

Sentinelles network report from 02/06/2019, n° 2019w05 (data from 01/28/2019 to 02/03/2019)

Influenza-like illness

EPIDEMIC 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 (2019w05), the incidence rate of influenza-like illness seen in general practice was estimated at 536 cases per 100,000 inhabitants (95% CI [507 ; 565]), still increasing compared to the previous week.

At the regional level, the highest incidence rates were noted in: Nouvelle-Aquitaine (808 cases per 100,000 inhabitants, 95% CI [661 ; 955]), Occitanie (702, 95% CI [594 ; 810]) and Auvergne-Rhône-Alpes (680, 95% CI [597 ; 763]) (the regional data are presented at the end of this newsletter).

Regarding the cases reported last week, the median age was 18 years (3 months to 95 ears). Males accounted for 49% of the cases. These cases showed no particular sign of severity: the percentage of hospitalization was estimated at 0.5% (95% CI [0.1 ; 0.9]).

Vaccine effectiveness: According to the first data collected by the Sentinel physicians, the effectiveness of influenza vaccine against all influenza viruses is estimated at: 59% (95%CI [20;79]) among people aged 65 and above, and 42% (95%CI [5;65]) 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 59% (95% CI [7;82]) against the virus A(H1N1)pdm09 and 19% (IC95 % [-43;54]) against A(H3N2) virus. These estimates will be refined in the coming weeks.

Virological monitoring: since week 2018s40, date of start of monitoring, 1,352 samples were swabbed by Sentinelles network practitioners (962 by general practitioners and 390 by pediatricians). All samples have been tested and among them 603 (44.6%) were positive for an influenza virus.

Last week 223 samples were realized and tested. Among them, 170 (76.2%) were positive for one influenza virus. The positivity rate was still increasing last week. The A(H3N2) et A(H1N1)pdm09 flu viruses were still predominant last week.

The influenza viruses detected along the season were distributed as follows:

- 228 (16.9%) A(H1N1)pdm09 virus,
- 330 (24.4%) A(H3N2) virus,
- 45 (3.3%) A untyped virus,
- 0 (0.0%) B/Victoria lineage virus,
- 0 (0.0%) B/Yamagata lineage virus,
- 0 (0.0%) B unknown lineage virus.

No influenza A and B viruses co-infections has been observed over the entire virological surveillance period.

Regarding the other respiratory viruses, since the beginning of their monitoring, 162 swabs (12.3%) were positive for the rhinovirus (hRV), 140 (10.4%) for the respiratory syncytial virus (RSV), and 41 (3.0%) for the metapneumovirus (hMPV). Last week, there was a low circulation of these three viruses.

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 epidemic peak could have been reached last week (2019w05). The ILI activity should remain stable or start to decrease this week (see the graph hereafter).

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.

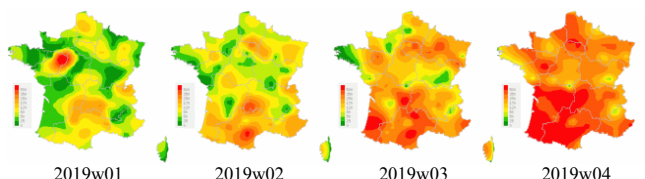
In view of all this information, the conclusions for the last week (2019w05) are:

- Strong increase in all indicators
- High proportion of influenza viruses among hospitalizations
- Co-circulation of A(H3N2) and A(H1N1)pdm09 viruses
- Approximately 1,100 deaths attributable to influenza from 2018w40 to 2019w03
- First estimates of vaccine effectiveness: moderate against A(H1N1)pdm09 virus and low against A(H3N2) virus among all at-risk individuals

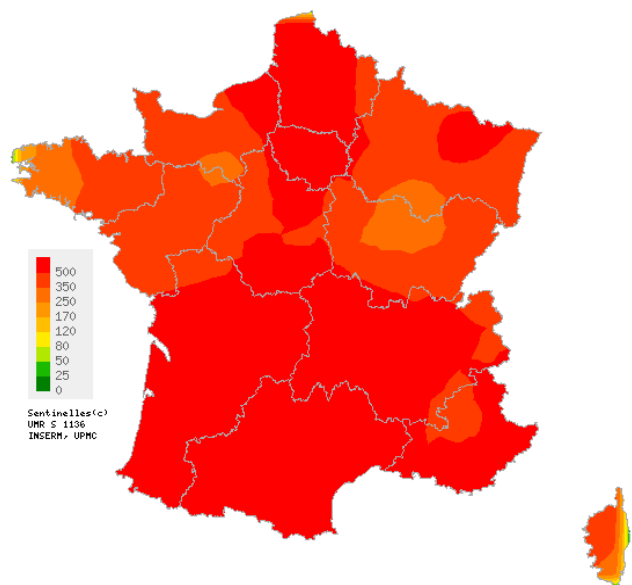
[Santé publique France weekly influenza report \(in french\)](#)

[More information about influenza-like illness. Sentinelles surveillance](#)

[Information about Sentinelles network statistical methods \(in french\)](#)



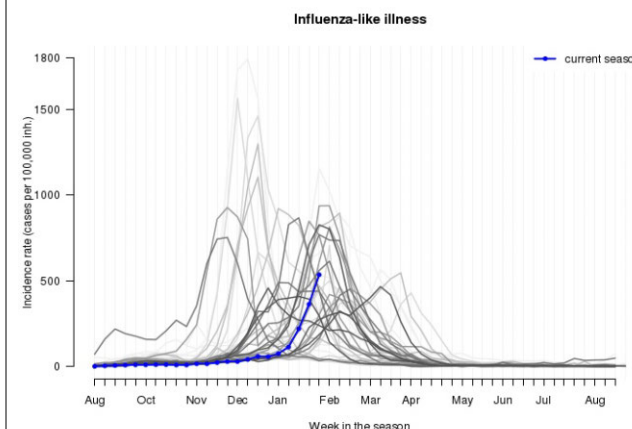
Consolidated data for the last 4 weeks



Map of spatial data interpolation based on influenza-like illness incidence rates at the « département » (NUTS 3) level (per 100,000 inhabitants),

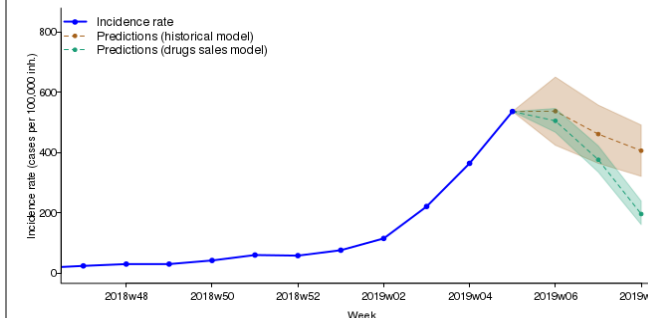
Sentinelles general practitioners, 2019w05

[Maps available at http://www.sentiweb.fr](http://www.sentiweb.fr)



Incidence rate of influenza-like illness 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

Sentinelles network report from 02/06/2019, n° 2019w05 (data from 01/28/2019 to 02/03/2019)

Acute diarrhea

High activity in general practice

Sentinel physicians monitor the number of acute diarrhea seen in consultations (defined by recent acute diarrhea (at least 3 daily watery or nearly so stools, dating less than 14 days, motivating consultation).

Clinical monitoring: in metropolitan France, last week (2019w05), the incidence rate of acute diarrhea seen in general practice was estimated at 152 cases per 100,000 inhabitants (95% CI [137 ; 167]), corresponding to 100,000 new cases, **below** the epidemic threshold (169 cases per 100,000) and slowly decreasing since two weeks. The 2019w04 incidence rate, above the epidemic threshold last week, has been consolidated below it.

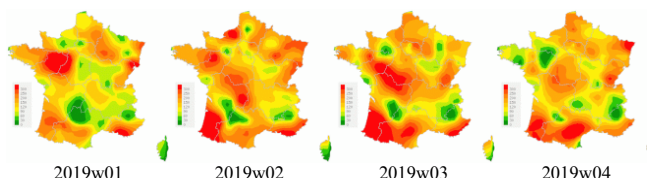
At the regional level, the highest incidence rates were noted in: Grand Est (181 cases per 100,000 inhabitants, 95% CI [130 ; 232]), Pays de la Loire (179, 95% CI [33 ; 325]) and Hauts-de-France (157, 95% CI [106 ; 208]) (the regional data are presented at the end of this newsletter).

Regarding the cases reported last week, the median age was 22 years (2 months to 92 years). Males accounted for 55% of the cases. These cases showed no particular sign of severity: the percentage of hospitalization was estimated at 0.3% (95% CI [0.0 ; 0.9]).

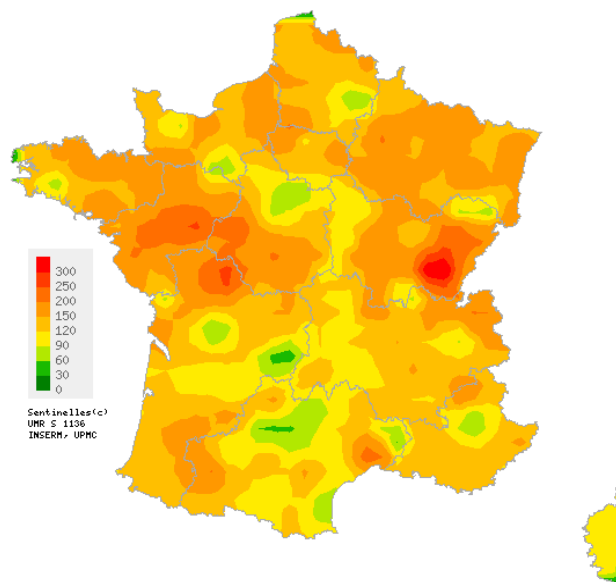
Forecast: according to the forecast model based on historical data, the level of activity of acute diarrhea should remain stable, close to the epidemic threshold in the upcoming weeks (see the graph hereafter).

[More information about acute diarrhea Sentinelles surveillance](#)

[Information about Sentinelles network statistical methods \(in french\)](#)

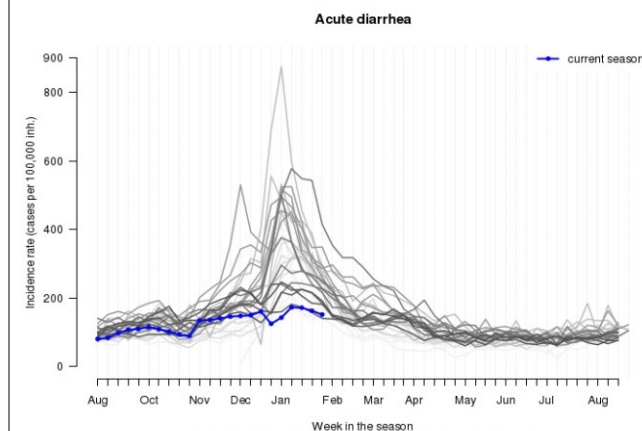


Consolidated data for the last 4 weeks



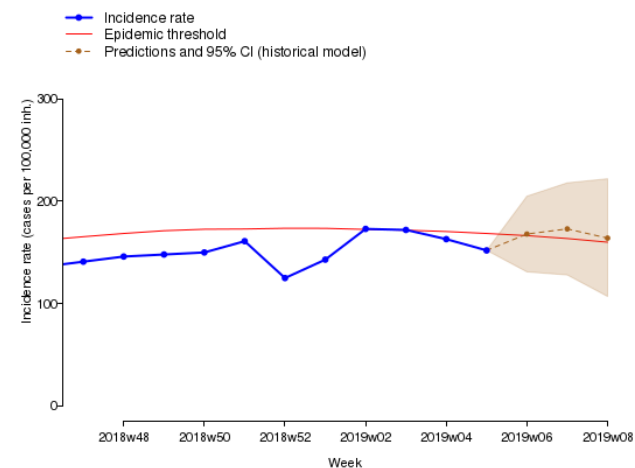
Sentinelles(c)
UMR S 1136
INSERM, UPMC

Map of spatial data interpolation
based on acute diarrhea incidence rates
at the « département » (NUTS 3) level (per 100,000 inhabitants),
Sentinelles general practitioners, 2019w05
[Maps available at http://www.sentiweb.fr](http://www.sentiweb.fr)



Incidence rate of acute diarrhea since 1990 (per 100,000 inhabitants),
Sentinelles general practitioners.

In Blue : season 2018-19 / In gray : seasons from 1990-91 to 2017-18
(the clearer the curve the older the data)



Predicted acute diarrhea incidence rate for the next three weeks
based on a forecast model on historical data
Sentinelles general practitioners

Sentinelles network report from 02/06/2019, n° 2019w05 (data from 01/28/2019 to 02/03/2019)

Chickenpox

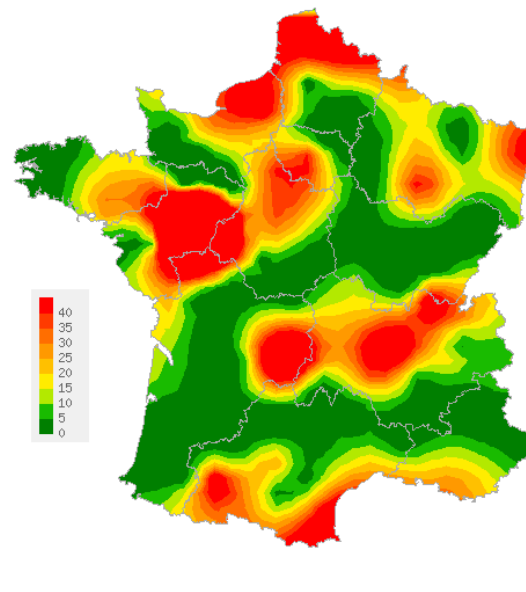
Moderate activity in general practice

In metropolitan France, last week (2019w05), the incidence rate of Chickenpox seen in general practice was estimated at 21 cases per 100,000 inhabitants (95% CI [16 ; 26]).

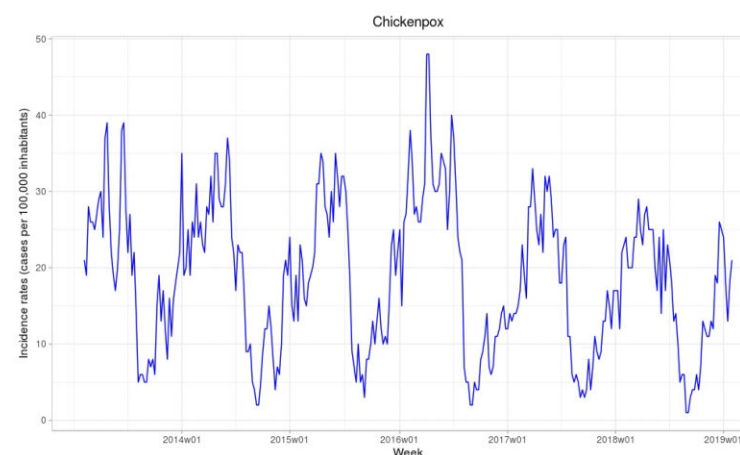
Six regional clusters were noted, **high** in Pays de la Loire (77 cases per 100,000 inhabitants, 95% CI [0 ; 216]) and Hauts-de-France (47, 95% CI [18 ; 76]) and **moderate** in Auvergne-Rhône-Alpes (31, 95% CI [13 ; 49]), Normandie (31, 95% CI [0 ; 63]), Centre-Val de Loire (28, 95% CI [8 ; 48]) and Bretagne (22, 95% CI [0 ; 45]). (the regional data are presented at the end of this report).

[More information about this surveillance](#)

[Information about Sentinelles network statistical methods \(in french\)](#)



Map of spatial data interpolation based on chickenpox incidence rates at the « département » (NUTS 3) level (per 100 000 inhabitants), Sentinelles general practitioners, 2019w05
[Maps available at http://www.sentiweb.fr](http://www.sentiweb.fr)



Chickenpox incidence rate
(per 100,000 inhabitants), Sentinelles general practitioners

National incidence rates (per 100,000 inhabitants) over the past 3 weeks	2019w05 (non consolidated)	2019w04	2019w03
	Incidence rate estimation [95% confidence interval]	Incidence rate estimation [95% confidence interval]	Incidence rate estimation [95% confidence interval]
INFLUENZA-LIKE ILLNESS	536 [507 ; 564]	364 [343 ; 385]	221 [204 ; 238]
ACUTE DIARRHEA	152 [137 ; 167]	163 [149 ; 177]	172 [157 ; 187]
CHICKENPOX	21 [16 ; 26]	18 [14 ; 22]	13 [9 ; 17]

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

Regional incidence rates for week 2019w05 (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	680 [597 ; 763]	133 [99 ; 167]	31 [13 ; 49]
Bourgogne-Franche-Comté	288 [181 ; 395]	140 [74 ; 206]	0 [0 ; 0]
Bretagne	424 [318 ; 530]	138 [82 ; 194]	22 [0 ; 45]
Centre-Val de Loire	486 [404 ; 568]	122 [81 ; 163]	28 [8 ; 48]
Corse	457 [337 ; 577]	91 [36 ; 146]	0 [0 ; 0]
Grand Est	500 [414 ; 586]	181 [130 ; 232]	18 [1 ; 35]
Hauts-de-France	580 [481 ; 679]	157 [106 ; 208]	47 [18 ; 76]
Ile-de-France	499 [416 ; 582]	115 [76 ; 154]	13 [1 ; 25]
Normandie	499 [376 ; 622]	137 [78 ; 196]	31 [0 ; 63]
Nouvelle-Aquitaine	808 [661 ; 955]	113 [64 ; 162]	9 [0 ; 22]
Occitanie	702 [594 ; 810]	131 [86 ; 176]	19 [2 ; 36]
Pays de la Loire	265 [114 ; 416]	179 [33 ; 325]	77 [0 ; 216]
Provence-Alpes-Côte d'Azur	560 [433 ; 687]	146 [80 ; 212]	16 [0 ; 41]

Table 2 : Incidence rates* estimation with 95% confidence interval, for each indicator, for each French region, for week 2019w05.

<p align="center">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</p> <p><i>The " Réseau Sentinelles " or Sentinelles Network (a.k.a. French Communicable Diseases Computer Network) is a network of 1,463 physicians working throughout the metropolitan regions of France including 605 involved in the clinical surveillance activity (489 general practitioners and 116 pediatricians) enabling the achievement of weekly newsletters. This network is developed within an agreement between Inserm, Sorbonne Université and Santé publique France.</i></p> <p>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</p>		
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-Kuetché 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

<p>Need information ?</p> <p>You can visit our website :</p> <p>http://www.sentiweb.fr</p> <p>These information are also available by using our RSS feed : http://www.sentiweb.fr/rss/fr/en</p> <p>You can also contact us using the above contact information.</p>

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