No
	1.c. Case finding based on testing for influenza		O Yes	O No
2)	Date of admission (yyyy-mm-dd)	= =	_	
3)	What is the hospital ID?			
4)	Patient study identification number		_	
5)	Sex	O Female O Ma	le	
6)	Age	O days O mo	onths O yea	ars

7) Has the patient had any one of these symptoms <u>in the last 7-10 days prior to</u> <u>admission? (mark all that applies)</u>

a) ILI systemic symptoms

- ✓ Fever/history of fever
- ✓ Malaise/fatigue/lethargy



Foundation for Influenza Epidemiology



O Yes

O Yes

O No O Do not know O No O Do not know

•		O Yes O Yes	O No O No	O Do not know O Do not know
b)	 Sore throat Shortness of breath/difficult breathing Wheezing Wheezing 	O Yes O Yes O Yes O Yes O Yes	O No O No O No O No O No	 O Do not know
Case	definition used: (Refer to Annex 2) – One answer only			
	SARI case definition Extended SARI case definition	O Yes O Yes	O No O No	

8.3. ECDC modified case definition – in last 7 days	O Yes	O No
8.4. ECDC modified case definition – in last 14 days	O Yes	O No
8.5. Acute respiratory illness case definition	O Yes	O No

8.6. Cases tested for Influenza

8)

8.7. Other (please detail:)

O Yes O No O Yes O No





IMPACT

Swabbing

9)	a. Date of swabbing (yyyy-mm-dd) (During hospital stay)	_ _ - _	-		O Do not know
	Lab	oratory Results			
10)	a. Does the patient have a positive flu res	ult?	O Yes	О N	o O Inadequate sample
	b. If yes, tick the boxes corresponding to	the positive virus(e	s)		
	□ H1N1pdm09				
	□ H1Nother				
	□ H3N2				
	□ H3Nother				
	🗆 B/Yamagata				
	🗆 B/Victoria				
	🗆 Influenza A not subtyped				
	Influenza B no lineage information				

O Yes O No

11) a. Did you test for other respiratory viruses?

b. If yes, tick the boxes indicating for which pathogen test was requested and whether test was positive or not

Test performed	Test result positive
🗆 Adenovirus	🛛 Yes 🖾 No 🖾 Do not know
🗆 Bocavirus	🛛 Yes 🗶 No 🖓 Do not know
🗆 Common human coronaviruses	🛛 Yes 🖾 No 🖾 Do not know
(229E, NL63, OC43, HKU1)	🛛 Yes 🗶 No 🖓 Do not know
🗆 Enterovirus	🛛 Yes 🗶 No 🖓 Do not know
🗆 Enterovirus/Rhinovirus	🛛 Yes 🖾 No 🖾 Do not know
🗆 Human Metapneumovirus	🛛 Yes 🗶 No 🖓 Do not know
□ MERS-CoV	🛛 Yes 🗶 No 🖓 Do not know
🗆 Parainfluenza viruses	🛛 Yes 🖾 No 🖾 Do not know
🗆 Picornavirus	🛛 Yes 🖾 No 🖾 Do not know
🗆 Respiratory syncytial virus	🛛 Yes 🗶 No 🖓 Do not know
□ Rhinovirus	🛛 Yes 🖾 No 🖾 Do not know
□ SARS-CoV	🛛 Yes 🖾 No 🖾 Do not know
□ SARS-CoV-2	🛛 Yes 🗶 No 🖓 Do not know
□ EV D68	🛛 Yes 🖾 No 🖾 Do not know
🗆 Others, please detail:	🛛 Yes 🗶 No 🖓 Do not know





O Inadequate sample

Submission of samples to GISAID EpiFlu™ database via the GISAID platform: All genome sequence data from selected severe influenza cases and all COVID-19 cases are to be submitted on the GISAID platform on a continued basis (http://gisaid.org/EPI_ISL/123456)

Clinical history		
Patient characteristics		
12) Other signs or symptoms at disease presentation (i.e., start <i>that applies or select not applicable</i>	ted in the p	ast 10 days) <i>Mark all</i>
✓ Nausea or vomiting	O Yes O	No O Do not know
✓ Diarrhea C	Yes O	No O Do not know
 ✓ New loss of taste or smell 	Yes O	No O Do not know
✓ Chest pain	Yes O	No O Do not know
13) a. Pregnancy status	Yes O	No O Non-applicable
b. If yes, pregnancy weeks:	_ weeks	•
14) Height (Only for children <5 years - <i>Round up to the nearest</i>	_ cm	O Do not know
15) Weight (Only for children <5 years - <i>Round up to the nearest integer</i>)	_ kg	O Do not know
16) a. Does the patient have any chronic conditions?	Yes O	No O Do not know
b. If yes, indicate which ones (<i>Mark all that applies</i>)		
🗆 Cardiovascular disease	0	Do not know
Chronic lung disease (such as chronic obstructive pulmon fibrosis) O Do not know	ary disease	[COPD] and cystic
□ Asthma	0	Do not know
□ Diabetes	0	Do not know
Immunodeficiency (except HIV) / Organ transplant	0	Do not know
🗆 Renal impairment	0	Do not know
🗆 Rheumatologic disease / Autoimmune disease	0	Do not know
Neurological or neuromuscular disease	0	Do not know
🗆 Cirrhosis / Liver disease	0	Do not know
🗆 Neoplasm (active)	0	Do not know
□ Obesity	0	Do not know

 Active tuberculosis Malnutrition (Only for children < 5 years) HIV infection HIV exposure (if children < 5 year) Hemoglobinopathies Born premature, ie., <37 week gestation (Only for childred) 	O O O O O O O O O O O O O O O O O O O	Do not k Do not k Do not k Do not k Do not k D Do n Do not k	know know know know ot know		
17) a. Use of influenza antivirals (oseltamivir, zanamivir, favipiravir o peramivir) for the current episode initiated before this admission?	O Yes O	No (D Do not	knov	v
b. Starting Date (yyyy-mm-dd)	-	-	_		
18) a. Use of influenza antiviral (oseltamivir, Oranamivir, favipiravir o peramivir) for the current episode initiated during this admission	ves O No	O Do	o not knov	I	
b. Starting Date (yyyy-mm-dd)	-	-	_		
19) a. Use of antibiotics preceding this admission?	Yes O No	0	Do not kn	ow	
b. Starting Date (yyyy-mm-dd)	<u> - </u> .	·			
20) a. Use of antibiotics during this admission?	Yes O No	0	Do not kn	ow	
b. Starting Date (yyyy-mm-dd)	<u> - </u> .	·			
Vaccination Status					
21) Vaccination status influenza: a. Influenza vaccination for the <u>current season</u>			•	\sim	
a. Influenza vaccination for the <u>current season</u> If yes :	U	Yes	O No	0	Do not know
i. Vaccinated more than 14 days before onset of acute	0	Yes	O No	0	Do not know
respiratory symptoms ii. Vaccination history for current season validated thr registry or medical records?	ough 🔿	Yes	O No	0	Do not know
iii. Influenza vaccination in the preceding season?	0	Yes	O No	0	Do not know

22) Vaccination status COVID-19:

a. COVID-19 vaccination for the <u>current season</u>





O Yes O No O Do not know

Severity (measured at admission)

23)	Confusion/lethargy	O Yes	O No	O Do not know
24)	Blood pressure (systolic/diastolic)	/ _	_ mmHg	O Do not know
25)	Respiratory rate (breaths per minute)	b	pm	O Do not know
26)	Oxygen saturation value on ambient air (%)		%	O Do not know
27)	Supplemental oxygen without mechanical ventilation	O Yes	O No	O Do not know
	Vasopressor support Apnea (only for children <5)	O Yes O Yes	O No O No	O Do not know O Do not know
30)	What is the baseline frailty score of the patient (only for all patients 50 years and older), prior to onset of the current illness? (category 1-9) (see annex 3 for definition of the scale)Category	_ C	Do not l	know
	Severity (measured at any time during admis	sion)		
31)	ICU admission (at any time during hospitalization)	O Yes	O No	O Do not know
32)	High dependence unit (at any time during hospitalization) (See Annex 4 for definition)	O Yes	O No	ON/A or DOnNotok
33)	Mechanical ventilation (at any time during hospitalization, and including ecmo)	O Yes	O No	O Do not know
	Outcome			
34)	Death while hospitalized	O Yes	O No	O Do not know
35)	Discharge/death date (yyyy-mm-dd)		_ -	-
36)	Transfer to another hospital/Left against medical orders	O Yes	O No	O Do not know
37)	a. Main diagnose at discharge/death (letter/code.subcode)	_ _ available	_ •	ONot
	b. Secondary 1 diagnose at discharge/death (letter/code.subcode)		_ •	O _{Not}
	c. Secondary 2 diagnose at discharge/death (letter/code.subcode)	 available	_ •	O _{Not}
	d. ICD used	O ICD-9) ICD-10
38)	What is the frailty score of the patient at discharge (only for all patients 50 years and older)? (category 1-9) See annex 2 for definition of the scale	Category 	C	Do not know

GIHSN Core questionnaire



39) GISAID EpiFlu™ database sharing:

a. Did you submit the sample to GISAID EpiFlu™ database?

O Yes O No

O No, failed sequencing

b. If yes, please enter the GISAID Accession Number (EPI_ISL)

The GISAID Accession Number needs to be completed for the data linkage (clinical/sequencing).

🗆 Influenza	(EPI_ISL_)
SARS-CoV2	(EPI_ISL_) _ _ _ _ _ _ _ _
Respiratory syncytial virus	(EPI_ISL_) _ _ _ _ _ _ _ _

End of the questionnaire. Please send the questionnaire to PI for recording.





Case ascertainment/Case finding

You can use this Table as a guidance to identify patients that may be eligible to participate in the surveillance system. You can use the list of acute events and/or ICD codes if available at your hospital or you can rely on other case ascertainment strategies, like looking at hospital admission logs, or looking at emergency department logs, infectious disease contacts etc.

Table 1. Example of admission diagnoses possibly associated with an influenzainfection that could be taken into account when looking for eligible patients.International Classification of Diseases Code version 9 and 10.

For patients less than 5 years	ICD 9 Codes	ICD 10 Codes
Acute upper or lower respiratory disease	382.9; 460 to 466	J00-J06, J20-J22
Dyspnea, breathing anomaly, shortness of breath, tachypnea (polypnea)	786.0; 786.00; 786.05-786.07; 786.09; 786.9	R06.0, R06, R06.9, R06.3, R06.00, R06.09, R06.83, R06.02, R06.82, R06.2, R06.89
Acute asthma or exacerbation	493.92	J45.901
Pneumonia and influenza	480 to 488	J09-J18
Acute respiratory failure	518.82	J96
Acute heart failure	428-429.0	150-150.9; 151.4
Myalgia	729.1	M79.1
Altered consciousness, convulsions, febrile convulsions	780.01-780.02; 780.09; 780.31- 780.32	R40.20, R40.4, R40.0, R40.1, R56.00, R56.01
Fever or fever unknown origin or non specified	780.6-780.60	R50, R50.9
Cough	786.2	R05
Gastrointestinal manifestations	009.0; 009.3	A09.0; A09.9
Sepsis, Systemic inflammatory response syndrome, not otherwise specified	995.90-995.94	R65.10, R65.11, R65.20, A41.9
Nausea and vomiting	078.82; 787.0; 787.01-787.03	R11; R11.0; R11.10 - R11.12; R11.2
Loss of smell, loss of taste		R43.8 , R43.8,





Pneumonia due to coronavirus disease 2019		J12.82, U07.1,
Coronavirus infection, unspecified		B34.2, U07.1, J12.81
SARS-associated coronavirus as the cause of diseases classified elsewhere		B97.21
Bacterial infection, unspecified, in conditions classified elsewhere and of unspecified site	041.9	
Transient cerebral ischemia	435	
Acute, but ill-defined, cerebrovascular disease	436	
Chronic bronchitis	491	
Asthma	49	
Chronic airway obstruction, not elsewhere classified	496	
Dizziness / Vertigo, NOS	780.4	
Altered mental status	780.97	
Symptoms concerning nutrition, metabolism and development: Feeding difficulties and mismanagement	783.3	
Symptoms concerning nutrition, metabolism and development : Other	783.9	
Viremia, unspecified	790.8	

For patients 5 years and older	ICD 9 Codes	ICD 10 Codes
Acute upper or lower respiratory disease	382.9; 460-466	J00-J06, J20-J22, H66.90
Acute myocardial infarction or acute coronary syndrome	410-411 and 413- 414	120-125.9
Acute asthma or exacerbation	493.92	J45.901
Acute Heart failure	428-429.0	150-150.9; 151.4
Pneumonia and influenza	480-488	J09-J18
Bronchitis and exacerbations of Chronic Pulmonary Obstructive disease	490, 491.21 and 491.22,	J40; J44.0; J44.1



Foundation for Influenza Epidemiology



Acute respiratory failure	518.82	J96
Myalgia	729.1	M79.1
Acute metabolic failure (diabetic coma, renal dysfunction, acid-base disturbances, alterations to the water balance)	250.1- 250.3; 584- 586; 276-277	E11.9, E10.9, E11.65, E10.65, E10.11, E11.01, E10.641, E11.641, E10.69, E11.00, E10.10, E11.69, N17.0, N17.1, N17.2, N17.8, N17.9, N18.1, N18.2, N18.3, N18.4, N18.5, N18.6M N18.9, N19, E87.0, E87.1, E87.2, E87.3, E87.4, E87.5, E87.6, E87.70, E87.71, E87.79, E86.0, E86.1
Altered consciousness, convulsions, febrile convulsions, syncope and collapse	780.09; 780.2; 780.31-780.32	R40.20, R40.4, R40.0, R40.1, R55, R56.00, R56.01
Dyspnea/respiratory abnormality	786.0	R06.0, R06-R06.9
Respiratory abnormality	786.00	R06.9
Shortness of breath	786.05	R06.02
Respiratory abnormality not otherwise specified	786.09	R06.3, R06.00, R06.09, R06.83
Respiratory symptoms/chest symptoms	786.9	R06.89
Fever or fever unknown origin or non-specified	780.6-780.60	R50, R50.9
Cough	786.2	R05
Sepsis, Systemic inflammatory response syndrome	995.90-995.94	R65.10, R65.11, R65.20, A41.9
Loss of smell, loss of taste		R43.8 , R43.8,
Pneumonia due to coronavirus disease 2019		J12.82, U07.1,
Coronavirus infection, unspecified		B34.2, U07.1, J12.81
SARS-associated coronavirus as the cause of diseases classified elsewhere		B97.21
Bacterial infection, unspecified, in conditions classified elsewhere and of unspecified site	041.9	

Foundation for Influenza Epidemiology

IMPACT

Transient cerebral ischemia	435	
Acute, but ill-defined, cerebrovascular disease	436	
Chronic bronchitis	491	
Asthma	49	
Chronic airway obstruction, not elsewhere classified	496	
Dizziness / Vertigo, NOS	780.4	
Altered mental status	780.97	
Symptoms concerning nutrition, metabolism and development: Feeding difficulties and mismanagement	783.3	
Symptoms concerning nutrition, metabolism and development : Other	783.9	
Viremia, unspecified	790.8	





1. Severe acute respiratory infection (SARI) case definition (<u>https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/case-definitions-for-ili-and-sari</u>)

An acute respiratory infection with:

- history of fever or measured fever of \geq 38C°
- and cough;
- with onset within the last 10 days.
- and requires hospitalization

2. Extended SARI case definition

An acute respiratory infection with cough and onset within 10 days that requires hospitalization (no fever required)

3. ECDC modified case definition for influenza like-illness (ILI) in last 7 days

Combination of:

- at least one of the following four systemic symptoms: fever or feverishness, headache, myalgia, or malaise;
- at least one of the following three respiratory symptoms: cough, sore throat or shortness of breath

4. ECDC modified case definition for influenza like-illness (ILI) in last 14 days

Combination of:

- at least one of the following four systemic symptoms: fever or feverishness, headache, myalgia, or malaise;
- at least one of the following three respiratory symptoms: cough, sore throat or shortness of breath





- 5. Acute respiratory illness case definition: Acute onset of at least one of the following four respiratory symptoms: cough or sore throat or shortness of breath or coryza and a clinician's judgment that illness is due to infection
- 6. Cases Tested for influenza a hospitalized person who has been tested for influenza within 72 hours of hospital admission





The frailty scale according to the categories defined below. If a subject is in between levels use best judgement.

Category 1: Very Fit. People who are robust, active, energetic and motivated. The people commonly exercise regularly. They are among the fittest for their age.

Category 2: Well. People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally

Category 3: Managing Well. People whose medical problems are well controlled but are not regularly active beyond routine walking.

Category 4: Vulnerable. While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "slowed up", and/or being tired during the day.

Category 5: Mildly Frail. These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

Category 6: Moderately Frail. People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.

Category 7: Severely Frail. Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months)

Category 8: Very Severely Frail. Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

Category 9: Terminally III. Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.





When considering high dependency units, please bear the following in mind:

- High dependency units (HDUs) are wards for people who need more intensive observation, treatment and nursing care than is possible in a general ward but slightly less than that given in intensive care unit (ICU).
- Another way to distinguish the two units is by the nurse to patient ratio. In ICU you may have the nurse to patient ratio as 1:1 whereas this may be 1:2 or 1:3 in HDUs. In a normal ward we can have 1 nurse covering up to 15 patients. Again, these are realities that may differ from country to country depending on resource availability.
- Not all hospitals will have HDUs, and each country or hospital may have a different level of accepted care at their HDU facilities. For instance, often mechanical ventilation is implemented in the ICU environment, but some hospitals (depending on country's policy) may have patients in mechanical ventilation staying at their HDUs.

If your hospital does not have a HDU, please chose "not applicable" option in the database



