



Respiratory Viruses Surveillance Country, Territory and Area Profiles, 2021

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WHO/EURO:2022-4760-44523-63025

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Suggested citation. Respiratory viruses surveillance country, territory and area profiles, 2021. Copenhagen: WHO Regional Office for Europe and Stockholm: European Centre for Disease Prevention and Control; 2022. Licence: CC BY 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

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¹ All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999)

Data

The data in these profiles were submitted by the country, territory or area during the period July 2021 to December 2021. The data here are presented unedited.

Abbreviations

ARI	Acute Respiratory Infection
COVID-19	Coronavirus Disease 2019
ECDC	European Centre for Disease Prevention and Control
GP	General practitioner/general practice
HDU	High dependency unit
HMO	Health maintenance organization (Israel)
ICD	International classification of diseases
ICPC	International Classification of Primary Care
ICU	Intensive care unit
ILI	Influenza-like illness
MEM	Moving epidemic method
NHS	National Health Service (United Kingdom)
NIC	National Influenza Centre
PAHO	Pan American Health Organization
PCR	Polymerase chain reaction
PHE	Public Health England
RSV	Respiratory syncytial virus
SARI	Severe acute respiratory infection
WHO	World Health Organization

Notes

- These profiles include only details of national surveillance systems which provide data to The European Surveillance System (TESSy) and are used in the drafting of the joint European Centre for Disease Prevention and Control (ECDC)–WHO Regional Office for Europe influenza bulletin, Flu News Europe (Flue News Europe [website]. In: Joint ECDC-WHO/Europe weekly influenza update. WHO/ECDC; 2014-2022 (<u>https://flunewseurope.org/</u>, accessed 16 February 2022)).
- Mid-year population estimates are based on 2020 data, according to the WHO Regional Office for Europe's European Health for All database (European Health Information Gateway. Health for All explorer [on-line database]. Copenhagen: WHO Regional Office for Europe; 2022 (<u>https://gateway.euro.who.int/en/hfa-explorer/</u>, accessed 16 February 2022)).
- 3. Income group is based on the June 2020 World Bank list of economies (World Bank Country and Lending Groups [website]. In: The World Bank, Data, country classification; 2022 (http://data.worldbank.org/about/country-and-lending-groups, accessed 16 February 2022)).
- 4. The type of surveillance can be defined as: a) sentinel; b) universal; or b) non-sentinel (WHO Regional Office for Europe guidance for sentinel influenza surveillance in humans. Copenhagen: WHO Regional Office for Europe; 2011 (https://apps.who.int/iris/handle/10665/107265, accessed 16 February 2022)).
 - a) A sentinel surveillance system is formed by one or more designated primary healthcare facilities or providers that routinely and consistently collect epidemiological information from patients presenting with an illness consistent with a specified case definition. Representative clinical specimens are collected from all or a subset of patients according to a randomized/systematic/convenience sampling protocol. Sentinel surveillance systems provide an efficient way to obtain high-quality data on relatively common conditions from a manageable number of locations. Each sentinel site should include facilities that together represent the population under surveillance.
 - b) A universal surveillance system is formed by all designated health care facilities or providers in a country, territory or area. This generally includes reporting of all clinician-defined "ARI" and is part of the national disease surveillance systems of several Member States in the WHO European Region. These universal systems provide subnational resolution of clinician-reported respiratory disease activity.
 - c) A non-sentinel surveillance system includes other types of surveillance system (e.g. laboratory surveillance), which do not meet the definition of the other two types of system. Non-sentinel surveillance generally refers to viruses reported from/detected in patients from non-sentinel surveillance systems. In the WHO European Region, this includes viruses from clinical diagnostic laboratories, outbreaks, or universal ARI surveillance systems that do not have randomized/ standardized sampling strategies.
- 5. The most common **case definitions** can be found in the table below:

ILI	ECDC	Sudden onset of symptoms <i>and</i> at least one of the following four systemic symptoms: fever or feverishness, malaise, headache, myalgia <i>and</i> at least one of the following three respiratory symptoms: cough, sore throat or shortness of breath.
	WHO <2011	Sudden onset of fever $>$ 38 C° AND cough OR sore throat in the absence of other diagnosis.
	WHO 2011	An acute respiratory illness with onset during the last 7 days with, measured temperature \geq 38°C, AND cough.
	WHO 2014	An acute respiratory infection with: measured fever of \geq 38 C° and cough; with onset within the last 10 days.
ARI	ECDC, WHO	Sudden/acute onset of at least one of the following four respiratory symptoms: cough, sore throat, shortness of breath, coryza; and a clinician's judgement that the illness is due to an infection.
SARI	WHO <2011	Onset of the following symptoms \leq 7 days prior to hospital admission: Fever >38°C AND cough OR sore throat AND shortness of breath or difficulty in breathing. <i>For children aged <5 years the IMCI case definition for pneumonia and severe pneumonia is applied.</i> *
	WHO 2011	An acute respiratory illness with onset during the previous 7 days requiring overnight hospitalization that includes: history of fever or measured fever of \geq 38°C, AND cough, AND shortness of breath or difficulty breathing.
	WHO 2014	An acute respiratory infection with: history of fever or measured fever of \geq 38 C°; and cough; with onset within the last 10 days; and requires hospitalization.

* Pneumonia: cough OR difficulty in breathing AND breathing faster than 40 breaths/minute (12 – 59 months); breathing faster than 50 breaths/minute (2 – 11 months); Severe pneumonia: cough OR difficulty in breathing AND any of the following general severe signs: unable to drink or breastfeed OR vomits everything OR convulsions OR lethargy or unconsciousness OR chest in drawing or stridor in a calm child.

Sampling strategies

- 1. Systematic sampling: samples are collected in a systematic way. This includes:
 - a. Interval sampling e.g. every 5th patient who meets the case definition is selected for testing and data collection.
 - b. Alternate day sampling e.g. select all patients who meet the case definition presenting to a facility on a certain day or days of the week.
- 2. Convenience sampling: this is also called ad hoc sampling and does not adhere to a pre-determined system e.g. 5 samples per week or the first 2 cases that meet the case definition are sampled.
- 3. All cases: samples are collected from all cases that meet the case definition.

Hospital*	Other**			
Severe acute	respiratory	Laboratory-co		
infection (SARI)		influenza		
Sentinel	Universal	Sentinel	Universal	

* Hospital-based surveillance can be carried out by "Severe acute respiratory infection" (SARI) surveillance or by "laboratory-confirmed influenza" surveillance. Both system types include patients that have been admitted to the hospital. In SARI surveillance, the number of SARI cases is reported and all or a subset are tested for influenza. In laboratory-confirmed surveillance, the cases that have been tested positive for influenza are reported.

** Other: this column includes other surveillance systems that do not fall under primary care and/or hospital-based surveillance.

Albania

Total population:	2,862,427	Income group:	upper middle

System characteristic	Primary car	e			Hospital*		Other**		
	Influenza-li	ke illness	Acute resp		Severe acut	e		y-confirmed	
	(ILI)		infection (ARI)		respiratory infection (SARI)		influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological			Clinical	Integrated clinical and virological			Integrated clinical and virological	
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2				Influenza, RSV & SARS-CoV-2			Influenza	
Reporting period	year round			Year-round	Year-round			year-round	
Population covered (%)	20.0%			100.0%	62.0%			100.0%	
Type of health facilities/ hospitals	General practice, pediatric practice, polyclinic			General practice, pediatric practices, polyclinic, emergency department in hospitals	7 regional hospitals, 2 university hospital centres (pediatric service infectious diseases service, intensive care service and lung disease hospital)			Regional and district hospitals, non sentinel hospitals and non sentinel primary care such as general and specialty practice, polyclinic, pediatric care etc	

System characteristic	Primary care				Hospital*		Other**		
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of health	6 facilities				9 hospitals			28 hospitals and	
facilities/								100 primary care facilities	
hospitals								Tacilities	
Number of									
primary care									
practitioners									
Case definition	WHO 2014			ECDC, WHO	WHO 2014			WHO 2014	
used									
Description of									
national case									
definition									
Year introduced	2009			1999	2009				2009
Epidemic	Yes			Yes	Yes				
threshold									
Sampling	Systematic			All cases	All cases			Convenience	
strategy	sampling.							sampling	
methodology									

System characteristic	Primary car	e			Hospital*		Other**		
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy	Sampling is performed in 4 polyclinics in Tirana and 1 in Durres and 1 Fier. The first 5 patients (on Tuesdays and Thursdays) are sampled at each polyclinic. Sampling of both pediatric and adult patients occurs			Sampling occurs when there is an increase in cases in different districts or age groups and in outbreaks	All SARI cases are sampled at all times (24hrs/7 days a week)			Sampling occurs when there is an increase in cases in different districts or age groups and in outbreaks	

Publicly available	Influenza	COVID-19	RSV
national bulletins	www.ishp.gov.al	www.ishp.gov.al, https://shendetesia.gov.al	No

Andorra

Total population:	81,011	Income group:	high	
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System	Primary ca	re			Hospital*				Other**
characteristic	Influenza-like illness		Acute respira	Acute respiratory		Severe acute		y-confirmed	
	(ILI)		infection (ARI)		respiratory	infection	influenza		
					(SARI)				
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance		Clinical	Integrated clinical		Integrated				
system			and virological		clinical and virological				
Respiratory			Influenza, RSV &		Influenza, RSV &				
pathogens tested			SARS-CoV-2		SARS-CoV-2				
for									
Reporting period		W40 (actual year)	W40 (actual year)		W40 (actual				
		to Week 20 (next	to Week 20 (next		year) to Week 20				
		year)	year)		(next year)				
Population		100.00%	100.00%		100.00%				
covered (%)									
Type of health		Emergencies	Emergencies		secondary level				
facilities/		department and	department						
hospitals		general practice							
Number of health			1		1				
facilities/									
hospitals									
Number of		83							
primary care									
practitioners									

System	Primary ca	are			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Case definition		WHO 2014			WHO 2014				
used									
Description of									
national case									
definition									
Year introduced		2000	2005		2009				
Epidemic		Yes	Yes		Yes				
threshold									
Sampling			Convenience		Convenience				
strategy			sampling		sampling				
methodology									
Sampling			all cases		all hospitalized				
strategy			diagnosed in the		cases are				
			emergencies department of		analyzed - all age group				
			the hospital on		are included in				
			Mondays are		the sampling				
			included						
			 all age group are included in 						
			the sampling						

Publicly available	Influenza	COVID-19	RSV
national bulletins	No	No	No

Armenia

Total population:	Fotal population:2,962,4		82	Income group:		:	uppe	er middle		
System characteristic	Primary o	care			Hospital*	Hospital*				
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza			
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal		
Surveillance system	Integrated clinical and virological			Integrated clinical and virological	Integrated clinical and virological				Virological	
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2			Influenza and RSV	Influenza, RSV & SARS-CoV-2				Influenza, RSV & SARS-CoV-2	
Reporting period	Year-round			Year-round	Year-round				Year-round	
Population covered (%)	N/A			100%	N/A				N/A	
Type of health facilities/ hospitals	Polyclinic			General practice, polyclinic	ICU, general ward, pediatrics ward, maternal healthcare institute				General practice, polyclinic	
Number of health facilities/ hospitals	5 facilities			All facilities	8 hospitals				All healthcare facilities	

System characteristic	Primary o	are			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acuinfection (ite respiratory SARI)	Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of primary care practitioners									
Case definition used	WHO 2014			ECDC, WHO	WHO 2014				Laboratory- confirmed influenza
Description of national case definition	WHO, 2014, including a history of fever within the last 10 days								
Year introduced	2010			1990	2010				2009
Epidemic threshold	No			Yes	No				No
Sampling strategy methodology	Systematic sampling			Convenience sampling	Systematic sampling				Convenience sampling

System characteristic	Primary o	are			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy	A different systematic sampling methodology is applied in each facility. The selection is random, so all age groups are represented			A small number of samples are taken and tested for influenza from ARI patients (2 per week)	A different systematic sampling methodology is applied in each facility. The selection is random, so all age groups are represented				

Publicly available	Influenza	COVID-19	RSV
national bulletins	No	Everyday data on registered cases is published on the website of the Ministry of Health and the National Centre for Disease Control and Prevention of the Ministry of Health of the Republic of Armenia (www.moh.am, www.ncdc.am)	No

Austria

Total population:	8,877,637	Income group:	high
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System	Primary care				Hospital*	Hospital*				
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza			
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal		
Surveillance system	Integrated clinical and virological								Virological	
Respiratory										
pathogens tested for										
Reporting period	Week 40-20								Week 40-20	
Population covered (%)	1.5%								Not available	
Type of health facilities/ hospitals	General practice, pediatric practice								Pediatricians, pediatric clinic, infectious disease hospital outpatient department and infectious disease hospital department	
Number of health facilities/ hospitals	180 facilities								Not available	
Number of primary care practitioners										

System	Primary car	e			Hospital*				Other**	
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza			
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	1	
Case definition	ECDC								ECDC	
used										
Description of										
national case										
definition										
Year introduced	2000/2001								1952	
Epidemic	Yes								No	
threshold										
Sampling	Convenience									
strategy	sampling									
methodology										
Sampling	Each sentinel site								No sampling	
strategy	collects 3-5 specimens per week								strategy. Physicians take nasopharyngeal swabs for diagnostic purposes	

Ρ	ublicly available	Influenza	COVID-19	RSV
n	ational bulletins	www.influenza.at	https://covid19-dashboard.ages.at	https://www.virologie.meduniwien.ac.at/wiss enschaft-forschung/virus-epidemiologie/rsv- netzwerk-oersn/

Azerbaijan

Total population:	9,854,050	Income group:	upper middle

System characteristic	Primary ca	ire			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological			Clinical	Integrated clinical and virological		Integrated clinical and virological		
Respiratory pathogens tested for									
Reporting period	Year-round				Year-round				
Population covered (%)	20.0%				2.9%		23.0%		
Type of health facilities/ hospitals	Pediatric practice, polyclinic				Infectious disease department in the hospital, pulmonology department of the hospital				

System characteristic	Primary ca	ire			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of health facilities/ hospitals	16 facilities				2 hospitals		18 facilities		
Number of primary care practitioners									
Case definition used	WHO <2011				WHO <2011				
Description of national case definition									
Year introduced	2009				2009				
Epidemic threshold	Yes				No				
Sampling strategy methodology	Systematic sampling				Systematic sampling				

System characteristic	Primary car	е			Hospital*	Other**			
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy	A sample is taken from every 3rd patient. All age groups are included				A sample is taken from every 3rd patient. All age groups are included				

Publicly available		COVID-19	RSV
national bulletins	No	-	-

Belarus

Total population:	9,465,675	Income group:	upper middle

System characteristic	Primary ca	re			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological		Integrated clinical and virological		Integrated clinical and virological				Virological
Respiratory pathogens tested for	Influenza & SARS-CoV-2		Influenza & SARS-CoV-2		Influenza & SARS-CoV-2				SARS-CoV-2 only
Reporting period	Year-round		Year-round		Year-round				Year-round
Population covered (%)	17.9%		61.5%		20.6%				100.0%

System characteristic	Primary ca	ire			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Type of health facilities/ hospitals	Pediatric practice (polyclinic), polyclinic (adults)		General practice, pediatric practice, polyclinic (adult), emergency ward, infectious disease ward, pulmonology ward		ICU, general, pediatrics, obstetrics, emergency, infectious disease, pulmonology hospitals/wards				ICU, general, pediatrics, obstetrics, infectious disease, pulmonology hospitals/wards
Number of health facilities/ hospitals	29 facilities		198 facilities		35 facilities				All facilities
Number of primary care practitioners									
Case definition used	WHO 2011		ECDC, WHO		WHO 2011				WHO 2011
Description of national case definition									
Year introduced	2010		2010		2010				2010

System characteristic	Primary ca	re			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory influenza	-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Epidemic threshold	Yes		Yes		No				No
Sampling strategy methodology	Convenience sampling		Convenience sampling		Convenience sampling				
Sampling strategy	During the epidemic and interepidemic period, 30 samples are collected per week (in total from sites that are included in the sentinel surveillance system in each region, from adults and children)		During the epidemic and interepidemic period, 30 samples are collected per week (in total from sites that are included in the sentinel surveillance system in each region, from adults and children)		During the epidemic and interepidemic period, 30 samples are collected per week (in total from sites that are included in the sentinel surveillance system in each region, from adults and children)				At the physician's discretion

Publicly available	Influenza	COVID-19	RSV
national bulletins	No	The information is published in the official Telegram channel of the	No
		Ministry of Health (daily) and on the website of the Ministry of Health	
		(periodically).	

Belgium

Total population:	11,502,704	Income group:	high

System	Primary car	e			Hospital*				Other**
characteristic	Influenza-li	ike illness	Acute respiratory infection		Severe acute		Laboratory-		
	(ILI)		(ARI)		respiratory infection		confirmed influenza		
					(SARI)				
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance	Integrated		Clinical		Integrated clinical				Integrated clinical
system	clinical and virological				and virological				and virological
Respiratory	Influenza, RSV				Influenza, RSV &				Influenza, RSV &
pathogens	& SARS-CoV-2				SARS-CoV-2				SARS-CoV-2
tested for									

System characteristic	Primary car	е			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respirato (ARI)	Acute respiratory infection (ARI)		nfection	Laborato confirme	ry- d influenza	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Reporting period	Clinical: year- round; Virological: week 40-20		Year-round		Most hospitals will start to report as soon as the ILI incidence of GP visits is increasing. Up till 2020, the surveillance ended at least 3 weeks after the (GP consultations for) ILI incidence dropped below the MEM epidemic threshold. Most years since 2012 the SARI surveillance ran from week 52 until week 16.				Year-round
Population covered (%)	1.3%		1.3%		The population covered is estimated at 9% of the Belgian population				Not available
Type of health facilities/ hospitals	General practice		General practice		General hospitals (all wards)				General hospitals (all wards)
Number of health facilities/ hospitals	83 facilities		83 facilities		6 hospitals				103 hospitals

System characteristic	Primary car	re			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laborato confirme	ry- d influenza	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of primary care practitioners Case definition used	National		National		National				
Description of national case definition	Sudden onset of fever with respiratory symptoms and general symptoms		Acute respiratory infection of the upper, medium or lower respiratory tract (including common cold, rhinitis, (rhino)pharyngitis, angina, sinusitis, otitis, laryngitis, (larynges)- tracheitis, bronchitis, bronchiolitis and (bronco)pneumonia) without influenza syndrome		Adapted from the SARI WHO 2014 case definition: an acute respiratory illness with onset within the last 10 days of history of fever, or measured fever of ≥ 38°c, and cough or dyspnea (shortness of breath or difficulty to breath) and requiring hospitalization (24h or more)				Samples from patients presenting with severe influenza in particular specific conditions: ARDS (acute respiratory distress syndrome), ECMO (extracorporeal membrane oxygenation), death, suspicion of antiviral resistance, returning from abroad or in case of outbreaks
Year introduced	1985		1985		2011-2012				2011-2012
Epidemic threshold	Yes		No		No				No
Sampling strategy methodology	Convenience sampling				All cases				Convenience sampling

System	Primary care				Hospital*	Other**			
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory- confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy	The first 2 ILI cases in a week seen by the GP		No samples collected		All hospitalized patients meeting the case definition are sampled				Only cases from patients with severe suspected influenza

Publicly available		COVID-19	RSV
national bulletins	Weekly bulletin respiratory infections https://epidemio.wiv- isp.be/ID/diseases/SiteAssets/Pages/Influenza/Wee klyBulletinRespiratoryInfections.pdf Epidemiology of infectious diseases https://epidemio.wiv- isp.be/ID/diseases/Pages/Influenza.aspx	There are daily bulletins and each Friday also a more comprehensive weekly report. The most recent bulletin can always be found on: <u>https://covid-</u> <u>19.sciensano.be/sites/default/files/Covid19/Derni%C3%A8re%20mise%20</u> <u>%C3%A0%20jour%20de%20la%20situation%20%C3%A9pid%C3%A9mi</u> <u>ologique.pdf</u>	RSV is one of the pathogens of which the epidemiological situation is weekly updated in the Weekly respiratory infections bulletin: <u>https://epidemio.wiv-</u> <u>isp.be/ID/diseases/SiteAssets/Pages/Influenz</u> <u>a/WeeklyBulletinRespiratoryInfections.pdf</u> (currently on p.7 and p.23)

Bulgaria

Total population:	6,975,761	Income group:	upper middle

System	Primary ca	re			Hospital*				Other**
characteristic	Influenza-like illness (ILI)			Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system			Integrated clinical and virological						Virological
Respiratory pathogens tested for			Influenza & SARS-CoV-2						Influenza, RSV & SARS-CoV-2
Reporting period			Year-round						Year-round
Population covered (%)			5.4%						
Type of health facilities/ hospitals			General practices						General practices, polyclinics, intensive care/critical care units, infectious disease hospital and wards, pediatric hospital and wards, pulmonary wards, and general hospitals

System	Primary ca	are			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute resp infection (Severe act respirator (SARI)	ute y infection	Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of health			218 facilities						40 hospitals
facilities/									
hospitals									
Number of									
primary care									
practitioners									
Case definition used			ECDC, WHO						ECDC - ILI and ARI case definitions
Description of									demilitions
national case									
definition									
Year introduced			2001						1958
Epidemic			Yes						No
threshold									
Sampling			Convenience						
strategy			sampling						
methodology									

System	Primary ca	are			Hospital*	Hospital*				
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza			
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	1 1	
Sampling strategy			10-20 cases from each of the 28 regions of the country that meet the case definition are sampled. All age groups are included in the sampling. Information available: age, sex, geographical information, diagnosis, data of sampling procedure does not differ between the start and the peak of the season. All cases are included in the sampling strategy.						According to the decision of the doctors. All age groups are included in the sampling. Information available: age, sex, geographica information, diagnosis, data of sampling. The sampling procedure does not differ between the start and the peak of the season. All cases are included in the sampling strategy.	

Publicly available	Influenza	COVID-19	RSV
national bulletins	Информационна система	-	-

за събиране и анализиране на данни за заболяемостта от грип и ОРЗ в	
България [in Bulgarian] https://grippe.gateway.bg/page.php?category=4	

Croatia

Total population:	4,065,253	Income group:	high	
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System	Primary ca	are			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance		Clinical							
system									
Respiratory									
pathogens tested									
for									
Reporting period		Week 40/current year - week 20/next year							
Population		100.0%							
covered (%)									
Type of health facilities/		General practice and pediatrics practice							
hospitals		within the primary care							

Number of health	Data from around				
	2570 primary				
facilities/	healthcare facilities				
hospitals	are collected by 21				
-	county				
	epidemiological units				
	and sent by email to				
	the Croatian Institute				
	of Public Health.				
	However, according				
	to our survey				
	conducted two years				
	ago, there is				
	substantial difference				
	in reporting rate				
	among the primary				
	healthcare sites that				
	are supposed to				
	report weekly ILI				
	data. Currently we				
	are exploring				
	possibilities to get				
	ILI data based on				
	the ICD-10 codes				
	directly from the IS				
	from the Healthcare				
	Insurance Fund. If				
	this will be feasible,				
	we plan to analyze				
	data from the last 3-				
	5 flu seasons to				
	estimate the baseline				
	(and compare with				
	the data obtained				
	directly from the				
	physicians during the				
	respective time). We				
	think that this kind of				
	data collection would				

System	Primary ca	are			Hospital*				Other**	
characteristic	Influenza-like illness (ILI)			Acute respiratory infection (ARI)		ute y infection	Laboratory-confirmed influenza			
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal		
		be more accurate in reflecting actual epi situation. Moreover, we could have all- year around ILI surveillance on weakly basis.								
Number of		Weakly Dasis.								
primary care										
practitioners										
Case definition used		ECDC								
Description of										
national case										
definition										
Year introduced		1975	l							
Epidemic threshold		Yes								
Sampling strategy methodology		Convenience sampling								

System characteristic	Primary care				Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	1
Sampling strategy		We do not have sampling strategy for ILI cases in place. Certain number of ILI cases gest tested based on the decision of the primary care physicians. We have developed protocol to establish sentinel ILI surveillance in several primary care offices in parallel with already existing universal ILI reporting, so we could get estimate the proportion of reported ILI cases due to confirmed influenza virus, but							
		reported ILI cases due to confirmed							

Publicly available	Influenza	COVID-19	RSV	
national bulletins	Weekly ILI report: <u>https://www.hzjz.hr/?s=gripa</u>			
	NIC report:	-	-	
	http://gripa.hr/content/szo/tjedno_izvjesce.aspx			
Cyprus

Total population:	880,582	Income group:	high
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System	Primary care	2			Hospital*				Other**
characteristic	Influenza-like illness (ILI)			Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological		Clinical					Integrated clinical and virological	Virological
Respiratory pathogens tested for									
Reporting period	Week 40-20		Week 40-20					Week 40-20	Week 40-20
Population covered (%)								90.0%	>80%
Type of health facilities/ hospitals	Pediatric outpatient department in public hospitals; adult outpatient department in public hospitals; offices of primary health care pediatrician and adult-care physicians practicing in the private sector		Pediatric outpatient department in public hospitals; adult outpatient department in public hospitals; offices of primary health care pediatrician and adult-care physicians practicing in the private sector					Nearly all hospitals in the private and public sectors	Public hospitals and Public Health Centers

System	Primary care	2			Hospital*	:			Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of health facilities/ hospitals	Clinical: 55 facilities; Virological: 18 public health physicians collect specimens for influenza diagnosis		55 facilities					9 hospitals	
Number of									
primary care practitioners									
Case definition used	National		National						
Description of national case definition	Sudden appearance of fever >39°C for at least 2 days AND respiratory symptoms, malaise, myalgia, headache							Severe acute respiratory illness requiring hospitalization including ICU admissions with confirmed virological specimen for influenza	
Year introduced	2003		2003					2013	
Epidemic threshold	No		No					No	
Sampling strategy methodology	Convenience sampling								

System	Primary car	Primary care				Hospital*				
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza			
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal		
Sampling	5-7 specimens									
strategy	are collected from each site per week									

Publicly available	Influenza	COVID-19	RSV
national bulletins	No	https://www.pio.gov.cy/coronavirus/eng/categories/information-guidelines (The National reports are under the epidemiological surveillance tab) https://www.pio.gov.cy/coronavirus/categories/press#30 (Daily reports are under the 3rd tab - only in Greek)	No

Czechia

Total population:	10,669,324	Income group:	high	
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System	Primary care				Hospital*	:			Other**
characteristic	Influenza-like illness (ILI)		Acute respirate	ory	Severe a	cute	Laborato	ry-	
			infection (ARI)		respiratory infection		confirmed influenza		
		-		-	(SARI)	-			
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance	Integrated clinical		Integrated clinical			Integrated clinical			Virological
system	and virological		and virological			and virological			
Respiratory									
pathogens									
tested for									
Reporting period	Clinical: year-round; Virological: week 40- 20		Clinical: year-round; Virological: week 40- 20			Year-round			
Population	~50%		~50%			~100%			
covered (%)									
Type of health facilities/ hospitals	General practice, pediatric practice		General practice, pediatric practice			All ICUs			
Number of health facilities/ hospitals	3470 facilities		3470 facilities						
Number of									
primary care									
practitioners									

System	Primary care				Hospital [*]	ĸ			Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory- confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Case definition used	ECDC.		ECDC, WHO			WHO 2014.			ECDC
Description of national case definition						WHO 2014 (with modification for necessity of hospitalization at ICU)			
Year introduced	2004		1956			2010			1956
Epidemic threshold	Yes		Yes			No			No
Sampling strategy methodology	Convenience sampling		Convenience sampling			All cases			
Sampling strategy	One sample from general practice and one sample from pediatric practice per week from all regions are collected during the influenza season (week 40-20)		One sample from general practice and one sample from pediatric practice per week from all regions are collected during the influenza season (week 40-20)						Upon request from the non- sentinel site

Publicly available	Influenza	COVID-19	RSV
national bulleting	Zpráva o chřipkové aktivitě, hlášení a výsledky laboratorních vyšetření [in Czech language only] http://www.szu.cz/tema/prevence/hlaseni-a- vysledky	in Czech language only at <u>https://onemocneni-aktualne.mzcr.cz/covid-19</u> <u>http://www.szu.cz/tema/prevence/celogenomova-sekvenace-v-cr-2021-</u> <u>souhrnna-zprava</u>	No

Denmark

Total population:		5,825,3	337	Incom	e group:		high		
System	Primary care		Hospital*				Other**		
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory- confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological					Integrated clinical and virological			Virological
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2								
Reporting period	Week 40-20. From 2021-22 this will change to year-round								Year-round
Population covered (%)	~3%								100.0%
Type of health facilities/ hospitals	General practice								All
Number of health facilities/ hospitals	100 facilities. Will be increased to ~150 in 2021-22								All national hospitals, out- patients clinics and GPs
Number of primary care practitioners									
Case definition used	ECDC								

Description of					
national case					
definition					
Year introduced	1994				2010
Epidemic	Yes				No
threshold					
Sampling	Systematic sampling				All cases
strategy					
methodology					
Sampling	GPs are asked to				There are
strategy	swab 2 patients with				national
	ILI each week. All age groups and				guidelines for when to swab
	patient groups.				patients in and
	patient groups.				outside
					hospitals
					during and
					outside the
					influenza
					season.

Publicly available	Influenza	COVID-19	RSV
national bulletins	https://www.ssi.dk/Aktuelt/Nyhedsbreve/INFLUENZ	https://covid19.ssi.dk/	https://www.ssi.dk/sygdomme-beredskab-
	<u>A-NYT.aspx</u>		og-forskning/sygdomsovervaagning/r/rs-
			virusovervaagning

Estonia

Total population:	1,326,898	Income group:	high

System	Primary care	9			Hospital*		Other**		
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological			Clinical				Clinical	Virological
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2								
Reporting period	Year-round			Year-round				Year-round	
Population covered (%)	13.1%			100.0%			Not available	Not available	Not available
Type of health facilities/ hospitals	General practice, polyclinic, family doctor			General practice, pediatric practice, polyclinic, family doctor				 Laboratory Laboratory confirmed influenza hospitalisation from all hospitals reported through e-register Case-based data from region and central hospitals about laboratory confirmed influenza cases 	

System	Primary care	е			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of health facilities/ hospitals	19 facilities			431 facilities				11 hospitals	
Number of primary care practitioners									
Case definition	ECDC			ECDC, WHO			Not available		Not available
Description of national case definition									
Year introduced	2006			1954			2011	2019	2000
Epidemic threshold	Yes			Yes			No		No
Sampling strategy methodology	Convenience sampling			Convenience sampling				All cases	Convenience sampling
Sampling strategy	Each sentinel site collects up to 10 specimens per week from cases that meet the ECDC case definition. All age groups are included.			Depends on doctor's decision; non-systematic.					

Publicly available	Influenza	COVID-19	RSV
national bulletins	http://www.terviseamet.ee/nakkushaigused/gripi- info.html	https://www.terviseamet.ee/et/uuskoroonaviirus https://www.terviseamet.ee/sites/default/files/Nakkushaigused/ulevaade	No

Finland

Total population:	5,523,904	Income group:	high	
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System	Primary car	е			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological		Integrated clinical and virological					Virological	Virological
Respiratory pathogens tested for									
Reporting period	Clinical: year- round; Virological: weeks 40-20		Clinical: year- round; Virological: weeks 40-20					Clinical: year- round; Virological: weeks 40-20	Clinical: year- round; Virological: weeks 40-20
Population covered (%)	50.0%		50.0%					Not known. All ICUs in Finland are included; specimens are collected on sentinel basis.	100.0%
Type of health facilities/ hospitals	General practice		General practice					Intensive care unit	All hospitals and outpatient clinics
Number of health facilities/ hospitals	Clinical: 160 facilities; Virological: 25 facilities		Clinical: 160 facilities; Virological: 25 facilities					13 intensive care units	All hospitals and outpatient clinics

System	Primary ca	re			Hospital*		Other**		
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of									
primary care practitioners									
Case definition used	ECDC		ECDC, WHO					ARI treated in intensive care unit	No case definition used
Description of national case definition									
Year introduced	2013		2013					2014	1995
Epidemic threshold	No		No					No	No
Sampling strategy methodology	Convenience sampling		Convenience sampling					Convenience sampling	Convenience sampling
Sampling strategy	Up to 5 specimens are collected per week.		Up to 5 specimens are collected per week.					Defined on clinical basis. All ICUs are asked to send 5-10 clinical samples from patients with clinically suspected influenza infection that require intensive care.	Defined on clinical basis.

	able Influenza	COVID-19	RSV
national bulle	tins <u>https://thl.fi/fi/web/infektiotaudit/taudit-ja-</u> mikrobit/virustaudit/influenssa/ajantasainen-	-	-
	influenssakatsaus		

France

Total population:	64,668,129	Income group:	high

System	Primary care				Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute resp	iratory	Severe acute res	piratory	Laboratory	-confirmed	
			infection (ARI)		infection (SARI)		influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological		Integrated clinical and virological.		Integrated clinical and virological		Integrated clinical and virological		Virological
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2		Influenza, RSV & SARS-CoV-2		Influenza, RSV & SARS- CoV-2		Influenza		Influenza, RSV & SARS-CoV-2
Reporting period	will start Week 35- 21		will start Week 35-21		year round		will start Week 35-21		Week 40-21
Population covered (%)									
Type of health facilities/			General practice		secondary/tertiary care hospitals		Intensive care unit		General hospitals
hospitals Number of health facilities/ hospitals					3 hospitals		190 wards /hospitals		
Number of primary care practitioners	Clinical: 305 GP; Virological: 183 GP		Clinical: 305 GP; Virological: 183 GP						

System	Primary care				Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute resp	iratory	Severe acute	e respiratory	Laborator	y-confirmed	1
			infection (ARI)		infection (SARI)		influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Case definition used	National		National		WHO 2014		Laboratory- confirmed influenza and cases diagnosed as influenza by the clinician		No case definition used
Description of national case definition	Sudden onset of fever >= 39°C with muscle pain and respiratory signs		Sudden onset of fever with ARI symptoms						
Year introduced	1984		2020		2021		2009		1994
Epidemic threshold	No		No		No		No		No
Sampling strategy methodology	Systematic sampling		Systematic sampling		all cases		All cases		
Sampling strategy	First ARI case of the week, irrespective of age. No difference in sampling procedure between start and peak of the season. If the patient has an ILI, it is mentioned on the clinical questionnaire.		First ARI case of the week, irrespective of age. No difference in sampling procedure between start and peak of the season.						No sampling strategy. All samples taken from in- patients for diagnosis of influenza

Publicly available	Influenza	COVID-19	RSV
national bulletins	https://www.santepubliquefrance.fr/maladies-et-	https://www.santepubliquefrance.fr/maladies-et-traumatismes/maladies-	https://www.santepubliquefrance.fr/maladies
	traumatismes/maladies-et-infections-	et-infections-respiratoires/infection-a-coronavirus/documents/bulletin-	-et-traumatismes/maladies-et-infections-
	respiratoires/grippe	national/covid-19-point-epidemiologique-du-5-aout-2021	respiratoires/bronchiolite

Georgia

Total population:	3,722,716	Income group:	upper middle

System characteristic	Primary ca	are			Hospital*	Hospital*			
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological				Integrated clinical and virological				Virological
Respiratory pathogens tested for									
Reporting period	Year-round				Year-round				Year-round
Population covered (%)	1.7%				N/A				N/A

System characteristic	Primary ca	are			Hospital*				Other**
		Influenza-like illness (ILI)		ratory .RI)	Severe acute infection (SA	e respiratory ARI)	Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Type of health facilities/ hospitals	General practice, pediatric practice, polyclinic				Children's hospital in Tbilisi and sentinel institutions in Kutaisi (4 hospitals) The following wards are included: resuscitation and intensive care, general therapeutics, pediatrics, obstetrics and gynecology, infectious disease, respiratory pathology, chronic pathology				Hospitals in Batumi, Akhaltsikhe and Zugdidi (virological surveillance only)
Number of health facilities/ hospitals	2 facilities				5 hospitals				N/A
Number of primary care practitioners									

System characteristic	Primary ca	are			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Case definition used	WHO 2014				WHO 2014				PAHO/WHO, 2014, atypical cases of SARI
Description of national case definition	Measured fever of \geq 38 °C and cough; with onset within the last 10 days				Measured fever of ≥ 38 °C and cough; with onset within the last 10 days; requires hospitalization				
Year introduced	2007				2007				2015
Epidemic threshold	No				No				No
Sampling strategy methodology	Systematic sampling				Systematic sampling				
Sampling strategy	Every third patient with ILI on Tuesdays and Thursdays				Every patient with ILI on Tuesdays and Thursdays				ICU patients and every atypical SARI case

Publicly available	Influenza	COVID-19	RSV
national bulletins	National Bulletin is issued at the end of the season	-	-
	(http://www.ncdc.ge/Handlers/GetFile.ashx?ID=07		

6a3d35-f135-4995-881f-7515fbd95ff9), however information on influenza activity during the season	
is updated weekly/daily on the NCDC homepage TM: Link:	
<u>http://ncdc.ge/Pages/User/News.aspx?ID=0bfb508</u> <u>4-0108-4b9a-9b96-4d796359f1be</u>	

Germany

Total population:	80,475,076	Income group:	high

System	Primary c	are		Hospital*				Other**	
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory- confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system			Integrated clinical and virological		Clinical				Virological
Respiratory pathogens tested for			Influenza, RSV & SARS-CoV-2		SARS-CoV-2 only				
Reporting period			Year-round		Year-round				Year-round
Population covered (%)			>1%		>5%				
Type of health facilities/ hospitals			General practice, pediatric practice		Hospitals with general wards				General practice, pediatric practice, hospitals, other laboratories
Number of health facilities/ hospitals			~ 800 practices in season 2020/2021		72 hospitals				
Number of primary care practitioners									
Case definition used			National		National				

System	Primary o	are		Hospital*			Other**		
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory- confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Description of national case definition			Patients with pharyngitis, bronchitis or pneumonia (with or without fever); Usage of ICD-10 codes for ARI: J00 – J22, B34.9, J44.0		Admitted patients with ICD-10 codes J09-J22				
Year introduced			1992		2015				1998
Epidemic threshold			No		No				No
Sampling strategy methodology			Convenience sampling		All cases				Convenience sampling
Sampling strategy			From season 2021/22: Specimens collected from the first ARI patients per week in different age groups; until season 2020/21: sampling of ILI- patients (using the ECDC case definition).		All SARI cases tested in hospital				No sampling strategy. Virological samples are sent to the NIC for further analysis/characterization from different sources.

Publicly available	Influenza	COVID-19	RSV
national bulletins		Weekly Situation Reports (German):	
		https://www.rki.de/DE/Content/InfAZ/N/Neuartiges Coronavirus/Situation	
		sberichte/Wochenbericht/Wochenberichte_Tab.html	
	https://influenza.rki.de/		-
		Short daily Situation Reports (English)	
		https://www.rki.de/EN/Content/infections/epidemiology/outbreaks/COVID-	
		19/Situationsberichte_Tab.html	

Greece

Total population:	10,7		32,898	2,898 Income gro			high		
System	Primary care	2			Hospital*		Other**		
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological					Integrated clinical and virological		Integrated clinical and virological	
Respiratory pathogens tested for	Influenza & SARS-CoV-2					Influenza & SARS-CoV-2		Influenza	
Reporting period	Week 40-20					Week 40-20		Year-round	
Population covered (%)	~1.5%					100.0%		100.0%	
Type of health facilities/ hospitals	Primary health care centres, private practitioners					All ICUs		All health facilities of the country including private practice offices	
Number of health facilities/	130 facilities								
hospitals									
Number of									
primary care									
practitioners									

System	Primary care	9			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		-	Acute respiratory infection (ARI)		ute y infection	Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Case definition used	ECDC					National		National	
Description of national case						Laboratory confirmed influenza		Laboratory confirmed influenza	
definition						IIIIuenza		IIIIIueiiza	
Year introduced	2004 (revised in 2014)					2010		2004	
Epidemic threshold	No					No		No	
Sampling strategy methodology	Convenience sampling					All cases		All cases	
Sampling strategy	Sampling plan: all age groups, at sentinel physician's discretion, up to 5 per week.								

Publicly available	Influenza	COVID-19	RSV
national bulletins	https://eody.gov.gr/wp- content/uploads/2020/10/20.2021-FLU-WEEK.pdf	https://eody.gov.gr/wp-content/uploads/2021/08/covid-gr-daily-report- 20210830.pdf	-

Hungary

Total population:	9,771,141	Income group:	high

System	Primary care	9			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological								Virological
Respiratory	Influenza & RSV								
pathogens tested for									
Reporting period	Week 40-20								Week 40-20
Population covered (%)	>20%								Not available
Type of health facilities/	General practice, pediatric practice								
hospitals Number of health	1317 facilities								Not available
facilities/ hospitals									
Number of primary care									
practitioners									
Case definition used	ECDC								No specified case definition

System	Primary car	е			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Description of									
national case									
definition									
Year introduced	2005								
Epidemic	Yes								No
threshold									
Sampling	Convenience								
strategy	sampling								
methodology									
Sampling	Doctors are								Sampling is
strategy	advised to collect 2 specimens of ILI patients per week per site								performed for diagnostic purposes

Publicly available		COVID-19	RSV
national bulletins	https://www.antsz.hu/felso_menu/temaink/jarvany/	-	_
	influenza		

Iceland

Total population:	366,463	Income group:	high	
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System	Primary ca	ire			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system		Integrated clinical and virological		Clinical				Integrated clinical and virological	Integrated clinical and virological
Respiratory pathogens tested for									
Reporting period		Year-round		Year-round				Year-round	Year-round
Population covered (%)		100.0%		100.0%				100.0%	100.0%
Type of health facilities/ hospitals		General practice, emergency department, long term care, selected private practitioners		General practice, emergency department				All health care facilities	
Number of health facilities/ hospitals		94 facilities		94 facilities					
Number of primary care practitioners									

System	Primary ca	are			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Case definition used		National		National				ECDC	
Description of national case definition		ICD-10 codes J09, J10 and J11 with subcodes		Selected ICD-10 codes for respiratory symptoms and infections					
Year introduced		2009		2011				2009	
Epidemic threshold		Yes		No				No	
Sampling strategy methodology									
Sampling strategy		No sampling strategy. Sampling is based on clinical suspicion for diagnostic purposes						No sampling strategy	

Publicly available	Influenza	COVID-19	RSV
national bulletins	https://www.landlaeknir.is/influensa/	https://www.covid.is/ https://www.landlaeknir.is/koronaveira/	N/A

Ireland

Total population:	4,977,400	Income group:	high	
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System	Primary of	care		Hospital*				Other**	
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universa I	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological		Integrated clinical and virological		Integrated clinical and virological				Virological
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2		SARS-CoV-2 only		Influenza, RSV & SARS-CoV-2				Influenza & RSV
Reporting period	Year-round		Year-round		Year-round				Year-round
Population covered (%)	6.6%		6.6%		7.6%				Not available
Type of health facilities/ hospitals	General practice		General practice		Hospital				Hospitals, GPs and nursing homes (excluding sentinel GPs)
Number of health facilities/ hospitals	61 facilities		61 facilities		One				Not available
Number of primary care practitioners									

System	Primary	care			Hospital*				Other**
characteristic	Influenza illness (I		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universa I	Sentinel	Universal	Sentinel	Universal	
Case definition used	ECDC		National		WHO 2014				Testing based on clinical need
Description of national case definition			https://www.hpsc.ie/a- z/respiratory/coronavirus/n ovelcoronavirus/casedefiniti ons/covid- 19interimcasedefinitionforir eland/						
Year introduced	2000		2020		2021				2000
Epidemic threshold	Yes								
Sampling strategy methodology	All cases		All cases		All cases				All cases
Sampling strategy									All cases reported

Publicly available		COVID-19	RSV
national bulletins	http://www.hpgs.io/p	https://www.hpsc.ie/a- z/respiratory/coronavirus/novelcoronavirus/surveillance/	RSV data are reported in Influenza surveillance reports <u>http://www.hpsc.ie/a-</u> z/respiratory/influenza/seasonalinfluenza/sur <u>veillance/influenzasurveillancereports/</u> . RSV is notifiable in Ireland and data on RSV notifications are also reported in HPSC's weekly infectious disease report. <u>https://www.hpsc.ie/notifiablediseases/weekl</u> yidreports/

Israel

Total population: 9,054,10	0 Income group:	high
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System	Primary care				Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	1
Surveillance	Clinical.								Integrated
system									clinical and virological
Respiratory	Influenza & RSV								
pathogens tested for									
Reporting period	Year-round								Year-round.
Population covered (%)	25.0%								25.0%
Type of health facilities/ hospitals	General practice, pediatric practice. Community clinics of the 2nd largest health maintenance organization in the country								Tertiary medical center
Number of health facilities/ hospitals	33 clinics - this is related to laboratory surveillance only								1 hospital

System characteristic	Primary care				Hospital*	Hospital*			
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		Other**
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	1 1
Number of primary care practitioners									
Case definition used	National								Hospitalized ARI cases
Description of national case definition	Acute fever of at least 37.8° accompanied by at least one of the following symptoms: runny nose, sore throat, cough, myalgia								
Year introduced	2000								2000
Epidemic threshold	Yes								No
Sampling strategy methodology	Convenience sampling								All cases
Sampling strategy	Convenience sampling. Swabs are taken from some ILI cases. Swabs are taken on the first or second day of illness.								Hospitalized ARI cases

Influenza COVID-19 RSV

Publicly available national bulletins	https://www.gov.il/en/departments/publications/?li mit=10&OfficeId=104cb0f4-d65a-4692-b590- 94af928c19c0&utm_source=go.gov.il&utm_medium =referral	https://www.gov.il/en/departments/publications/?limit=10&OfficeId=104c b0f4-d65a-4692-b590- 94af928c19c0&utm_source=go.gov.il&utm_medium=referral	https://www.gov.il/en/departments/publicatio ns/?limit=10&OfficeId=104cb0f4-d65a-4692- <u>b590-</u> 94af928c19c0&utm_source=go.gov.il&utm_ medium=referral
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Italy

Total population:	59,729,080	Income group:	high	
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System	Primary care	e			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe act respirator (SARI)	ute y infection	Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological							Integrated clinical and virological	Virological
Respiratory pathogens tested for	Influenza & SARS-CoV-2							Influenza	Influenza & SARS-CoV-2
Reporting period	Clinical: week 42-17; Virological: week 46-17							Week 42-17	Week 46-17
Population covered (%)	Clinical: at least 2% of the regional population of each age group							100.0%	100.0%
Type of health facilities/ hospitals	General practice, pediatric practice							Hospitals	Hospitals
Number of health facilities/ hospitals								417	1000

System	Primary ca	Primary care				Hospital*				
characteristic	Influenza-like illness (ILI)			Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		y-confirmed		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal		
Number of primary care practitioners	1,200									
Case definition	ECDC							National	Not available	
Description of national case definition								Every hospitalized patient in ICU and/or in ECMO with SARI (according to the WHO 2011 case definition) and/or ARDS symptoms is eligible. Only the positive cases for any of the influenza viruses are reported.		
Year introduced	1999							2009	2009	
Epidemic threshold	Yes							No	No	
Sampling strategy methodology	Convenience sampling							All cases	Convenience sampling	

System	Primary care	Primary care							Other**	
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza			
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal		
Sampling	The protocol							All cases	Not available	
strategy	requests collection of at least 2 swabs per week for each MD by age group with no differences between the start and the peak of the season.							hospitalized in ICU and/or in ECMO with SARI and ARDS symptoms confirmed for influenza must be reported.		

Publicly available	Influenza	COVID-19	RSV
national bulletins	Two weekly bulletins (epi and vir) in Italian	Weekly epi bulletin in Italian language [
	language	https://www.epicentro.iss.it/coronavirus/sars-cov-2-sorveglianza-dati] and	No
	https://w3.iss.it/site/RMI/influnet/pagine/rapportoI	by-weekly variant SARS-CoV-2 bulletin [https://www.iss.it/cov19-cosa-fa-	NO
	nflunet.aspx	<u>iss-varianti</u>]	

Kazakhstan

Total population:		18,5	13,673	Ir	come group:	upper middle		iddle		
System characteristic	Primary care	2			Hospital*				Other**	
Characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza			
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal		
Surveillance system	Integrated clinical and virological			Integrated clinical and virological	Integrated clinical and virological					
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2			Influenza, RSV & SARS-CoV-2	Influenza, RSV & SARS-CoV-2					
Reporting period	Year-round			From W40 to W20, but ARVI cases are recorded all year round	Year-round					
Population covered (%)	8.8%			100.0%						

System characteristic	Primary care	9			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory influenza	/-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Type of health facilities/ hospitals	Children's polyclinic, adult polyclinic			Polyclinics (for children and adults), infectious disease hospital, state hospital, pulmonary ward	Hospital departments: general, pediatric, pulmonary, infectious disease				
Number of health facilities/ hospitals	30 facilities				27 hospitals				
Number of primary care practitioners									
Case definition used	WHO 2011				WHO 2014				
Description of national case definition									
Year introduced	2008				2008				
Epidemic threshold	No			Yes	No				

System characteristic	Primary ca	re			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy methodology	Systematic sampling			Convenience sampling	Systematic sampling				

Sampling	Samples are taken	Monthly, in at	Samples are			
trategy	from patients over	least 10 patients	taken from			
	1 year of age who	with ARVI,	patients with			
	meet the standard	influenza, with	SARI (in children			
	ILI case definition	pronounced	over 1 year of			
	and have been ill	clinical	age, no later			
	no more than 72	symptoms in the	than 72 hours			l
	hours, with a	pre-epidemic and	from the onset			
	minimum of 3 and	epidemic periods	of the disease;			
	no more than 5	of ARVI and	for people over			
	patients from	influenza	18, no later than			
	each age group:		7 days from the			
	1-4, 5-14, 15-29,		onset of the			
	30–64, 65 and		disease). Swabs			ĺ
	older. Collection		are taken from			
	of samples from		not more than 1			
	ILI patients is		patient daily			
	carried out by a		from each age			
	mobile team at		group: 1–4 and			
	the patient's		5–14 in			
	house. Each		children's			
	polyclinic sends a		hospitals, 15–29,			
	mobile team with		30–64, 65 and			
	a clinical physician		older in adult			
	to the patients		hospitals. Over			
	who are subject to		the week, at			
	laboratory		least 3 people			
	examination: in a		from each age			
	four-week month,		group are			
	once; in a five-		examined (with			
	week month,		the total number			1
	twice. If there		for all age			
	was no visit for		groups per week			1
	some reason, the		is at least 15).			
	schedule for that					1
	day may include					ĺ
	taking samples at					ĺ

System characteristic	Primary care				Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
	the polyclinic's triage point.								

Publicly available	Influenza	COVID-19	RSV
national bulletins	Information is posted weekly on the sites mz.gov.kz, npc-ses.kz, ses.dec.kz and sent by mail to all stakeholders	We do not have a national bulletin, but all information on COVID-19 in the country and the world is posted weekly on the sites https://hls.kz, mz.gov.kz and npc-ses.kz	No

Kyrgyzstan

Total population:	6,456,500	Income group:	lower middle

System characteristic	Primary ca	re			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological			Clinical	Integrated clinical and virological		Virological		Clinical
Respiratory pathogens tested for									
Reporting period	Weekly, year- round			Weekly, year- round	Weekly, year- round		Weekly, year- round		Weekly, year- round
Population covered (%)	N/A		100.0%	N/A					

System characteristic	Primary ca	are			Hospital*	Hospital*			
	Influenza- (ILI)	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Type of health facilities/ hospitals	Polyclinics			Polyclinics and hospitals	Hospitals		It is carried out using PCR in the National Virological Laboratory and in 3 virological laboratories of the Centers for Disease Control and Prevention and state sanitary and epidemiological surveillance (in the cities of Osh and Bishkek and in the Ysyk-Ata District).		
Number of health facilities/ hospitals	4 facilities			All healthcare organizations in the republic excluding private ones	5 hospitals		At the moment, confirmation is carried out in 4 virological laboratories		
Number of primary care practitioners									

System characteristic	Primary ca	Primary care				Hospital*			
	Influenza-like illness (ILI)			Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Case definition used	WHO 2014			National	WHO 2014				
Description of national case definition	Standard case definition for influenza-like illness (ILI): An acute respiratory illness with onset during the last 7 days with: • measured temperature \geq 38 °C; • cough			Acute upper respiratory infections of multiple and unspecified sites (code J06 according to ICD- 10)	Standard case definition for Severe Acute Respiratory Infection (SARI): an acute respiratory disease with onset during the last 7 days, requiring hospitalization and characterized by: • a history of fever or measured fever ≥ 38°C; • cough		An influenza case confirmed by one of the laboratory diagnostic methods recommended for the diagnosis of influenza in the country		
Year introduced	2016			2009	2009		2005		
Epidemic threshold	No			Yes	No		No		Yes

System characteristic	Primary ca	are			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy methodology	Convenience sampling				Convenience sampling				
Sampling strategy	The first patients who applied, older than 1 year, meeting the standard case definition of ILI, at least 3 patients from each treatment group within a week, with disease duration no more than 7 days from onset			No samples collected	The first patients who applied, older than 1 year, meeting the standard case definition of SARI, at least 3 patients from each treatment group within a week, with disease duration no more than 7 days from onset				

Publicly available	Influenza	COVID-19	RSV
	The website of the Department of Disease Prevention and State Sanitary and Epidemiological Surveillance is currently being revised, providing a special section on influenza to reflect the relevant	-	-
	activities.		

Latvia

Total population:	1,913,822	Income group:	high	
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System	Primary care	9			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance	Clinical		Integrated		Clinical				Virological
system			clinical and virological						
Respiratory									
pathogens tested									
for									
Reporting period	Week 40/2020 to week/2021		Week 40/2020 to week/2021		Week 40/2020 to week/2021				Year-round
Population covered (%)	4.8%		4.8%						
Type of health facilities/ hospitals	General practice, pediatric practice		General practice, pediatric practice		8 regional hospitals and 2 hospitals in capital city				All types of hospitals and outpatient facilities
Number of health facilities/ hospitals					10 hospitals				
Number of primary care practitioners	57 general practitioners		57 general practitioners						

System	Primary care	Primary care			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Case definition used	ECDC		ECDC, WHO		National				
Description of national case definition					By ICD-10 influenza and influenza- associated pneumonia.				
Year introduced	1995		1995		2006				
Epidemic threshold	Yes		Yes		No				No
Sampling strategy methodology	Convenience sampling		Convenience sampling		Convenience sampling				Convenience sampling
Sampling strategy	ILI cases are preferably sampled at the GPs sentinel sites and include patients in all age groups. No specimens for sentinel were taken in the 2020-2021 season by GPs								Hospitalized severe ILI cases are sampled at any time (24 hrs./7 days per week).

Publicly available	Influenza	COVID-19	RSV
national bulletins	The influenza bulletins are published weekly (from week 40 till week 20), also available bulletin for the	Statistics of COVID-19 : https://www.spkc.gov.lv/lv/covid-19-statistika	No

season: https://www.spkc.gov.lv/lv/parskati-par-	
akutu-augsejo-elpcelu-infekciju-un-gripas-izplatibu	

Lithuania

Total population:	2,794,633	Income group:	high

System	Primary car	е			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological		Integrated clinical and virological						
Respiratory	Influenza only		Influenza & RSV						Influenza, RSV &
pathogens tested for									SARS-CoV-2
Reporting period	Year-round		Year-round						Year-round
Population covered (%)	2.2%		2.2%						
Type of health facilities/	General practice		General practice						
hospitals									
Number of health facilities/ hospitals	109 facilities		109 facilities						
Number of primary care practitioners									
Case definition used	ECDC		ECDC, WHO						

System	Primary ca	ire			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Description of									
national case									
definition									
Year introduced	2004		2004						
Epidemic	Yes		Yes						
threshold									
Sampling	Convenience		Convenience						
strategy	sampling		sampling						
methodology									
Sampling	All cases are		On Tuesday						
strategy	included		according to medical doctor's decision						

Publicly available	Influenza	COVID-19	RSV
national bulletins	https://nvsc.lrv.lt/lt/uzkreciamuju-ligu-		
	valdymas/gripas-1/sergamumo-gripu-ir-umiomis-	https://osp.stat.gov.lt/praejusios-paros-covid-19-statistika	No
	virsutiniu-kvepavimo-taku-infekcijomis-duomenys		

Luxembourg

Total population:	576,243	Income group:	high	

System characteristic	Primary car	e			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respining infection (A		Severe act respirator (SARI)	ute y infection	Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological	Virological	Clinical						Virological
Respiratory pathogens tested for	Influenza & SARS-CoV-2								Influenza & SARS-CoV-2
Reporting period	Week 40-20	started week 2020-40 for Influenza. Started week 2020-09 for Covid-19. No RSV data	Week 40-20						started week 2020-40 for Influenza. Started week 2020-09 for Covid-19
Population covered (%)	3.0%		3.0%						Not available.
Type of health facilities/ hospitals	General practice, pediatrician practice		General practice, pediatrician practice						All private and hospital clinical laboratories are required to report positive samples

System characteristic	Primary ca	re			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	1 1
Number of health	15 facilities		15 facilities						3 private and 4
facilities/									hospital
hospitals									laboratories
Number of									
primary care									
practitioners									
Case definition	ECDC		ECDC, WHO						ECDC
used									
Description of	Respiratory								
national case	symptoms and								
definition	sudden fever >38.0° and								
	myalgia								
Year introduced	2003		2003						2020
Epidemic	Yes		No						No
threshold									
Sampling	All cases								All cases
strategy									
methodology									
Sampling	In principle, all		No samples						All laboratory
strategy	patients are		collected						confirmed cases
	sampled								are reported

Publicly available	Influenza	COVID-19	RSV
national bulletins	https://lns.lu/departement/microbiologie/surveillanc e-de-la-grippe/	-	-

Malta

Total population:	504,115	Income group:	high
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System	Primary care	Э			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe act respirator (SARI)	ute y infection	Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological								Virological
Respiratory									
pathogens tested for									
Reporting period	Week 40-20								Week 36-20
Population covered (%)	25.0%								100.0%
Type of health facilities/ hospitals	General practice.								State hospital
Number of health facilities/	8 facilities								1 hospital
hospitals									
Number of primary care practitioners									
Case definition used	WHO 2014								WHO 2014

System	Primary car	e			Hospital*	Other**			
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Description of									
national case									
definition									
Year introduced	2003								2009
Epidemic	No								No
threshold									
Sampling	Convenience								
strategy	sampling								
methodology									
Sampling	Patients that								At the discretion
strategy	accept having a specimen taken								of the hospital respiratory physician or pediatrician

Pu	blicly available	Influenza	COVID-19	RSV
na	tional bulletins	No	-	-

Montenegro

Total population:

622,028

Income group:

upper middle

System	Primary care	9			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute infection (SA	e respiratory ARI)	Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological	Integrated clinical and virological			Integrated clinical and virological	Integrated clinical and virological		Virological	
Respiratory pathogens tested for					Influenza & SARS-CoV-2	Influenza & SARS-CoV-2		Influenza	
Reporting period	Week 40-20	Week 40-20			Week 40-20	Week 40-20.			
Population covered (%)	Not available	100.0%			Not available	Not available		Not available	
Type of health facilities/ hospitals	General practice, pediatric practice	General practice, pediatric practice, polyclinic			General hospitals, Clinical Centre of Montenegro. Special Hospital for Respiratory diseases Brezovik, General Hospital Berane	General hospitals, Clinical Centre of Montenegro		General hospitals, Clinical Centre of Montenegro. All General Hospitals	
Number of health facilities/ hospitals	4 facilities	29 facilities			3 hospitals	8 hospitals		8 hospitals	
Number of primary care practitioners									

System	Primary care	9			Hospital*				Other**
characteristic	Influenza-like illness		Acute resp	biratory	Severe acute respiratory		Laboratory-confirmed		
	(ILI)		infection ((ARI)	infection (S	ARI)	influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Case definition	ECDC	ECDC			WHO 2014	WHO 2014		ECDC	
used									
Description of									
national case									
definition									
Year introduced	2015/2016	2009			2016	2016		2009	
Epidemic		Yes				No			
threshold									
Sampling	Convenience				All cases	All cases			
strategy	sampling								
methodology									
Sampling	The first				All SARI cases are	All SARI cases are			
strategy	suspected case				sampled at all	sampled at all			
	of ILI in each week is sampled				times	times			

Publicly available	Influenza	COVID-19	RSV
national bulletins	We have a publicly available national weekly		
	influenza bulletin. Available at:		
	http://www.ijzcg.me/2018/05/%d0%b5pid%d0%b		
	5mi%d0%bel%d0%bes%d0%bai-	We have a daily report for new Covid-19 cases at http://www.ijzcg.me	-
	n%d0%b0dz%d0%ber-n%d0%b0d-		
	grip%d0%bem-u-s%d0%b5z%d0%beni-20172018-		
	20-sedmica-2018-godine/		

Netherlands

Total population:		17,441,139	Income group:	high	
System	Primary care		Hospital*		Other**

Oystein				Hospital				O ener	
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance	Integrated		Integrated						Virological
system	clinical and virological		clinical and virological						
Respiratory	Influenza, RSV &		Influenza, RSV &						Influenza, RSV &
pathogens tested	SARS-CoV-2		SARS-CoV-2						SARS-CoV-2
for									
Reporting period	Year-round		Year-round						Year-round
Population covered (%)	0.9%		1) ARI syndrome: 9% 2) ARI virology: 0.9%						
Type of health facilities/ hospitals	General practice		1) ARI syndrome: general practice 2) ARI virology: general practice; same network as sentinel ILI						Virology diagnostic laboratories; mostly hospital based
Number of health facilities/ hospitals	41 facilities		1) 380 facilities 2) 41 facilities						1) 18 laboratories 2) 20 laboratories (11 overlap with (1))

System	Primary car	e			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of primary care practitioners									
Case definition used	National		National						 5-6 influenza virus positive specimens max per week per laboratory; randomly selected and special cases. All influenza virus, RSV and SARS-CoV-2- positive laboratory diagnoses
Description of national case definition	Acute onset and rectal temperature >38°c and at least one of the following symptoms: cough, coryza, sore throat, frontal headache, retrosternal pain, myalgia		1) ICPC codes R74, R75, R77, R78, R80, R81. 2) Any ARI other than ILI (ICPC codes R74, R77, R78, R80, R81)						Based on diagnostic requests from physicians; no specific case definition

System	Primary care	e			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Year introduced	1970; testing of specimens introduced in 1994		1) 2015 2) 1994						1) 1948 2) 1964
Epidemic threshold	Yes		No						No
Sampling strategy methodology	Convenience sampling		Convenience sampling						Convenience sampling
Sampling strategy	The first two ILI patients. If there are no ILI patients Monday -Wednesday, then the first two ILI or ARI patients presenting Thursday - Sunday. In the absence of ILI cases, samples are collected from ARI cases. Preferably at least one child with age < 10 yrs.		1) No sampling, syndromic surveillance only 2) See ILI surveillance						Based on diagnostic requests from physicians; no national samplin strategy

Influenza	COVID-19	RSV

	https://www.erasmusmc.nl/nl-nl/link- pages/influenza-surveillance-nieuwsbrief,	https://www.rivm.nl/coronavirus-covid-19/actueel/wekelijkse-update-	https://www.rivm.nl/rs-virus/stand-van-
national bulletins	https://www.rivm.nl/griep-griepprik/feiten-en- cijfers, <u>www.nivel.nl/surveillance</u>	epidemiologische-situatie-covid-19-in-nederland	zaken-rs-virus https://www.rivm.nl/griep- griepprik/feiten-en-cijfers

North Macedonia

Total population:		2,081	.,012	I	ncome group:		upper m	niddle	
System	Primary care	e			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological	Clinical	Clinical		Integrated clinical and virological				Integrated clinical and virological
Respiratory pathogens tested for	Influenza & SARS-CoV-2	Influenza & SARS-CoV-2	Influenza & SARS-CoV-2	Influenza & SARS-CoV-2	Influenza, RSV & SARS-CoV-2	Influenza, RSV & SARS-CoV-2			
Reporting period	Week 40-20	Week 40-20	Week 40-20		Week 40-20				Week 40-20
Population covered (%)	2.0%	100.0%	2.0%	100.0%					100.0%
Type of health facilities/ hospitals	General practices	General practice, pediatric practice, polyclinic, infectious disease clinic, all other health facilities from primary care, secondary care and tertiary level of health care	General practices						

System	Primary ca	are			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of health	18 facilities	All	18 facilities		5 hospitals				
facilities/									
hospitals									
Number of									
primary care									
practitioners									
Case definition	WHO 2014.		ECDC, WHO		WHO 2014.				Laboratory-
used									confirmed influenza
Description of									
national case									
definition									
Year introduced	2014	1966	2014		2014				
Epidemic	Yes	Yes	No						
threshold									
Sampling	Convenience								Convenience
strategy	sampling								sampling
methodology									

System	Primary care	9			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy	For sentinel ILI/ARI, as of the 2017-2018 season, advice is to collect 2 specimens per site per week from first patients presenting with ILI. All age groups are included in sampling and all cases are included in the sampling strategy. The sampling strategy envisages increasing the number of samples per week going to the peak, according to IPH		No samples collected		All reported cases are included in the sampling strategy				For universal surveillance there is no sampling strategy. Based on clinician's decision.

Publicly available	Influenza	COVID-19	RSV
national bulleting	http://www.iph.mk/en/multimedia/diseases-reports/	http://www.iph.mk/%d1%81%d0%be%d1%81%d1%82%d0%be%d1%9 8%d0%b1%d0%b0-%d1%81%d0%be-covid-19-%d0%b2%d0%be-	No

	%d1%80%d0%b5%d0%bf%d1%83%d0%b1%d0%bb%d0%b8%d0%ba	
	<u>%d0%b0-</u>	
	<u>%d1%81%d0%b5%d0%b2%d0%b5%d1%80%d0%bd%d0%b0-</u>	
	<u>%d0%bc%d0%b0-3/</u>	
	http://iph.mk/wp-content/uploads/2021/08/info-COVID-19-do-	
	<u>29.08.2021.pdf</u>	

Norway

Total population:	5,379,475	Income group:	high	
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System characteristic	Primary care				Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Virological	Clinical		Clinical				Integrated clinical and virological	Virological.
Respiratory pathogens tested for								Influenza	
Reporting period	Year-round	Week 40-20		Year-round				Year-round	Year-round
Population covered (%)	3.0%	99.0%		99.0%				100.0%	100.0%
Type of health facilities/ hospitals	General practices, emergency clinics in primary health care	General practices, emergency clinics in primary health care		General practices, emergency clinics in primary health care				All hospitals in Norway and all medical microbiology laboratories performing influenza virus diagnostics	Medical microbiology laboratories performing influenza virus diagnostics
Number of health facilities/ hospitals	70 facilities	5849 facilities		5849 facilities				All hospitals in Norway	19 laboratories

System	Primary care				Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of									
primary care									
practitioners									
Case definition	WHO 2014	National		National				National	National
used									

Description of	ICPC-2 diagnosis	ICPC-2 diagnosis code	Inpatient hospital Laboratory						
national case	code "R80	"R05 cough", "R74	admission + ICD-10 confirmed						
	influenza" where	Acute upper	code for influenza influenza.						
definition	an ILI case is	respiratory infection",	(J09-J11) + RT-PCR						
	defined as:	"R78 Acute bronchitis/	tests positive for						
	myalgia and	bronchiolitis" and "R83	influenza A/B virus.						
	cough without	respiratory infection							
	abnormal	not classified							
	findings upon	elsewhere. R05							
	airway	includes productive or							
	examination	non-productive/dry							
	except	cough. R74 includes							
	inflammation of	acute rhinitis,							
	nasal mucosa	pharyngitis, cold,							
	and throat, plus	nasopharyngitis, upper							
	three or more of	respiratory infections.							
	the following:	R78 includes acute							
	-sudden onset of	lower respiratory							
	symptoms	infection not classified							
	(within 12	elsewhere, bronchitis							
	hours);	not classified							
	- fever, chills or	elsewhere, larynges							
	feverishness;	tracheobronchitis,							
	- malaise and	respiratory infection							
	fatigue;	not classified							
	- influenza in the	elsewhere and							
	community;	tracheobronchitis. R83							
	- ongoing	respiratory infections							
	influenza	not classified							
	epidemic;	elsewhere; includes							
	- laboratory	diphtheria,							
	confirmed	emphysema,							
	influenza.	epiglottitis, chronic							
		pharyngitis, chronic							
		nasopharyngitis,							
		chronic rhinitis not							
		classified elsewhere,							
		fungal respiratory							
		infection, lung abscess,							
System	Primary ca	re			Hospital*	ĸ			Other**
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characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laborato influenza	ry-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
				protozoal infection (without pneumonia).					
Year introduced	Laboratory sentinel system was introduced in 1979	2014. Prior to this there was a sentinel system for ILI that started in 1998; before that clinical influenza was notifiable (aggregated)		2017				2020	1982
Epidemic		Yes						No	No.
threshold									
Sampling	Convenience							All cases	All cases
strategy	sampling								
methodology									

System	Primary car	re		Primary care					Other**
characteristic	Influenza-like illness (ILI)			Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy	70 general practices and primary care emergency wards are participating in the voluntary network of influenza sentinel practices coordinated by the NIC. These send in ILI patient specimens all year round, based on the WHO 2014 case definition. All ages included but bias toward working-age patients.			No samples collected				New register-based surveillance system established in the Norwegian Emergency Preparedness Register for COVID- 19. Temporary surveillance system. Hospitalization data from the Norwegian Patient Register is linked to data from the MSIS Laboratory Database which contains test results from all medical microbiology laboratories in Norway. All cases and age groups are included. Case- based data. The surveillance data can be stratified on age, sex, regional health authority and ventilator usage. Coinfections with SARS-CoV-2 can	Medical microbiology laboratories that perform influenza virus diagnostics daily report all detections, by type and subtype, as case based data to MSIS Laboratory Database from 2020-21-season. These labs also submit influenza positive specimens to the NIC, each up to five samples per type per week plus special cases (severe, unusual circumstances, suspicion of resistance).

Publicly available	Influenza	COVID-19	RSV
national bulletins	https://www.fhi.no/sv/influensa/influensaovervakin g/	https://www.fhi.no/publ/2020/koronavirus-ukerapporter/	Not currently. Planning to publish lab data for RSV and other resp. viruses on NIPH website this fall

Poland

Total population:	38,354,173	Income group:	high	
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System	Primary care				Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological								Integrated clinical and virological
Respiratory									
pathogens tested for									
Reporting period	Year-round								Year-round
Population covered (%)	3.0%								100.0%
Type of health facilities/	General practice								General practice, hospitals
hospitals									
Number of health	517 facilities								
facilities/									
hospitals									
Number of									
primary care practitioners									
Case definition used	ECDC								ECDC

System	Primary care				Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Description of									
national case									
definition									
Year introduced	2004								1951
Epidemic	No								No
threshold									
Sampling	Convenience								Convenience
strategy	sampling								sampling
methodology									
Sampling	Collection of								There is no
strategy	specimens 7 days a week (by age and sentinel site) is recommended. The sampling procedure is the same during the whole season - all cases and all age groups are included.								national sampling strategy. Sampling is based on the doctor's decision.

Publicly avail	hle Influenza	COVID-19	RSV
national bulle	http://wwwold.pzb.gov.pl/oldpage/epimeld/grvpa/ai	-	-

Portugal

Total population:	10,286,263	Income group:	high

System	Primary care				Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection		Laboratory-confirmed influenza		
	Sentinel Universal		Sentinel Universal		(SARI) Sentinel Universal		Sentinel Universal		
Surveillance system	Integrated clinical and virological	Universal	Integrated clinical and virological	Universal	Sentiner	Oniversal	Integrated clinical and virological	Universal	Virological
Respiratory pathogens tested for			Influenza, RSV & SARS-CoV-2						
Reporting period	Clinical: year-round; virological: year around	Clinical: year- round; virological: year around	Clinical: year-round; virological: year around				week 40 to week 20		
Population covered (%)	unknown	unknown	unknown				unknown		

System	Primary care				Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Type of health facilities/ hospitals	General Practitioners (GP) and since 2020 also the specific COVID- 19 units (units existing in all primary care centers to specifically attended respiratory patients)	General Practitioners (GP) and since 2020 also the specific COVID-19 units (units existing in all primary care centers to specifically attended respiratory patients)	General Practitioners (GP) and since 2020 also the specific COVID- 19 units (units existing in all primary care centers to specifically attended respiratory patients)				Intensive care units		Non sentinel surveillance: hospitals and emergency departments
Number of health facilities/ hospitals	13 specific COVID- 19 centers and around 50 GP	13 specific COVID-19 centers and around 50 GP	13 specific COVID- 19 centers and around 50 GP				33 ICU		29 hospitals
Number of primary care practitioners									
Case definition used	ECDC		ECDC, WHO				National		ECDC
Description of national case definition							Hospitalized influenza- confirmed cases by RT-PCR		
Year introduced	1989		2020				2011-2012		2009
Epidemic threshold	Yes						No		No

System	Primary care				Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling	Convenience		Systematic sampling						
strategy	sampling								
methodology									
Sampling	Samples are		5 weekly samples				All respiratory		Hospitals
strategy	collected from ILI cases, from GP patient list, all ages, and during the whole season. This strategy has been interrupted after the SARS-CoV-2 emergency as all respiratory patients are attended in specific health facilities.		by center in a specific day				patients admitted in ICU are tested for influenza (and now also for SARS-CoV-2)		reported all cases weekly tested for influenza

Ī	Publicly available	Influenza	COVID-19	RSV		
	national bulletins	http://www.insa.min-		http://www.insa.min-		
		saude.pt/category/informacao-e-cultura-	-	saude.pt/category/informacao-e-cultura-		
		<u>cientifica/publicacoes/atividade-gripal/</u>		cientifica/publicacoes/atividade-gripal/		

Republic of Moldova

Total population:		3,	,545,124		Income group:		upp	er middle	
System	Primary ca	ire			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory- confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological	Clinical	Integrated clinical and virological	Clinical	Integrated clinical and virological	Clinical			Integrated clinical and virological
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2		Influenza, RSV & SARS-CoV-2		Influenza, RSV & SARS-CoV-2				Influenza & SARS-CoV-2
Reporting period	Year-round	Weekly from week 40 to week 20. Monthly from week 21 to week 39	Year-round	Weekly from week 40 to week 20. Monthly from week 21 to week 39	Year-round	Weekly from week 40 to week 20. Monthly from week 21 to week 39			
Population covered (%)	11.0%	100.0%	11.0%	100.0%	43.0%	100.0%			
Type of health facilities/ hospitals	Health centres	Health centres	Health centres	Health centres	Intensive care unit, general/internal medicine, pediatric medicine, infectious disease and respiratory disease ward, therapeutic/chronic disease ward				Intensive care unit, general medicine, paediatric medicine, infectious disease and respiratory disease ward, chronic disease ward, medical centres

System	Primary c	are			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute re infection (SARI		Laborato confirme influenza	d	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of health facilities/ hospitals	10 facilities	~369 facilities	10 facilities	~369 facilities	12 hospitals	~68 hospitals			492 facilities
Number of primary care practitioners									
Case definition used	WHO 2014	WHO 2014	ECDC, WHO	ECDC, WHO	WHO 2014	WHO 2014			ILI – WHO, 2014; ARI – ECDC/WHO; SARI – WHO, 2014
Description of national case definition									
Year introduced	2017	2017	2017	2017	2017	2017			2017
Epidemic threshold	Yes	Yes	Yes	Yes	No	No			No
Sampling strategy methodology	Convenience sampling		Convenience sampling		Convenience sampling				

System	Primary ca	are			Hospital*				Other**
characteristic	Influenza-		Acute resp	-	Severe acute re infection (SARI		Laborato	-	
	illness (ILI)		infection (ARI)				confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling	12 swabs are	During the	12 swabs are	During the flu	20 swabs are collected	During the flu			Non-sentinel facilities
strategy	collected	flu season,	collected	season, when	weekly from first	season, when			collect samples in more
	weekly	when	weekly	necessary,	patient who meet the	necessary,			severe ILI and SARI cases.
	(between	necessary,	(between week	samples from	SARI/ILI case	samples from			
	week 40 and	samples from	40 and week	non-sentinel	definition. These	non-sentinel			
	week 20) from the first	non-sentinel facilities to	20) from the first patient	facilities to the flu are	swabs are performed between week 40 and	facilities to the flu are			
	patient who	the flu are	who meet the	investigated. It	week 20; outside this	investigated. It			
	meet the	investigated.	ILI/ARI case	is not a	period swabs are	is not a			
	ILI/ARI case	It is not a	definition.	programmed	collected in case of	programmed			
	definition.	programmed	These swabs	number of	their existence. All age	number of			
	These swabs	number of	are performed	samples. Varies	groups are included in	samples. Varies			
	are performed	samples.	between week	from season to	the sampling.	from season to			
	between week	Varies from	40 and week	season.		season.			
	40 and week	season to	20; outside this						
	20; outside	season.	period swabs						
	this period		are collected in						
	swabs are		case of their						
	collected in		existence. All						
	case of their		age groups are						
	existence. All		included in the						
	age groups		sampling.						
	are included in								
	the sampling.								

Publicly available	Influenza	COVID-19	RSV
national bulletins	5	Daily presentation at <u>https://msmps.gov.md/minister/comunicare/comunicate/</u> Dashboard: <u>https://gismoldova.maps.arcgis.com/apps/opsdashboard/index.html#/d27</u> <u>4da857ed345efa66e1fbc959b021b</u>	No

Romania

Total population:

22,154,572

Income group:

upper middle

System	Primary c	are			Hospital*				Other**
characteristic	Influenza (ILI)			Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		ry- d influenza	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological		Integrated clinical and virological		Integrated clinical and virological				Virological
Respiratory pathogens tested for					Influenza & SARS- CoV-2				
Reporting period	Year-round		Year-round		Week 46-20				Week 40-20
Population covered (%)	2.0%		2.0%		16.0%				100.0%
Type of health facilities/ hospitals	General practice		General practice		ERs, Intensive care unit, general/internal medicine, pediatric medicine, infectious disease ward, respiratory disease ward				Hospitals, primary health care practices, specialized medical practices, health centres, outpatient clinics, emergency services providers, home care providers, long term care institutions
Number of health facilities/ hospitals	192 facilities		192 facilities		18 hospitals				Around 12,000 GPs and 10,000 other health facilities/hospitals

System	Primary ca	are			Hospital*				Other**
characteristic	Influenza (ILI)	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		ry- d influenza	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of									
primary care									
practitioners									
Case definition	WHO 2014.		ECDC, WHO		National				For ILI: WHO 2014
Description of national case definition	An acute respiratory illness with fever ≥38°c, cough, onset within the last 10 days, in the absence of other clinical diagnosis.		An acute respiratory illness with sudden onset and at least one of the following: cough, sore throat, breathing difficulties, coryza.		An acute respiratory illness with a history of fever or measured fever of ≥ 38°c and cough and shortness of breath or difficulty breathing, with onset within the past 10 days, requiring hospitalization overnight.				For ILI: WHO 2014.
Year introduced	2014		2001		2009			1	2014
Epidemic threshold	Yes		Yes		Yes				No
Sampling strategy methodology	Systematic sampling		Convenience sampling		All cases				

System	Primary ca	are			Hospital*				Other**
characteristic	Influenza-	like illness	Acute respirat	tory	Severe acute	respiratory	Laborato	ry-	
	(ILI)		infection (AR)	I)	infection (SAR	RI)	confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy	On Tuesdays from week 40 (onset of influenza season) swabs are collected from all cases presented and who meet the ILI case definition. After the onset of the season the algorithm is established by the National Center, according to specific season		Depending on the epidemiological context, ARI cases can be sampled and tested for influenza. All ILI negative cases should have been tested for COVID- 19		Between week 46 and week 20, ALL detected SARI cases in each sentinel hospital should have been sampled and tested both for influenza and COVID-19.				For ILI: there is only sentinel sampling strategy. Non-sentine sampling is done for the more serious cases, depending on the funds available for payment of the tests.

Publicly a	available	Influenza	COVID-19	RSV
national l	bulletins	http://www.cnscbt.ro/index.php/informari- saptamanale/gripa We also send a detailed analysis to the data sources.	http://www.cnscbt.ro/index.php/analiza-cazuri-confirmate-covid19	No

Russian Federation

Total population:

146,459,803

Income group:

upper middle

System characteristic	Primary o	are			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological	Integrated clinical and virological	Integrated clinical and virological	Integrated clinical and virological	Integrated clinical and virological	Clinical			
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2	Influenza, RSV & SARS-CoV-2	Influenza, RSV & SARS-CoV-2	Influenza, RSV & SARS-CoV-2	Influenza, RSV & SARS-CoV-2	Influenza, RSV & SARS-CoV-2			
Reporting period	Year-round	Year-round	Year-round	Year-round	Year-round	Year-round			
Population covered (%)	About 15% of the population lives in cities with sentinel sites	35.0%	About 15% of the population lives in cities with sentinel sites	35.0%	About 15% of the population lives in cities with sentinel sites	35.0%			About 35% of the population

System characteristic	Primary o	care			Hospital*				Other**
characteristic	Influenza (ILI)	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		e respiratory ARI)	Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Type of health facilities/ hospitals	Polyclinics, infectious disease hospitals, general hospitals (infectious disease wards)	Polyclinics, infectious disease hospitals, general hospitals (infectious disease wards)	Polyclinics, infectious disease hospitals, general hospitals (infectious disease wards)	Polyclinics, infectious disease hospitals, general hospitals (infectious disease wards)	Infectious disease hospitals for adults and children, infectious disease wards at general hospitals, intensive care units	Infectious disease hospitals for adults and children, infectious disease wards at general hospitals, intensive care units			Polyclinics, infectious disease hospitals, general hospitals (infectious disease wards)
Number of health facilities/ hospitals	14 polyclinics	61 cities	14 polyclinics	61 cities	19 hospitals in 8 cities	61 cities			58 laboratories
Number of primary care practitioners									
Case definition used	WHO 2011	No case definition used	WHO 2011	No case definition used	WHO 2011	No case definition used			
Description of national case definition									
Year introduced	2010	2005	2010	1971	2010				1971

System characteristic	Primary o	care			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Epidemic threshold	No	Yes	No	Yes	No	No			No
Sampling strategy methodology	Convenience sampling	Convenience sampling	Convenience sampling	Convenience sampling	Systematic sampling	Convenience sampling			Convenience sampling
Sampling strategy	The average number of samples from patients with ILI/ARI is 29 per week on average for each city; all age groups are included.	Convenience sampling	The average number of samples from patients with ILI/ARI is 29 per week on average for each city; all age groups are included.	Convenience sampling	Samples are taken from SARI patients, selected as per the WHO, 2011, definition. During the COVID-19 pandemic, the percentage tested is 50–60%	Convenience sampling			Every week 10– 50 samples in the city are tested for influenza on average. The exact number is determined by the epidemiological situation.

Publicly available	Influenza	COVID-19	RSV
national bulletins	https://www.influenza.spb.ru/system/epidemic_situ ation/laboratory_diagnostics/	https://www.influenza.spb.ru/system/epidemic_situation/laboratory_diagn ostics/	https://www.influenza.spb.ru/system/epidemi c_situation/laboratory_diagnostics/
	https://www.influenza.spb.ru/en/influenza_surveilla nce_system_in_russia/epidemic_situation/	http://стопкоронавирус.pф https://www.influenza.spb.ru/en/influenza_surveillance_system_in_russia/ epidemic_situation/	https://www.influenza.spb.ru/en/influenza_su rveillance_system_in_russia/epidemic_situati on/

Serbia

Total	population:
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6,945,235

Income group:

upper middle

System	Primary car	е			Hospital*				Other**
characteristic	Influenza-li	ke illness	Acute res		Severe acute r			y-confirmed	
	(ILI)		infection	<u> </u>	infection (SAR	-	influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance	Integrated	Integrated	Clinical		Integrated clinical		Integrated	Integrated	Virological
system	clinical and virological	clinical and virological			and virological		clinical and virological	clinical and virological	
Respiratory	Influenza & RSV	Influenza & RSV			Influenza & RSV		Influenza	Influenza	Influenza, RSV
pathogens tested									& SARS-CoV-2
for									
Reporting period	Year-round	Year-round			Year-round		Year-round	Year-round	Year-round
Population		100.0%			80.0%				
covered (%)									
Type of health		General practice,			Intensive care unit,				
facilities/		pediatric practice			general/internal				
hospitals					medicine, pediatric medicine, infectious				
					disease ward,				
					respiratory disease				
					ward				
Number of health	357 doctors till	158 facilities			10 hospitals				
facilities/	39 week of surveillance in								
hospitals	the season								
	2020/2021								
Number of									
primary care									
practitioners									

System	Primary care	9			Hospital*				Other**
characteristic	Influenza-lil (ILI)	ke illness	Acute responses		Severe acute re infection (SAR		Laboratory influenza	-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Case definition	WHO 2011	WHO 2011.			WHO 2011.				
used									
Description of									
national case									
definition									
Year introduced	2009	2006			2009				
Epidemic		Yes			Yes				
threshold									
Sampling	Convenience	Convenience			Convenience				
strategy	sampling	sampling			sampling				
methodology									
Sampling	ILI cases are	ILI cases are			Sentinel SARI cases				
strategy	sampled mostly during the first 4	sampled mostly during the first 4			are sampled mostly during the first 4				
	days in the week.	-			days in the week. All				
	All age groups are included in sampling.	All age groups are included in sampling.			age groups are included in sampling.				

Publicly available	Influenza	COVID-19	RSV
national bulletins	www.batut.org.rs	www.batut.org.rs	-

Slovakia

System		Heenitel¥		Other**
Total population:	5,454,147	Income group:	high	
		-	1.1.1	

System	Primary ca	re			Hospital*				Other**
characteristic	Influenza-l (ILI)	ike illness	Acute respining (Severe ac respirator (SARI)	cute ry infection	Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological	Clinical.	Integrated clinical and virological	Clinical.		Integrated clinical and virological.			
Respiratory pathogens tested for	Influenza only		Influenza only			Influenza & SARS-CoV-2			
Reporting period		Year-round		Year-round		Year-round			Year-round
Population covered (%)		100.0%		100.0%		100.0%			53.2%
Type of health facilities/ hospitals		General practice, pediatric practice		General practice, pediatric practice		Intensive care unit			General practice, pediatric practice, hospitals
Number of health facilities/ hospitals		88 facilities		88 facilities		74 hospitals			3635 facilities
Number of									
primary care practitioners									
Case definition used		ECDC		ECDC, WHO		WHO 2014			ECDC, WHO, WHO 2014

System	Primary car	e			Hospital*				Other**
characteristic	Influenza-li (ILI)	ike illness	Acute respi infection (A		Severe ac respirator (SARI)	ute y infection	Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Description of									
national case									
definition									
Year introduced		2002		2002		2009			2002
Epidemic		Yes		Yes		No			
threshold									
Sampling		Convenience		Convenience		All cases			
strategy		sampling		sampling					
methodology									
Sampling	five samples by	Based on the	five samples by	Based on the		All reported			
strategy	GP(or	doctor's decision.	GP(or	doctor's decision.		SARI cases are			
57	pediatrician) by	All cases are	pediatrician) by	All cases are		laboratory tested			
	week	included in the sampling	week	included in the sampling					
		strategy		strategy					

Publicly available	Influenza	COVID-19	RSV
national bulletins	During the influenza season some data can be	actual daily data can be viewed on the website <u>www.korona.gov.sk</u> ,	No
	viewed on the website - <u>www.uvzsr.sk</u>	www.health.gov.sk	NO

Slovenia

Total population:	2,100,126	Income group:	high	
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System	Primary care	e			Hospital*				Other**
characteristic	Influenza-lil (ILI)	ke illness	Acute resp infection (Severe act respirator (SARI)	ute y infection	Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological.		Clinical						Virological
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2								
Reporting period	Year-round		Year-round						Year-round
Population covered (%)	4.0%		4.0%						100.0%
Type of health facilities/ hospitals	Family practices, pediatric practices, school doctors		Family practices, pediatric practices, school doctors						Hospitals
Number of health facilities/ hospitals	44 facilities		44 facilities						All facilities/hospitals.
Number of primary care practitioners									

System	Primary car	re			Hospital*	:			Other**
characteristic	Influenza-li (ILI)		Acute res infection		Severe ac respirator (SARI)	cute ry infection	Laborator influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Case definition used	ECDC		ECDC, WHO						No case definition used. Most samples are derived from hospitalized patients with ARI, but not exclusively
Description of									
national case definition									
Year introduced	1999		1999						2010
Epidemic threshold	No		No						No
Sampling strategy methodology	Convenience sampling								
Sampling strategy	Samples are collected from ILI patients. More intensive sampling is advised during the beginning and end of the season. The number of samples is not limited		No samples are collected						

Influenza COVID-19 RSV

Publicly available <u>https:</u>	s://www.nijz.si/sl/tedensko-spremljanje-gripe-	https://www.pijz.ci/cl/dnewno-chremlianie-okuzh-c-sars-cov-2-covid-19	https://www.nijz.si/sl/tedensko-spremljanje-
national bulletins in-dru	rugih-akutnih-okuzb-dihal-v-sezoni-20202021		respiratornega-sincicijskega-virusa-rsv

Spain

Total population:	47,351,567	Income group:	high	
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System	Primary c	are			Hospital*				Other**
characteristic	Influenza	-like illness	Acute respirato	ory infection	Severe acute	respiratory	Laborato	r y-	
	(ILI)		(ARI)		infection (SA	RI)	confirme	d influenza	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance			Integrated clinical and		Integrated clinical				Virological
system			virological		and virological				
Respiratory			Influenza, RSV &		Influenza, RSV &				Influenza & RSV
pathogens tested			SARS-CoV-2		SARS-CoV-2				
for									
Reporting period			Clinical: week 40-39.		Year-round (week				
			Virological: week 40- 39		40-39)				
Population			0.9% regarding the		11.9% regarding				
covered (%)			participants Spanish		the participants				
			regions		Spanish regions All wards mainly in				Laboratories
Type of health			General practice, pediatric practice		public general				mainly in public
facilities/			pediatric practice		hospitals				hospitals
hospitals									Treepicale
Number of health			213 facilities		13 hospitals				
facilities/									
hospitals									
Number of									
primary care									
practitioners									
Case definition			National		National				
used									

System	Primary c	are			Hospital*				Other**
characteristic	Influenza	-like illness	Acute respirato	ry infection	Severe acute	respiratory	Laborato	r y-	
	(ILI)		(ARI)		infection (SA	RI)	confirme	d influenza	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Description of			ARI with sudden onset		SARI with onset in				
national case			of one of the following		the last 10 days				
definition			symptoms: fever,		requiring				
uchinicion			cough or shortness of		hospitalization				
			breath, considering						
			also anosmia/ageusia						
Year introduced			2020		2020				1996
Epidemic			No		No				
threshold									
Sampling			Systematic sampling		Systematic				
strategy					sampling				
methodology									
Sampling			Samples are collected		Samples are				
strategy			from the first 2-5 ARI		collected from all				
Strategy			patients (depending of		SAR patients				
			the region) who		hospitalized on				
			attend the sentinel		Tuesday and/ or				
			facility during the		Wednesday				
			week. All age groups						
			are included in						
			sampling						

Publicly available	Influenza	COVID-19	RSV
national bulletins	National weekly ARI/SARI surveillance bulletin;		
	Available in :	National weekly COVID-19 universal surveillance bulletin; Available in	RSV circulation in Spain is included in the
	https://www.isciii.es/QueHacemos/Servicios/Vigilan	https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE	National weekly ARI/SARI surveillance
	ciaSaludPublicaRENAVE/EnfermedadesTransmisibles	/EnfermedadesTransmisibles/Paginas/InformesCOVID-19.aspx	bulletin
	/Paginas/Temporada Gripe 2010-21.aspx		

Sweden

Total population:	10,353,441	Income group:	high

System	Primary car	е			Hospital [*]	<			Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laborato influenza	ry-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance	Virological		Virological					Clinical.	Virological.
system									
Respiratory	Influenza &		SARS-CoV-2 only					Influenza	
pathogens tested	SARS-CoV-2								
for									
Reporting period	Week 40-20. During the pandemic the surveillance did run summer 2020		Week 40-20. During the pandemic the surveillance did run summer 2020					Year-round	Year-round
Population covered (%)	8.0%		8.0%					100.0% (with 25% underreporting).	100.0%
Type of health facilities/ hospitals	General practice, infectious disease and pediatric clinics		General practice, infectious disease and pediatric clinics					Intensive care unit	Emergency care, hospitals, infectious disease and pediatric clinics, primary care facilities

System	Primary car	e			Hospital*	:			Other**
characteristic	Influenza-li (ILI)	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of health facilities/ hospitals	72 facilities during the 2020- 2021 season		72 facilities during the 2020- 2021 season					80 intensive care units (aug 2021)	Circa 28 microbiological laboratories (these also report analyses performed at other hospitals without microbiological laboratories)
Number of									,
primary care practitioners									
Case definition used	ECDC		ECDC, WHO					Laboratory-confirmed influenza (and covid- 19, separately)	Laboratory- confirmed influenza cases. Patients presenting with ILI - similar to ECDC ILI case definition
Description of									
national case									
definition									
Year introduced	2006							2013	1993, changed in 2013.
Epidemic threshold	No		No					No	Yes
Sampling strategy methodology	Convenience sampling		Convenience sampling						

System	Primary car	Primary care				Hospital*					
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laborator influenza				
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal			
Sampling	Up to 5		Up to 5					No sampling strategy.	No sampling		
strategy	specimens		specimens					Samples are collected	strategy. Samples		
	collected per		collected per					based on decision of	are collected based		
	week per site		week per site					the clinician	on decision of the		
									clinician		

Publicly available	Influenza	COVID-19	RSV
national bulletins	https://www.folkhalsomyndigheten.se/folkhalsorapp ortering-statistik/statistikdatabaser-och- visualisering/sjukdomsstatistik/influensa- veckorapporter/aktuell-influensarapport/	https://www.folkhalsomyndigheten.se/folkhalsorapportering- statistik/statistik-a-o/sjukdomsstatistik/covid-19-veckorapporter/senaste- covidrapporten/	https://www.folkhalsomyndigheten.se/folkhal sorapportering-statistik/statistik-a- o/sjukdomsstatistik/rsv- veckorapporter/senaste-rsv-rapporten/

Switzerland

Total population:		8,379	,477	Ir	come group:		high		
System	Primary care				Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological								Virological
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2								
Reporting period	Clinical: all year round. Virological: week 40-16 (exceptionally in 2021 all year round)								Year-round
Population covered (%)	1.8%.								100.0%
Type of health facilities/ hospitals	General practice, pediatrician								Laboratories
Number of health facilities/ hospitals	150-200 facilities								<200 laboratories

System	Primary care				Hospital*				Other**
characteristic	Influenza-lik (ILI)	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of primary care practitioners									
Case definition used	WHO <2011								Laboratory- confirmed influenza.
Description of national case definition									
Year introduced	1987								1988
Epidemic threshold Sampling strategy methodology	Yes Convenience sampling								No
Sampling strategy	About 40% of the sentinel facilities collect specimens. They sample all ILI patients when the incidence is below the epidemic threshold, and every 4th-5th ILI patient when the incidence is above the epidemic threshold								Mandatory notification of influenza detection. Consequently, no standard sampling strategy

Publicly available	Influenza	COVID-19	RSV
national bulletins	We have a weekly report on ILI, which is published in the weeks 41 to 17 (for the Weeks 40 - 16 during season): German: https://www.bag.admin.ch/bag/de/home/krankheit en/ausbrueche-epidemien-pandemien/aktuelle- ausbrueche-epidemien/saisonale-grippe lagebericht-schweiz.html French: https://www.bag.admin.ch/bag/fr/home/krankheite n/ausbrueche-epidemien-pandemien/aktuelle- ausbrueche-epidemien-pandemien/aktuelle- ausbrueche-epidemien/saisonale-grippe lagebericht-schweiz.html TM: https://www.hug-ge.ch/laboratoire- virologie/centre-national-reference-influenza-cnri (for general page where you can choose language) https://www.bag.admin.ch/bag/de/home/krankheit en/ausbrueche-epidemien-pandemien/aktuelle- ausbrueche-epidemien-pandemien/aktuelle- ausbrueche-epidemien-pandemien/aktuelle- ausbrueche-epidemien-pandemien/aktuelle- ausbrueche-epidemien-pandemien/aktuelle- ausbrueche-epidemien-pandemien/aktuelle- ausbrueche-epidemien-pandemien/aktuelle-	includes data from mandatory COVID-19 notification but not from sentinel- surveillance: <u>https://www.covid19.admin.ch/de/overview</u>	No

Tajikistan

Total population:	8,931,200	Income group:	lower middle

System characteristic	Primary o	care			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological	Clinical	Integrated clinical and virological	Clinical	Integrated clinical and virological		Integrated clinical and virological		
Respiratory pathogens tested for									
Reporting period	W40-W20	W40-W20	W40-W20	W40-W20	W40-W20		W40-W20		
Population covered (%)	0.4%	100.0%	0.4%	100.0%	10.3%		10.7%		
Type of health facilities/ hospitals	Health center	Health centers (PHC) and hospitals		Health centers (PHC) and hospitals	Hospital		National influenza center		
Number of health facilities/ hospitals	1 facility	3085 facilities		3085 facilities	5 hospitals		1		

System characteristic	Primary of	care			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of primary care practitioners									
Case definition used	WHO 2014	National	ECDC, WHO	National	WHO 2014				
Description of national case definition		Cases are diagnosed primarily on the basis of clinical signs, therefore the system provides for the surveillance of both viral and bacterial acute respiratory diseases		Cases are diagnosed primarily on the basis of clinical signs, therefore the system provides for the surveillance of both viral and bacterial acute respiratory diseases					
Year introduced	2016		2016		2016		2016		
Epidemic threshold	No	No	No	No	No		No		
Sampling strategy methodology	Systematic sampling		Systematic sampling		Systematic sampling		Systematic sampling		

System characteristic	Primary care			Hospital*	Other**				
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy	Operational Guidelines for Sentinel Influenza Surveillance in the Republic of Tajikistan	There is no sampling strategy	Operational Guidelines for Sentinel Influenza Surveillance in the Republic of Tajikistan	No sampling strategy	All patients meeting the SARI case definition (WHO, 2014) who are admitted through the emergency department on Monday, Tuesday and Wednesday. Samples are taken from patients in all age groups. The sampling procedure does not differ between the start and the peak of the season. All cases are included in the sampling strategy.		Operational Guidelines for Sentinel Influenza Surveillance in the Republic of Tajikistan		

Publicly available	Influenza	COVID-19	RSV
national bulletins	-	https://covid.tj/	No
Turkey

Total population:	83, 384, 680	Income group:	upper middle

System	Primary care				Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)			Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological				Integrated clinical and virological				Virological
Respiratory pathogens tested for									
Reporting period	Week 40-20				Week 40-20				Week 40-20
Population covered (%)	1.0%				Not available				Not available
Type of health facilities/ hospitals	Family physician centers				Intensive care unit, emergency department, internal disease department, pediatric disease department, infectious disease department, pulmonary disease department				All hospitals

System	Primary care			Hospital*	Hospital*				
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of health facilities/ hospitals	220 facilities				9 hospitals				The number of health facilities is not constant. Samples are collected from any hospital in the country
Number of									
primary care									
practitioners									
Case definition used	WHO <2011				WHO 2014				WHO 2014
Description of national case definition					WHO 2014; age- specific case definitions				
Year introduced	2004				2016				2004
Epidemic threshold	No				No				No
Sampling strategy methodology	Convenience sampling				All cases				

System characteristic	Primary care				Hospital*	Hospital*			
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	1
Sampling strategy	At least one sample for each week randomly chosen until Friday showing ILI case definition, including all age groups, by 220 family doctors				Samples are collected from all patients that meet the SARI case definition, all age-groups included, in 9 hospital				No sampling strategy

	blicly available	Influenza	COVID-19	RSV
na	tional bulletins	https://grip.gov.tr/tr/haftalik-influenza-raporu	-	-

Turkmenistan

Total population:		5,438	,670	Inc	ome group:		upper mi	ddle	
System characteristic	Primary care		Hospital*				Other**		
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological			Integrated clinical and virological	Integrated clinical and virological			Integrated clinical and virological	
Respiratory pathogens tested for									
Reporting period	From W40 to W20 of the next year			Year-round	Year-round			Year-round	
Population covered (%)				100.0%	N/A			100.0%	
Type of health facilities/ hospitals	Polyclinic			Polyclinics and hospitals	Hospital			Polyclinics and hospitals	

Number of health facilities/ hospitals Number of primary care	1 facility	All	1 hospital	All
practitioners				
Case definition used	WHO 2014	ECDC, WHO	WHO 2014	National
Description of national case definition	Standard case definition for influenza-like illness (ILI): Acute respiratory infection with onset within the previous 10 days AND a measured temperature of ≥ 38.0 °C AND a cough. Patients with ILI are a subgroup of patients clinically diagnosed with acute respiratory infection (ARI), i.e. ILI is equated to ARI with fever and cough	Acute onset of symptoms AND at least one of the following respiratory symptoms: cough; sore throat (pharyngitis); shortness of breath; coryza AND a clinician's judgement that the illness is due to an infection.ARI may or may not be accompanied by a fever.ARI may include the following conditions: 1. Acute nasopharyngitis, coryza, including rhinitis (acute), nasal catarrh 2. Acute	Standard case definition for Severe Acute Respiratory Infection (SARI): Acute respiratory infection requiring hospitalization with onset within the previous 10 days, history of fever or measured temperature \geq 38.0 °C AND cough. SARI cases are inpatients hospitalized with an overnight stay (full hospitalization). Patients discharged on the same day do not meet the case definition. If a patient with SARI	Influenza is an acute viral infectious disease with airborne transmission of the pathogen, characterized by painful bouts of fever, high temperature, headache, muscle pain, severe loss of strength, and usually a productive or nonproductive cough, as well as other respiratory symptoms during 10 days. ARI, acute respiratory infection, is characterized by acute onset and at least one of the following four respiratory

		nasopharyngitis	seeks care from a	symptoms: •	
		and acute	hospital but	cough; • sore	
		rhinopharyngitis	refuses	throat	
		3. Acute sinusitis	hospitalization,	(pharyngitis); •	
		4. Acute	they cannot be	shortness of	
		pharyngitis	considered a SARI	breath; • coryza;	
		5. Acute tonsillitis	case	and a	
		6. Acute laryngitis		judgement that the	
		and tracheitis		illness is due to an	
		7. Acute		infection;	
		obstructive		 the presence or 	
		laryngitis,		absence of fever	
		epiglottitis and			
		bronchitis			
		8. Acute upper			
		respiratory			
		infections of			
		multiple and			
		unspecified sites			
		9. Pneumonia of			
		viral and bacterial			
		origin, as well as			
		secondary			
		pneumonia due to			
		underlying			
		diseases such as			
		chronic heart			
		failure			
Year introduced	2021	2019	2021	2019	
Epidemic	No	No	No	No	
threshold					
unesnou					
Sampling	Systematic sampling	Convenience	Systematic	Convenience	
		sampling	sampling	sampling	
strategy					
methodology					

Sampling	Every day, the	Recommended risk	SARI patients are	Recommended risk
strategy	first two to three	groups for	encouraged to	groups for
strategy	patients meeting	laboratory	submit a sample	laboratory sampling
	the ILI case		for influenza	for suspected
	definition should be	suspected	testing Monday	influenza/ARI: •
	sent to the	influenza/ARI: •	through Sunday,	Pregnant women; •
	procedure room for	Pregnant women; •	with a maximum	Persons living in
	a smear; there	Persons living in	of 20 samples per	long-term care
	should be no more	long-term care	week	facilities (homes for
	than 20 samples per	facilities (homes		the elderly and
	week from one	for the elderly and		disabled, boarding
	sentinel site. All age	disabled, boarding		schools, etc.); •
	groups are	schools, etc.); •		Persons undergoing
	included;	Persons		inpatient
	procedures are not	undergoing		treatment:
	standard	inpatient		≻ Children aged 6
	throughout the	treatment:		months to 5 years
	season; only	≻ Children aged 6		with a severe form
	individuals who	months to 5 years		of ARI/influenza;
	meet the standard	with a severe form		➤ Persons with
	sentinel ILI case	of ARI/influenza;		chronic heart or
	definition are	➤ Persons with		lung disease,
	included	chronic heart or		metabolic or renal
		lung disease,		disease, chronic
		metabolic or renal		liver damage,
		disease, chronic		chronic
		liver damage,		neurological
		chronic		disorders, or
		neurological		immunodeficiency
		disorders, or		states with severe
		immunodeficiency		ARI/influenza;
		states with severe		≻ Elderly people
		ARI/influenza;		(over 65 years old)
		➤ Elderly people		with severe
		(over 65 years old)		ARI/influenza;
		with severe		≻ Healthcare
		ARI/influenza;		workers;
		 ≻ Healthcare 		> Veterinary
				,
		workers;		workers, farmers,

➤ Veterinary	etc., who were in
workers, farmers,	contact (2–14 days
etc., who were in	prior to the
contact (2–14 days	disease) with sick
prior to the	or deceased wild
disease) with sick	birds, poultry, pigs,
or deceased wild	as well as workers
birds, poultry, pigs,	of zoos and
as well as workers	circuses.
of zoos and	➤ Persons who
circuses.	developed an acute
➤ Persons who	respiratory
developed an acute	infection of
respiratory	unknown etiology
infection of	after staying (2–14
unknown etiology	days prior to the
after staying (2–14	disease) in a region
days prior to the	that is not
disease) in a	epidemically safe
region that is not	for new types of
epidemically safe	influenza.
for new types of	Note: Taking
influenza.	samples for
Note: Taking	laboratory research
samples for	is at the discretion
laboratory research	of the attending
is at the discretion	physician
of the attending	
physician	

Publicly available	Influenza	COVID-19	RSV
national bulletins	No	No	No

Ukraine

Total population:	44,624,373	Income group:	lower middle

System characteristic	Primary car	e			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological			Clinical	Integrated clinical and virological				
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2				Influenza, RSV & SARS-CoV-2				
Reporting period	Year-round			W40-W20	Year-round				
Population covered (%)	0.1%			100.0%	6.5%				

System characteristic	Primary ca	re			Hospital*				Other**
Characteristic	Influenza-l (ILI)	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		e infection	Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Type of health facilities/ hospitals	Primary healthcare			Primary healthcare and hospitals	Infectious disease hospitals and multidisciplinary hospitals (intensive care units, pediatric, infectious and pulmonary disease wards).				
Number of health facilities/ hospitals	7 PHC facilities			All PHC facilities and all hospitals in the country	11 hospitals				
Number of primary care practitioners									
Case definition used	WHO 2014			No case definition used	WHO 2014				
Description of national case definition									

System characteristic	Primary ca	re			Hospital*	Other**			
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Year introduced	2016			2016					
Epidemic threshold	No			Yes	No				
Sampling strategy methodology	Convenience sampling				Convenience sampling				

System characteristic	Primary car	e			Hospital*				Other**
characteristic	Influenza-li (ILI)	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy	Each physician participating in the sentinel surveillance system collects samples from no more than the first 3 patients meeting the ILI case definition per week. Sampling covers all age groups. All patients are included in the sampling strategy. The sampling procedure does not differ between the start and the peak of the season			Sampling is done without a specific strategy. Samples are taken at the discretion of the physician for diagnostic purposes but not for surveillance purposes. No laboratory testing of samples is carried out in the ARVI routine surveillance system	Each sentinel hospital collects samples from no more than 5 patients meeting the SARI case definition per week. Sampling covers all age groups. All patients are included in the sampling strategy. The sampling procedure does not differ between the start and the peak of the season				

Influenza

COVID-19

RSV

Publicly available national bulletins	<u>https://phc.org.ua/kontrol-zakhvoryuvan/inshi- infekciyni-zakhvoryuvannya/zakhvoryuvanist-na- grip-ta-grvi-v-ukraini</u>	https://phc.org.ua/kontrol-zakhvoryuvan/inshi-infekciyni- zakhvoryuvannya/zakhvoryuvanist-na-grip-ta-grvi-v-ukraini https://phc.org.ua/kontrol-zakhvoryuvan/inshi-infekciyni- zakhvoryuvannya/koronavirusna-infekciya-covid-19 https://covid19.gov.ua/ https://moz.gov.ua/article/news/operativna-informacija-pro-poshirennja- koronavirusnoi-infekcii-2019-cov19 https://moz.gov.ua/koronavirus-2019-ncov https://www.nas.gov.ua/UA/Activity/covid/Pages/wg.aspx	The weekly newsletter "Influenza and ARVI in Ukraine" (<u>https://phc.org.ua/kontrol-</u> <u>zakhvoryuvan/inshi-infekciyni-</u> <u>zakhvoryuvannya/zakhvoryuvanist-na-qrip-ta-</u> <u>grvi-v-ukraini</u>) includes data on the results of testing sentinel samples for RSV, among other things. No separate national bulletin on RSV is issued.
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Uzbekistan

Total population:	33,255,538	Income group:	lower middle

System characteristic	Primary care	e			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological		Clinical		Integrated clinical and virological				
Respiratory pathogens tested for									
Reporting period	From W40 of the current year to W20 of the next year		From W40 of the current year to W20 of the next year		From W40 of the current year to W20 of the next year				
Population covered (%)	0.16% of the country's population		0.16% of the country's population		0.03% of the country's population				
Type of health facilities/ hospitals	General practice, polyclinic		General practice, polyclinic		Hospital, maternity hospital				

System characteristic	Primary care	e			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of health facilities/ hospitals	1 facility		1 facility		3 hospitals				
Number of primary care practitioners	5 sites, 5 doctors								
Case definition used	WHO 2014		WHO 2014		WHO 2014				
Description of national case definition									
Year introduced	2016		2016		2016				
Epidemic threshold	Yes		No						
Sampling strategy methodology	Convenience sampling				Systematic sampling				

System characteristic	Primary car	e			Hospital*	Hospital*				
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza			
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal		
Sampling strategy	Five physicians have been appointed, each of whom takes a smear on the first day of the week from patients who have been diagnosed with ILI in accordance with the ILI case definition				A swab is taken from all patients hospitalized on the first day of the week and meeting the SARI case definition					

Publicly available	Influenza	COVID-19	RSV
national bulletins	The national influenza bulletin is published at <u>https://ssv.uz/uz</u> on a weekly basis	No	The national influenza bulletin contains laboratory data on RSV and is published at https://ssv.uz/uz weekly

United Kingdom of Great Britain and Northern Ireland

Total population:

66,796,807

Income group:

high

England

System	Primary care	е			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laborato influenza	ry-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological				Integrated clinical and virological			Integrated clinical and virological	Virological
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2				Influenza, RSV & SARS-CoV-2			Influenza	
Reporting period	Reported via TESSy week 40 to 20 each season				Usually wk. 40 to wk. 20. Currently year round			Reported via TESSy week 40 to 20 each season	Reported via TESSy week 40 to 20 each season
Population covered (%)					20-25%			100.00%	100.00%
Type of health facilities/ hospitals	General practice				Acute hospitals			Intensive care units and high dependency units	PHE, NHS and private microbiology laboratories.

System	Primary car	e			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of health facilities/ hospitals	Over 1000 contribute ILI data. Fewer practices contribute to the virological surveillance scheme				Approximately 25- 30 hospitals			141 hospitals	>200 laboratories
Number of									
primary care practitioners									
Case definition used	WHO 2011				National			National	

System	Primary ca	are			Hospital*	Hospital*				
characteristic	Influenza-	like illness	Acute res	piratory	Severe acute	respiratory	Laborato	ry-confirmed		
	(ILI)			infection (ARI)		RI)	influenza	-		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal		
Description of					Confirmed			A case is defined		
national case					influenza, RSV			as: Any individual		
definition					and/or SARS-CoV-			admitted to		
					2, , suspected or			hospital ICU/HDU		
					excluded COVID-			AND has a		
					19, patients not			laboratory		
					tested for COVID-			confirmed influenza		
					19 and other			A (including H1, H3		
					causes of ARI. We			or novel) or		
					accept a clinical			influenza B		
					working diagnosis			infection.		
					of ARI			Symptoms: History		
								of or observed		
								fever (>=38		
								degrees		
								centigrade) with		
								onset of previous		
								10 days AND at		
								least two of:		
								cough, sore throat,		
								headache,		
								rhinorrhea, limb or		
								joint pain,		
								vomiting, diarrhea,		
								increased		
								respiratory rate or		
								poor feeing)		
Year introduced	1964							2010		
Epidemic	Yes.				Yes			Yes	No	
•										
hreshold										

System characteristic	Primary car	е			Hospital*	Hospital*				
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza			
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal		
Sampling	Convenience				All cases			All cases	Convenience	
strategy	sampling								sampling	
methodology										
Sampling	At the start of							All cases should be		
strategy	the season 2-3 ILI cases are swabbed per week. At the peak of the season max. 20 patients are swabbed per week							sampled		

Publicly available	Influenza	COVID-19	RSV
national bulletins	https://www.gov.uk/government/collections/weekly -national-flu-reports	https://www.gov.uk/government/collections/weekly-national-flu-reports	https://www.gov.uk/government/collections/ weekly-national-flu-reports

Northern Ireland

System characteristic	Primary car	e			Hospital*	:			Other**
	Influenza-li (ILI)	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		cute ry infection	Laborato influenza	ry-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance	Virological	Clinical						Virological	Virological
system									
Respiratory	Influenza & RSV	Influenza & RSV							Influenza, RSV &
pathogens tested									SARS-CoV-2
for									
Reporting period	Week 40-20	Year-round						Year-round for universal surveillance (reported to TESSy); week 40-20 for ICU- based surveillance	Year-round
Population covered (%)	11.0%	98.0%						100.0%	Influenza/RSV: 100% COVID-19: Universal symptoms 100%, GP Sentinel scheme 11%

System characteristic	Primary care	e			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		influenza	y-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Type of health facilities/ hospitals	General practice	General practice						All hospitals for universal surveillance; all ICU/HDU units for ICU surveillance	Influenza/RSV: All facilities. COVID- 19: All hospitals for Pillar 1 (HSC laboratory testing) surveillance; all ICU/HDU units for ICU surveillance; 36 GP practices involved in the COVID Sentinel GP scheme
Number of health facilities/ hospitals	36 facilities	321 facilities						All hospitals	Influenza/RSV: All facilities. COVID- 19: 36 Sentinel GP practices, and all hospitals
Number of primary care									
practitioners									
Case definition used	National	National						Laboratory- confirmed influenza	Influenza: Laboratory- confirmed influenza. COVID- 19: A Confirmed case- individual with clinical symptoms and a positive SARS-CoV2 specimen result

System characteristic	Primary care	9			Hospital*				Other**
	Influenza-lil (ILI)	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		ry-confirmed	
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Description of national case definition	A disabling acute respiratory illness accompanied by severe fever and myalgia	All cases have symptoms consistent with clinical 'flu', 'flu- like illness' and acute respiratory illness (read codes) are automatically extracted from GP practices on a daily basis							COVID-19- Individuals with • new continuous cough OR • high temperature OR • a loss of, or change in, normal sense of smell (anosmia) or taste (ageusia)
Year introduced	2001	2009						2011	Influenza: 2011. COVID-19: 2020
Epidemic threshold	No	Yes						No	No
Sampling strategy methodology	Convenience sampling	All cases						All cases	All cases

System characteristic	Primary care	2			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy	Note no virological samples collected in 2020/2021. In 2019/20: up to a maximum of 5 patients per week that meet the case definition. Swabbing should be undertaken regardless of vaccination status and within seven days of onset of symptoms	No virological samples collected						All cases should be sampled	All cases should be sampled

Publicly available	Influenza	COVID-19	RSV
national bulletins			Reported within publicly available national
	https://www.publichealth.hscni.net/publications/infl		influenza bulletin -
	uenza-weekly-surveillance-bulletin-northern-ireland-	https://www.publichealth.hscni.net/publications/coronavirus-bulletin	https://www.publichealth.hscni.net/publicatio
	202021		ns/influenza-weekly-surveillance-bulletin-
			northern-ireland-202021

Scotland

System characteristic	Primary care				Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological	Clinical		Clinical		Integrated clinical and virological			Virological
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2					Influenza, RSV & SARS-CoV-2			
Reporting period	Year-round	Year-round		Year-round		Year-round			Year-round
Population covered (%)	100.0% - see comments	100.0%		100.0%		100.00%			100.0%
Type of health facilities/ hospitals	Temporary Community Assessment centres (CAC) set up for mild/moderate symptomatic patients as well as GP red pathways	General practice		General practice		All hospitals			All hospital wards
Number of health facilities/ hospitals	26 CACs initially with some stepping down now over time with the return of GP practices	930 facilities		930 facilities		277 hospitals			274 hospitals
Number of primary care practitioners									
Case definition used	National	National		National		WHO 2014			National

System	Primary care				Hospital*	:			Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Description of national case definition	Early definitions included: Any patient presenting with ILI OR ARI OR change in smell/taste AND seen in the CAC AND swabbed within 7 days of onset of symptoms. Case divisions were later replaced with recruitment quidance	Aggregated automated GP extracts on ILI and ARI consultations based on READ codes. Definition of ILI and ARI are based on clinical discretion		Aggregated automated GP extracts on ILI and ARI consultations based on READ codes. Definition of ILI and ARI are based on clinical discretion		A patient discharged from a Scottish hospital who has one or more of the following ICD-10 codes: J09-22, J80, U07.1 - U07.2, J04 or B97.4			Based on clinical discretion of healthcare professional
Year introduced	2000 Modified 2020 for COVID requirements	2009		2009		2020			2009
Epidemic threshold	No	Yes		Yes		No			No
Sampling strategy methodology	All cases					All cases			All cases

System	Primary care				Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling strategy	All patients with mild to moderate symptoms who attend the CAC. Recruitment guidance included: Every patient, with symptoms, that will have a swab taken to test for SARS- COV-2 (and later on Flu/RSV) for diagnostic purposes, who are given self- care advice to manage their condition in the community, without hospital admission	No samples collected		No samples collected					

Publicly available	Influenza	COVID-19	RSV
national bulletins	https://publichealthscotland.scot/publications/weekl	https://publichealthscotland.scot/publications/covid-19-statistical-	https://publichealthscotland.scot/publications
	y-national-seasonal-respiratory-report/	report/covid-19-statistical-report-4-august-2021/	/weekly-national-seasonal-respiratory-report/

Wales

System	Primary car	е			Hospital*				Other**
characteristic	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and virological	Clinical	Virological	Clinical	Integrated clinical and virological			Virological	Virological
Respiratory pathogens tested for	Influenza, RSV & SARS-CoV-2		Influenza, RSV & SARS-CoV-2		Influenza, RSV & SARS-CoV-2			Influenza	
Reporting period	Year-round.	During periods of heightened activity	Year-round.	During periods of heightened activity	Year-round.				Year-round
Population covered (%)	11.8%	100.0%	11.8%	100.0%	Currently approx. 9%, but will increase when new sites come online			100.0%	100.0%
Type of health facilities/ hospitals	General practice	General practice	General practice	General practice	Hospital ED			All wards	Hospitals; non- sentinel general practices
Number of health facilities/ hospitals	42 facilities	420 facilities	42 facilities	420 facilities	2 sites, with further expansion underway			19 hospitals	19 hospitals and ad-hoc non- sentinel general practices
Number of primary care practitioners									

System characteristic	Primary ca	re			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Case definition used	National	National	National	National	National			Laboratory- confirmed influenza in patients tested with respiratory symptoms.	Laboratory- confirmed influenza in patients tested with respiratory symptoms.
Description of national case definition	GP diagnosed ILI, based on clinicians indication on form	GP diagnosed ILI, based on Read/ SNOMED codes	GP diagnosed ARI, based on clinicians indication on form	GP diagnosed ARI, based on Read/ SNOMED codes	Symptomatic presentations in ED where there is an intention to admit. Plan to move to agreed ECDC SARI-Net definitions				
Year introduced	1987	2009	1987	2020	2020			2005	2005
Epidemic threshold	Yes	No	No	No	No			No	No
Sampling strategy methodology	All cases	All cases	All cases.	All cases	All cases			All cases	All cases

System characteristic	Primary car	е			Hospital*				Other**
	Influenza-li	ike illness	Acute respi	ratory	Severe acute	e respiratory	Laboratory	confirmed	
	(ILI)		infection (ARI)		infection (SARI)		influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Sampling	Sentinel GPs are	All clinically	Sentinel GPs are	All clinically	All symptomatic			All confirmed	All confirmed
strategy	asked to swab	diagnosed cases	asked to swab	diagnosed cases	presentations in			cases of	cases of
sciacegy	all diagnosed ILI	of ILI	all diagnosed	of ARI	ED where there is			influenza in	influenza in
	cases (around		ARI cases		an intention to			hospital patients	hospital patients
	the peak of an		(around the		admit. At times of			for whom	(with a very
	epidemic this		peak of an		high pressure in			respiratory	small proportion
	may be limited		epidemic this		ED, completeness			screen tests are	of non-sentinel
	to the first 5		may be limited		of reporting may			requested	GP patients) for
	patients		to the first 5		decrease. We are				whom
	diagnosed in		patients		setting in place a				respiratory
	each practice		diagnosed in		means to estimate				screen tests are
	per week)		each practice		completeness of				requested
			per week)		reporting				

Publicly available	Influenza	COVID-19	RSV
national bulletins	https://www.wales.nhs.uk/sites3/page.cfm?orgid=4 57&pid=34338	https://public.tableau.com/app/profile/public.health.wales.health.protectio n/viz/RapidCOVID-19virology-Public/Headlinesummary	Included in the weekly influenza bulletin

Kosovo²

Total population:	 Income group:	upper middle

System	Primary care				Hospital*				Other**
characteristic	Influenza-li	ke illness	Acute resp	oiratory	Severe acut	te	Laborator	y-confirmed	
	(ILI)		infection (ARI)		respiratory infection (SARI)		influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Surveillance system	Integrated clinical and	Clinical	Integrated clinical and	Clinical	Integrated clinical and	Clinical	Integrated clinical and	Integrated clinical and	
-	virological		virological		virological		virological	virological	
Respiratory pathogens tested	Influenza & SARS-CoV-2			Influenza & SARS-CoV-2	Influenza & SARS-CoV-2				
for									
Reporting period	Week 40-20			Week 40-20					
Population covered (%)	48.4%	Whole population	48.4%	Whole population	48.4%	Whole population	48.4%	Whole population	
Type of health facilities/ hospitals	General practice, pediatric practice, infectious disease, lung disease (all health care levels)			All health care levels	Pediatric practice, intensive care unit, infectious diseases, lung disease (secondary and tertiary health care levels)				

² All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

System characteristic	Primary car	e			Hospital*				Other**
	Influenza-like illness (ILI)		Acute respiratory infection (ARI)		Severe acute respiratory infection (SARI)		Laboratory-confirmed influenza		
	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	Sentinel	Universal	
Number of health	5 facilities			34 facilities	5 facilities				
facilities/									
hospitals									
Number of									
primary care									
practitioners									
Case definition	WHO 2014			ECDC, WHO	WHO 2014				
used									
Description of	No specific case								
case definition	definition								
Year introduced	2012			2017/2018	2014				
Epidemic	Yes			No	No				
threshold									
Sampling	Systematic			Systematic	All cases				
strategy	sampling			sampling					
methodology									
Sampling	In Pristina and			In Pristina and	All SARI cases				
strategy	Prizren. Samples			Prizren. Samples	are sampled at				
	are collected			are collected	all times (24				
	twice per week on Monday and			twice per week on Monday and	hrs./7 days a week)				
	Thursday			Thursday	WEEK)				

Publicly available	Influenza	COVID-19	RSV
bulletins	No link available	There is regular weekly analysis of epidemiological situation, but not published	No