

## Influenza-like illness

### INFLUENZA-LIKE ILLNESS

#### Epidemic Activity in 4 weeks 784,000 people would have consulted a GP

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, the incidence rate of influenza-like illness seen in general practice was estimated at 395 cases per 100,000 inhabitants (95% CI [368 ; 422]), corresponding to 257,000 new cases, **above** the epidemic threshold (179 cases per 100,000) [1]. During these 4 weeks of influenza epidemic, 784,000 people would have consulted a general practitioner for this reason.

**At the regional level,** the highest incidence rates were reported in: Auvergne-Rhône-Alpes (597 cases per 100,000 inhabitants, 95% CI [493 ; 701]), Provence-Alpes-Côte d'Azur (541, 95% CI [409 ; 673]) and Ile-de-France (451, 95% CI [354 ; 548]). Nearly all regions have an incidence rate above the national epidemic threshold (the regional data are presented at the end of this newsletter).

**Regarding the cases reported** last week, the median age was 36 years (6 months to 96 years). Males accounted for 50% of the cases. These cases showed no particular sign of severity: the percentage of hospitalization was estimated at 0.7% (95% CI [0.1 ; 1.2]).

**Virological monitoring:** since week 2016w40, date of start of monitoring, 1506 samples were collected by Sentinelles network practitioners (1017 by general practitioners and 489 by pediatricians). The virus of type A(H3N2) was predominant, accounting for 93.5% (605/647) of the positive samples. Last week 191 samples were tested. Among them, 101 (52.9%) were positive for at least one influenza virus. The positivity rate decreased in week 2017w01. The virus of type A(H3N2) remains the predominantly detected virus:

- 3 (0.2%) A(H1N1)pdm09 virus,
- 605 (40.2%) A(H3N2) virus,
- 37 (2.5%) A untyped virus,
- 2 (0.1%) B/Victoria lineage virus,
- 0 (0.0%) B/Yamagata lineage virus,
- 1 (0.1%) B unknown lineage virus.

One single influenza A and B viruses co-infection has been observed.

Among the samples tested for three other respiratory viruses, the Rhinovirus was dominant with 194 (13,2%) positive samples. Last week, there was a decrease in the RSV and HRV activity.

The samples were analyzed by the CNR (National Reference Centers) of *influenzae* viruses (CC Paris, CA Lyon), and the laboratory of Virology at the University of Corsica.

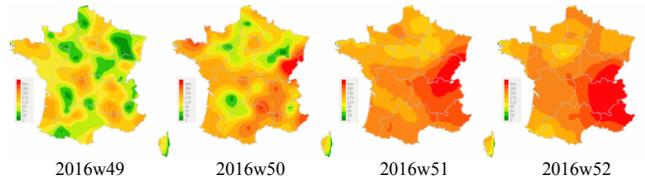
**Forecast:** according to the forecast models based on historical data [2], and on medication deliveries (*IMS-Health research partnership*) [3], the activity of ILI should continue to rise moderately and should peak from this week (see the graph hereafter).

[More information about this surveillance](#)  
[Information about the statistical methods](#)

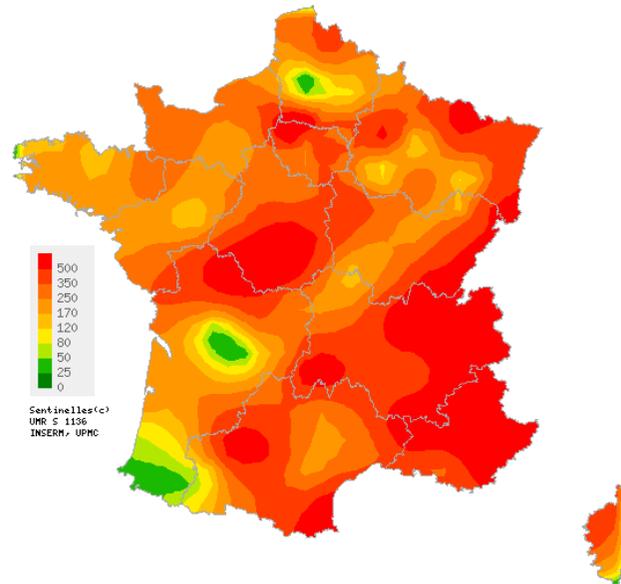
[1] Costagliola D, et al. A routine tool for detection and assessment of epidemics of influenza-like syndromes in France. *Am J Public Health*. 1991;81(1):97-9.

[2] Viboud C, et al. Prediction of the spread of influenza epidemics by the method of analogues. *Am J Epidemiol*. 2003 Nov 15;158(10):996-1006.

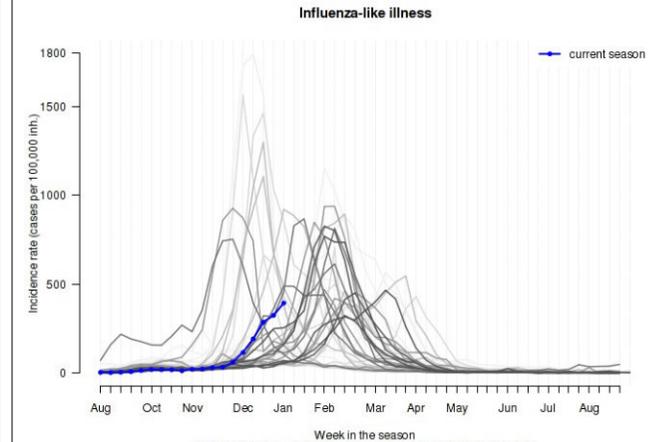
[3] Vergu E, et al. Medication sales and syndromic surveillance, France. *Emerg Infect Dis*. 2006. 12(3):416-21.



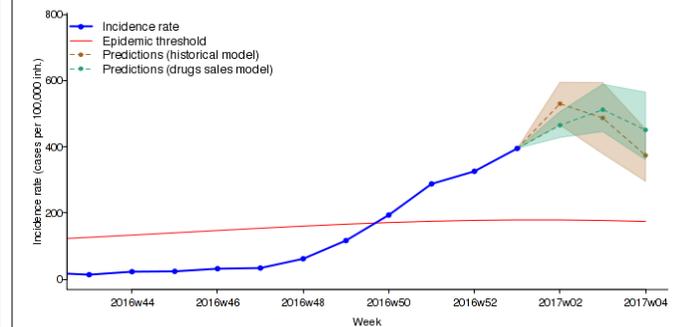
Consolidated data for the last 4 weeks



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, 2017w01  
Maps available at <http://www.sentiweb.fr>



Incidence rate of influenza-like illness since 1984 (per 100 000 inhabitants),  
Sentinelles general practitioners.  
In Blue: season 2016-2017 / In gray: seasons from 1984 to 2016  
(the clearer the curve the older the data)



Predicted incidence rate for the next three weeks  
based on a forecast model on historical data [2] and on drug sales [3]  
Sentinelles general practitioners

## Acute Diarrhea

### ACUTE DIARRHEA Epidemic Activity in 8 weeks 1,087,000 people would have consulted a GP

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, the incidence rate of acute diarrhea seen in general practice was estimated at 262 cases per 100,000 inhabitants (95% CI [239 ; 285]), corresponding to 171,000 new cases, **above** the epidemic threshold (197 cases per 100,000) [1]. Over those 8 weeks, 1,087,000 people would have consulted a GP for this reason.

**At the regional level,** the highest incidence rates were noted in: Hauts-de-France (367 cases per 100,000 inhabitants, 95% CI [260 ; 474]), Bretagne (324, 95% CI [203 ; 445]) and Provence-Alpes-Côte d'Azur (290, 95% CI [170 ; 410]) (the regional data are presented at the end of this newsletter).

**Regarding the cases reported** last week, the median age was 30 years (3 months to 96 years). Males accounted for 47% of the cases. These cases showed no particular sign of severity: the percentage of hospitalization was estimated at 0.3% (95% CI [0.0 ; 0.7]).

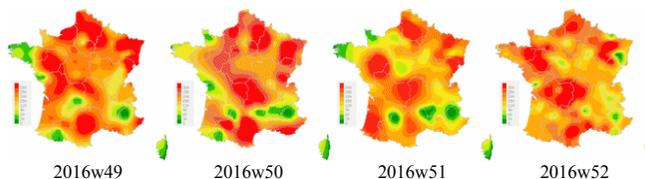
**Forecast:** according to the forecast model based on historical data [2], the level of activity of acute diarrhea may decrease and remain close to the epidemic threshold in the upcoming weeks (see the graph hereafter).

[More information about this surveillance](#)

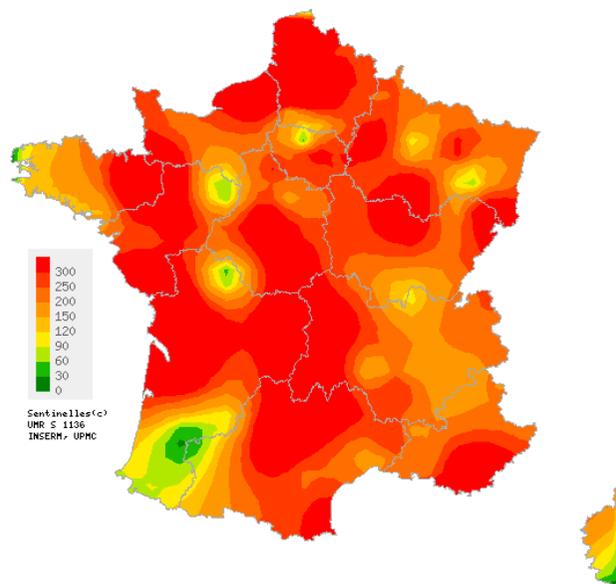
[Information about the statistical methods](#)

[1] Costagliola D, et al. A routine tool for detection and assessment of epidemics of influenza-like syndromes in France. Am J Public Health. 1991;81(1):97-9.

[2] Viboud C, et al. Prediction of the spread of influenza epidemics by the method of analogues. Am J Epidemiol. 2003 Nov 15;158(10):996-1006.

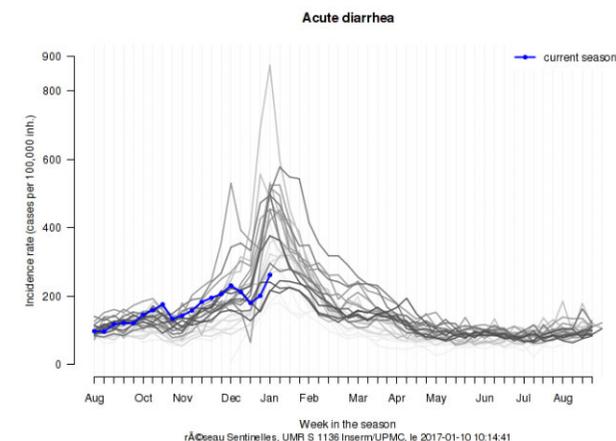


Consolidated data for the last 4 weeks

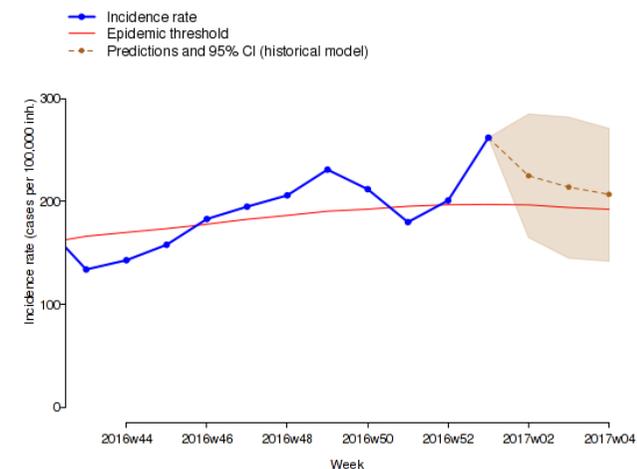


Sentinelles(c)  
UMR S 1136  
INSERM, UPMC

Map of spatial data interpolation  
based on acute diarrhea incidence rates  
at the « department » (NUTS 3) level (per 100 000 inhabitants),  
Sentinelles general practitioners, 2017w01  
Maps available at <http://www.sentiweb.fr>



Incidence rate of acute diarrhea since 1990 (per 100 000 inhabitants),  
Sentinelles general practitioners.  
In Blue : season 2016-2017 / In gray : seasons from 1990 to 2016  
(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 [2]  
Sentinelles general practitioners

## Chickenpox

### CHICKENPOX

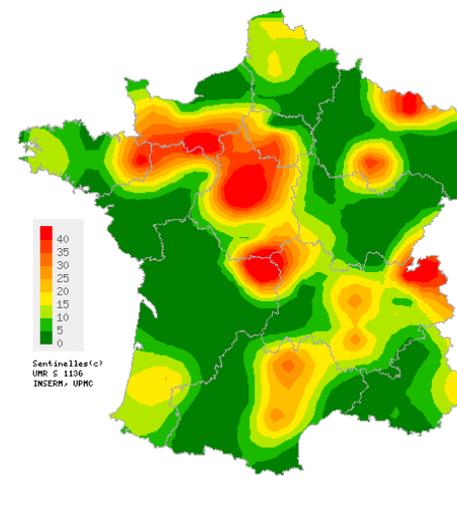
#### Low activity

In metropolitan France, last week, the incidence rate of Chickenpox seen in general practice was estimated at 12 cases per 100,000 inhabitants, (95% CI [7 ; 17]).

Two moderate regional clusters were reported in Centre-Val de Loire (32, 95% CI [8 ; 56]) and Auvergne-Rhône-Alpes (20, 95% CI [6 ; 34]). \*

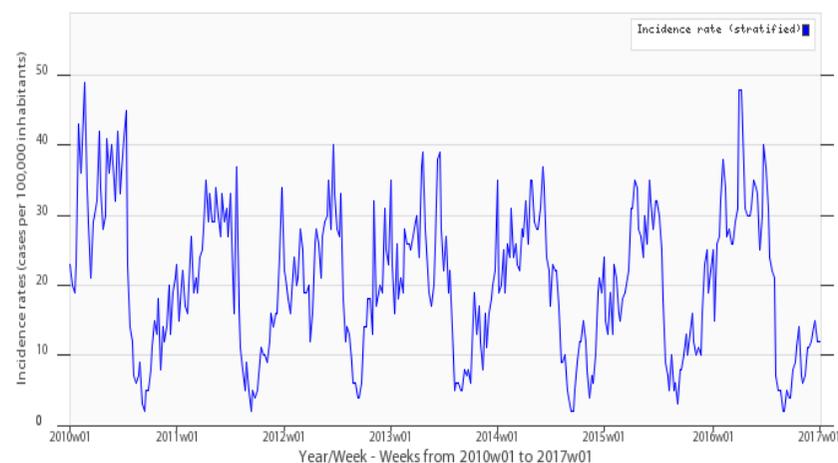
[More information about this surveillance](#)

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



Map of spatial data interpolation based on chickenpox incidence rates at the « departement » (NUTS 3) level (per 100 000 inhabitants), Sentinelles general practitioners, 2017w01  
[Maps available at http://www.sentiweb.fr](http://www.sentiweb.fr)

Sentinelles Network, Chickenpox, Metropolitan France



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

National incidence rates (per 100 000 inhabitants) over the past 3 weeks	2017w01 (non consolidated)	2016w52	2016w51
	Incidence rate estimation [95% confidence interval]	Incidence rate estimation [95% confidence interval]	Incidence rate estimation [95% confidence interval]
INFLUENZA-LIKE ILLNESS	395 [368 ; 422]	326 [302 ; 350]	288 [265 ; 311]
ACUTE DIARRHEA	262 [239 ; 285]	201 [181 ; 221]	180 [160 ; 200]
CHICKENPOX	12 [7 ; 17]	12 [8 ; 16]	15 [9 ; 21]

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

Regional incidence rates for week 2017w01 (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	597 [493 ; 701]	219 [157 ; 281]	20 [6 ; 34]
Bourgogne-Franche-Comté	337 [224 ; 450]	217 [138 ; 296]	0 [0 ; 0]
Bretagne	225 [130 ; 320]	324 [203 ; 445]	18 [0 ; 46]
Centre-Val de Loire	336 [253 ; 419]	255 [186 ; 324]	32 [8 ; 56]
Corse	430 [313 ; 547]	189 [110 ; 268]	0 [0 ; 0]
Grand Est	404 [322 ; 486]	242 [170 ; 314]	11 [0 ; 27]
Hauts-de-France	289 [207 ; 371]	367 [260 ; 474]	12 [0 ; 29]
Ile-de-France	451 [354 ; 548]	182 [127 ; 237]	11 [0 ; 22]
Normandie	313 [209 ; 417]	287 [183 ; 391]	14 [0 ; 29]
Nouvelle-Aquitaine	231 [125 ; 337]	269 [172 ; 366]	3 [0 ; 9]
Occitanie	366 [290 ; 442]	256 [194 ; 318]	4 [0 ; 11]
Pays de la Loire	137 [56 ; 218]	166 [64 ; 268]	0 [0 ; 0]
Provence-Alpes-Côte d'Azur	541 [409 ; 673]	290 [170 ; 410]	8 [0 ; 22]

Table 2 : Incidence rates\* estimation with 95% confidence interval, for each indicator, for each French region, for week 2017w01.

**Réseau Sentinelles**  
**Inserm-UPMC UMR-S 1136**  
**Institut Pierre Louis d'Epidémiologie et de Santé Publique (IPLESP)**  
**Faculté de Médecine Pierre et Marie Curie, 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](mailto:sentinelles@upmc.fr)

*The "Réseau Sentinelles" or Sentinelles Network  
(a.k.a. French Communicable Diseases Computer Network)  
is a network of 1395 physicians working throughout the metropolitan regions  
of France including 554 involved in the clinical surveillance activity  
(439 general practitioners and 115 pediatricians)  
enabling the achievement of weekly newsletters.  
This network is developed in cooperation between Inserm, Université Pierre  
et Marie Curie (UPMC) and the Agence Santé publique France.*

**Head of RS :** Thomas Hanslik  
**Deputy head of RS :** Thierry Blanchon  
**Monitoring managers:** Soledad Guerreiro, Caroline Guerrisi, Louise Rossignol  
**Information systems, biostatistics :** Cécile Souty, Clément Turbelin, Ana Vilcu  
**Editor :** Yves Dorléans

Regional branch	Head of network	Regional manager
Auvergne-Rhône-Alpes / Bourgogne-Franche-Comté	Marianne Sarazin	Caroline Liotard
Centre : Val de Loire / Hauts-de-France	Thierry Prazuck	Thomas Goronflot Mathieu Rivière
Ile-de-France	Mathilde François	Cécile Pino
Méditerranée : Corse / Occitanie / Provence-Alpes-Côte d'Azur	Jean-Pierre Amoros Alessandra Falchi	Priscillia Bompard Lisandru Capai Shirley Masse

**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.