Inserm
La science pour la santé
From science to health

MÉDECINE SORBONNE UNIVERSITÉ

Sentinelles

Santé publique France

Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

Sentinelles network report from 04/10/2019, n° 2019w14 (data from 04/01/2019 to 04/07/2019)

Influenza-like illness

Low activity in general practice

Sentinel physicians monitor the number of ILI seen in consultations (defined by sudden fever > 39°C (>102°F) with myalgia and respiratory signs).

Clinical monitoring: in metropolitan France, last week (2019w14), the incidence rate of influenza-like illness seen in general practice was estimated at 22 cases per 100,000 inhabitants (95% CI [16 ; 28]), corresponding to 14,000 new cases. The incidence rate was still decreasing.
At the regional level, the highest incidence rates were noted in: Provence-Alpes-Côte d'Azur (42 cases per 100,000 inhabitants, 95% CI [1 ; 83]), Hauts-de-France (37, 95% CI [3 ; 71]) and Corse (30, 95% CI [0 ; 67]) *(the regional data are presented at the end of this newsletter)*.

Regarding the cases reported last week, the median age was 33 years (20 months to 83 years). Males accounted for 43% of the cases. These cases showed no particular sign of severity: the percentage of hospitalization was estimated at 3.0% (95% CI [0.0 ; 8.7]).

Vaccine effectiveness: According to the data collected by the Sentinel physicians, the effectiveness of influenza vaccine against all influenza viruses is estimated at: 40% (95%CI[5 ; 62]) among people aged 65 and above, and 56% (95%CI[25; 74]) among people under 65 with complications risk factors. If we focus at the vaccine effectiveness (VE) by virus, VE among all people at risk of complications is 69% (95%CI[45; 83]) against the virus A(H1N1)pdm09 and 33% (95%CI[2; 54]) against A(H3N2) virus. These estimates will be refined in the coming weeks.

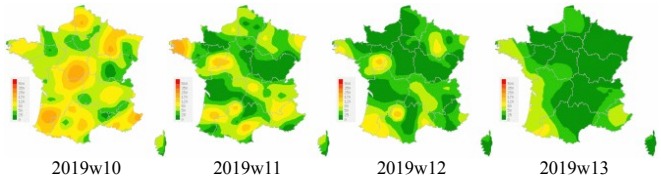
Virological monitoring: since week 2018s40, date of start of monitoring, 2,463 samples were swabbed by Sentinelles network practitioners (,1,826 by general practitionners and 637 by pediatricians), all have been tested.
Last week 15 samples were realized and tested. Among them, 5 (33.3%) were positive for at least one influenza virus. The positivity rate was slightly higher than the previous week.
The influenza viruses detected along the season were distributed as follows:
- 431 (17.5%) A(H1N1)pdm09 virus,
- 821 (33.3%) A(H3N2) virus,
- 23 (0.9%) A unsubtyped virus,
- 2 (0.1%) B/Victoria lineage virus,
- 0 (0.0%) B/Yamagata lineage virus,
- 0 (0.0%) B unknown lineage virus.

Two co-infections of influenza viruses A(H1N1)pdm09 and A(H3N2) were observed over the entire virological surveillance period.
Regarding the other respiratory viruses, 250 swabs were positive 10.2%) for the rhinovirus (hRV), 170 (6.9%) positive for the respiratory syncytial virus (RSV), and 87 (3.5%) positive for the metapneumovirus (hMPV). Last week, there was a decrease in the activity of these viruses, except for hMPV, especially over 15 years old people.
The samples were analyzed by the CNR (Coordinating center: Institut Pasteur - Paris, associated center: Hospices civils de Lyon), and the laboratory of Virology at the University of Corsica.

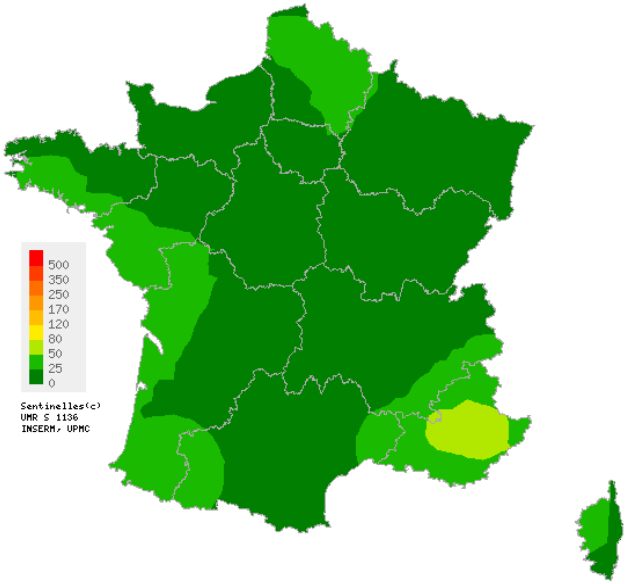
Forecast: according to the forecast models based on historical data, and on medication deliveries *(IQVIA research partnership)*. The ILI activity should continue its decrease this week (2019w15).
In order to have a global vision of the situation in metropolitan France, all available data on winter respiratory infections are analysed jointly by Santé publique France, the National Respiratory Viruses Reference Center and the Sentinelles network.

In view of all this information, the conclusions for the last week (2019w14) are:
- End of the influenza epidemic in all metropolitan regions
- Sporadic detection of influenza viruses
- Approximately 9,500 deaths attribuable to influenza since the start of surveillance and until week 12
- Preliminary assessment of the 2018-19 influenza epidemic on April 17th (epidemiological report of week 15)

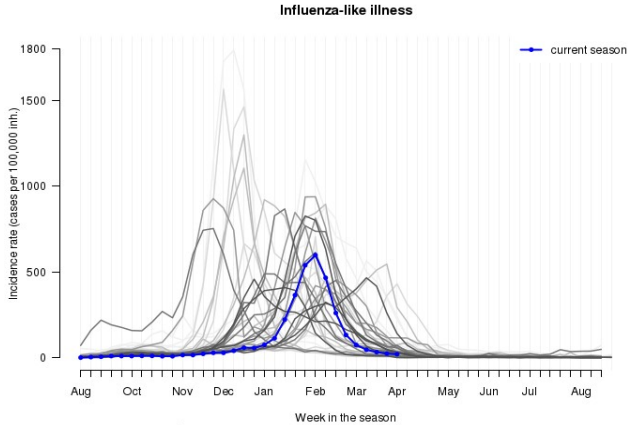
Santé publique France weekly influenza report (in french)
More information about influenza-like illness Sentinelles surveillance
Information about Sentinelles network statistical methods (in french)



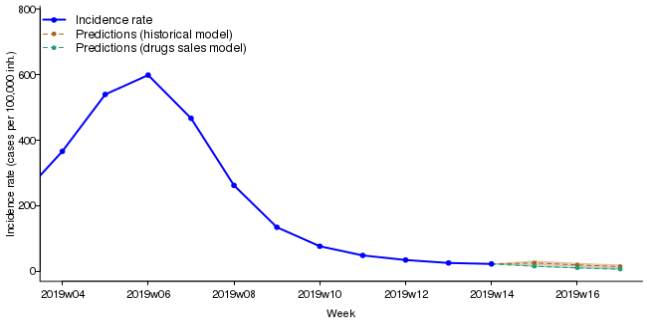
Consolidated data for the last 4 weeks



Map of spatial data interpolation based on influenza-like illness incidence rates at the « departement » (NUTS 3) level (per 100,000 inhabitants), Sentinelles general practitioners, 2019w14
Maps available at http://www.sentiweb.fr



Incidence rate of influenza-like llness since 1984 (per 100,000 inhabitants), Sentinelles general practitioners.
In Blue: season 2018-19/ In gray: seasons from 1984-85 to 2017-18
(the clearer the curve the older the data)



Predicted incidence rate for the next three weeks
based on a forecast model on historical data and on drug sales
Sentinelles general practitioners

Inserm
La science pour la santé
From science to health

MÉDECINE SORBONNE UNIVERSITÉ

Sentinelles

Santé publique France

Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

Sentinelles network report from 04/10/2019, n° 2019w14 (data from 04/01/2019 to 04/07/2019)

ACUTE DIARRHEA

Moderate to high activity in general practice

in metropolitan France, last week (2019w14), the incidence rate of acute diarrhea seen in general practice was estimated at 149 cases per 100,000 inhabitants (95% CI [132 ; 166]), **above** the epidemic threshold (134 cases per 100,000).

At the regional level, the highest incidence rates were noted in: Hauts-de-France (260 cases per 100,000 inhabitants, 95% CI [160 ; 360]), Nouvelle-Aquitaine (221, 95% CI [136 ; 306]) and Provence-Alpes-Côte d'Azur (199, 95% CI [94 ; 304]). *

More information about acute diarrhea Sentinelles surveillance

CHICKENPOX

Moderate activity in general practice

In metropolitan France, last week (2019w14), the incidence rate of Chickenpox seen in general practice was estimated at 27 cases per 100,000 inhabitants (95% CI [20 ; 34]).

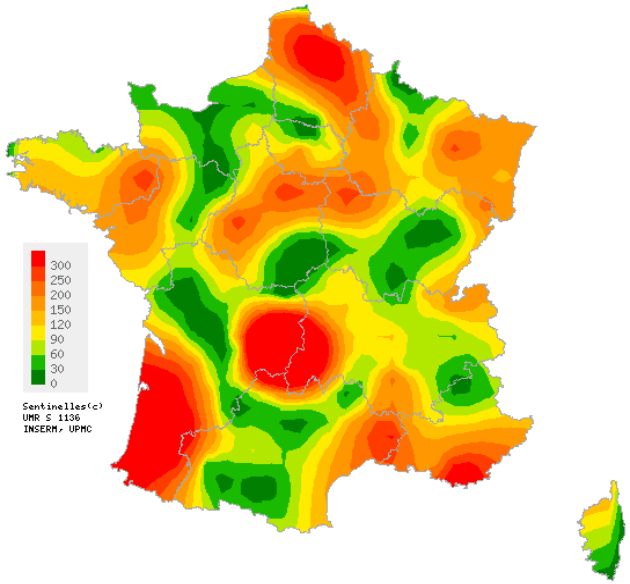
Eight regional clusters were noted, **high** in Hauts-de-France (46 cases per 100,000 inhabitants, 95% CI [12 ; 80]) and **moderate** in Occitanie (36, 95% CI [10 ; 62]), Nouvelle-Aquitaine (36, 95% CI [2 ; 70]), Grand Est (31, 95% CI [3 ; 59]), Auvergne-Rhône-Alpes (28, 95% CI [9 ; 47]), Normandie (27, 95% CI [0 ; 70]), Pays de la Loire (22, 95% CI [0 ; 44]) and Bretagne (20, 95% CI [0 ; 45]). *

More information about chickenpox Sentinelles surveillance

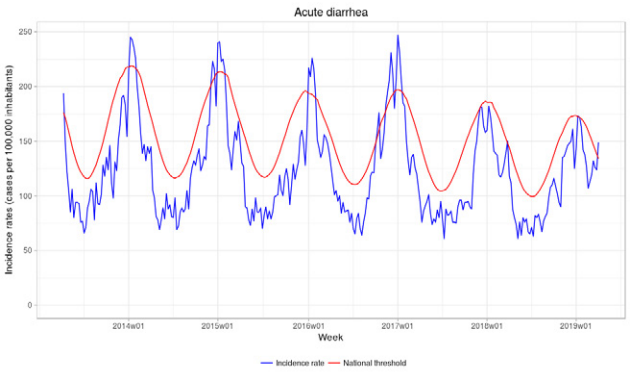
Information about Sentinelles network statistical methods (in french)

* The regional data are presented at the end of this report.

ACUTE DIARRHEA

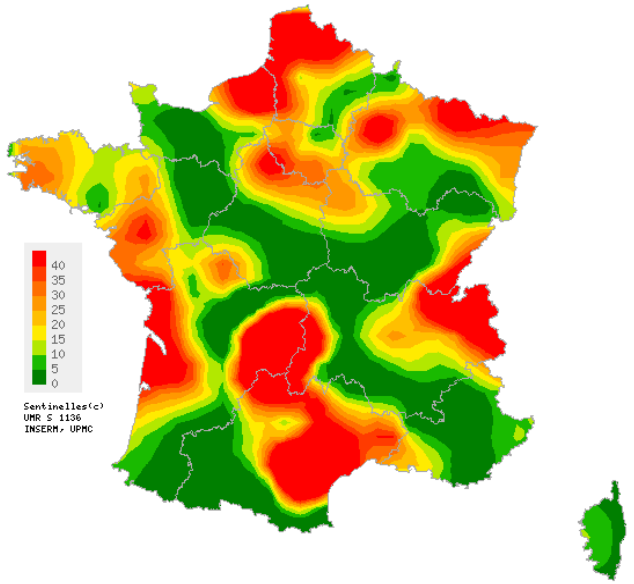


Map of spatial data interpolation based on incidence rates at the « departement » (NUTS 3) level, (per 100,000 inhabitants), Acute diarrhea, Sentinelles general practitioners, 2019w14
Maps available at http://www.sentiweb.fr

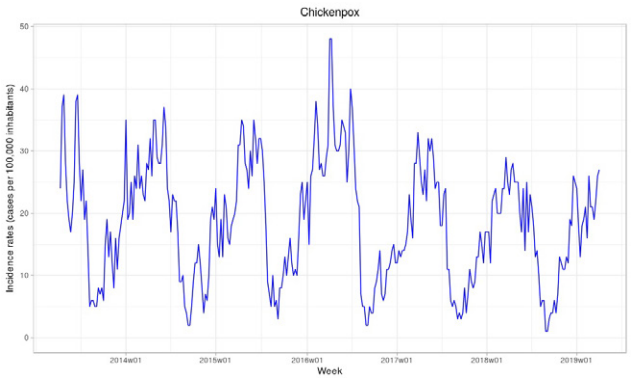


Incidence rate in blue,
epidemic threshold in red calculated by a periodic regression model
(per 100,000 inhabitants), Acute diarrhea, Sentinelles general practitioners

CHICKENPOX



Map of spatial data interpolation based on incidence rates at the « departement » (NUTS 3) level, (per 100,000 inhabitants), Chickenpox, Sentinelles general practitioners, 2019w14
Maps available at http://www.sentiweb.fr



Incidence rate in blue,
(per 100,000 inhabitants), Chickenpox, Sentinelles general practitioners

National incidence rates (per 100,000 inhabitants) over the past 3 weeks	2019w14 (non consolidated)	2019w13	2019w12
	Incidence rate estimation [95% confidence interval]	Incidence rate estimation [95% confidence interval]	Incidence rate estimation [95% confidence interval]
INFLUENZA-LIKE ILLNESS	22 [16 ; 28]	25 [19 ; 31]	34 [27 ; 41]
ACUTE DIARRHEA	149 [132 ; 166]	124 [111 ; 137]	126 [113 ; 139]
CHICKENPOX	27 [20 ; 34]	26 [20 ; 32]	22 [16 ; 28]

Table 1 : Incidence rates* estimation with 95% confidence interval, for each indicator, in France, over the past 3 weeks.

Regional incidence rates for week 2019w14 (per 100,000 inhabitants)	INFLUENZA-LIKE ILLNESS	ACUTE DIARRHEA	CHICKENPOX
	Incidence rate estimation [95% confidence interval]	Incidence rate estimation [95% confidence interval]	Incidence rate estimation [95% confidence interval]
Auvergne-Rhône-Alpes	11 [0 ; 24]	114 [78 ; 150]	28 [9 ; 47]
Bourgogne-Franche-Comté	4 [0 ; 11]	68 [32 ; 104]	8 [0 ; 23]
Bretagne	28 [0 ; 57]	177 [90 ; 264]	20 [0 ; 45]
Centre-Val de Loire	3 [0 ; 10]	196 [136 ; 256]	16 [0 ; 32]
Corse	30 [0 ; 67]	124 [49 ; 199]	6 [0 ; 21]
Grand Est	9 [0 ; 24]	161 [104 ; 218]	31 [3 ; 59]
Hauts-de-France	37 [3 ; 71]	260 [160 ; 360]	46 [12 ; 80]
Ile-de-France	9 [0 ; 18]	60 [36 ; 84]	18 [4 ; 32]
Normandie	11 [0 ; 26]	41 [9 ; 73]	27 [0 ; 70]
Nouvelle-Aquitaine	22 [0 ; 44]	221 [136 ; 306]	36 [2 ; 70]
Occitanie	24 [3 ; 45]	145 [93 ; 197]	36 [10 ; 62]
Pays de la Loire	22 [1 ; 43]	109 [62 ; 156]	22 [0 ; 44]
Provence-Alpes-Côte d'Azur	42 [1 ; 83]	199 [94 ; 304]	9 [0 ; 28]

Table 2 : Incidence rates* estimation with 95% confidence interval, for each indicator, for each French region, for week 2019w14.

Réseau Sentinelles
Inserm - Sorbonne Université UMR-S 1136
Institut Pierre Louis d'Epidémiologie et de Santé Publique (IPLESP)
Sorbonne-Université, site Saint-Antoine
27, rue Chaligny / 75571 Paris cedex 12
Phone. : 01 44 73 84 35 / Fax : 01 44 73 84 54
Email : sentinelles@upmc.fr

*The " Réseau Sentinelles" or Sentinelles Network (a.k.a. French Communicable Diseases Computer Network) is a network of **1,434** physicians working throughout the metropolitan regions of France including **610** involved in the clinical surveillance activity (**493** general practitioners and **117** pediatricians) enabling the achievement of weekly newsletters. This network is developped within an agreement between Inserm, Sorbonne Université and Santé publique France.*

Head of RS: Thomas Hanslik
Deputy head of RS: Thierry Blanchon
Monitoring managers: Louise Rossignol
Information systems, biostatistics: Corentin Hervé, Titouan Launay, Cécile Souty, Clément Turbelin, Ana Vilcu
Publication: Yves Dorléans

Regional branch	Head of network	Regional manager
Auvergne-Rhône-Alpes / Bourgogne-Franche-Comté	Marianne Sarazin	Caroline Liotard
Centre Val de Loire / Pays de la Loire / Hauts-de-France	Thierry Prazuck	Charly Kengne-Kuetche Mathieu Rivière
Ile-de-France	Mathilde François	Lucie Fournier
Méditerranée : Corse / Provence-Alpes-Côte d'Azur	Jean-Pierre Amoros Alessandra Falchi	Shirley Masse Natacha Villechenaud
Sud-Ouest : Nouvelle-Aquitaine / Occitanie	Louise Rossignol Thierry Blanchon (no regional branch)	Marion Debin
Normandie		Laetitia Vaillant
Bretagne		Jennifer Morice
Grand Est		Caroline Guerrisi

Need information ?

You can visit our website :

http://www.sentiweb.fr

These information are also available by using our RSS feed :
http://www.sentiweb.fr/rss/fr/en

You can also contact us using the above contact information.

* Incidence rates estimate are calculated on the activity of general practitioners.