Influenza-like illness

Results from the electronic surveillance of communicable diseases from 12/08/2014 to 12/14/2014.

INFLUENZA-LIKE ILLNESS
Low activity, increasing

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 77 cases per 100,000 inhabitants, 95% CI [61 ; 93], (49,000 new cases), below the epidemic threshold (168 cases per 100,000) [1].

At the regional level, the highest incidence rates were noted in: Nord-Pas-de-Calais (230 cases per 100,000 inhabitants), Bourgogne (218) and Franche-Comté (188) *(the regional data are presented at the end of this newsletter)*.

Regarding the cases reported last week, the median age was 32 years (22 months to 97 years). Males accounted for 53% of the cases. These cases showed no particular sign of severity: there were no hospitalized cases reported for influenza-like illness last week.

Virological surveillance

Since week 2014w40 of resumption of monitoring, 286 samples were collected by Sentinelles network general practitioners. Among them, 14 influenza viruses have been identified:
- 4 A(H1N1)2009 type virus,
- 7 A(H3N2) type virus,
- 3 B type virus.

Forecast: according to the forecast model based on historical data [2], and on medication sales (IMS-Health research partnership) [3], the intensity of influenza activity should moderately increase next weeks *(see the graph hereafter).*
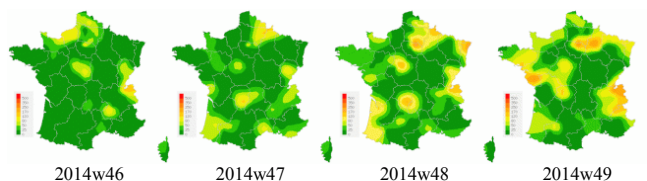*More information about this surveillance*

The Sentinelles network team

[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.
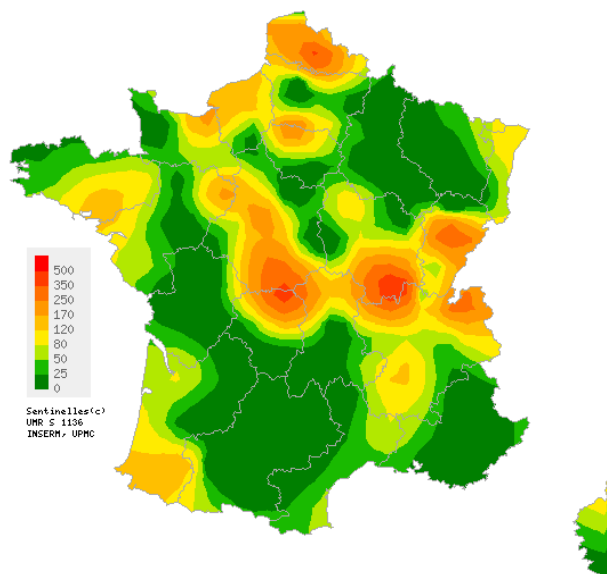[2] Viboud C, et al. Prediction of the spread of influenza epidemics by the method of analogues. Am J Epidemiol. 2003 Nov 15;158(10):996-1006.
[3] Vergu E, et al. Medication sales and syndromic surveillance, France. Emerg Infect Dis. 2006. 12(3):416-21.

Current activity

2014w46   2014w47   2014w48   2014w49

Consolidated data for the last 4 weeks

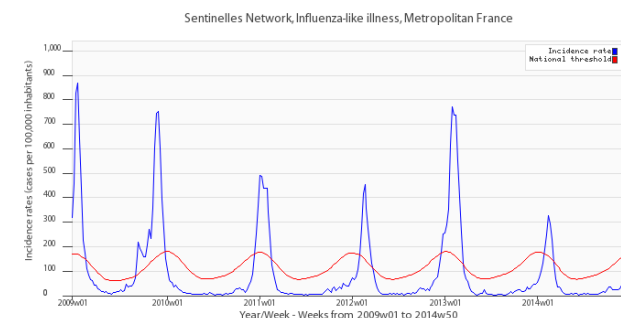

Sentinelles(c)
UMR S 1136
INSERM, UPMC

Week 2014w50
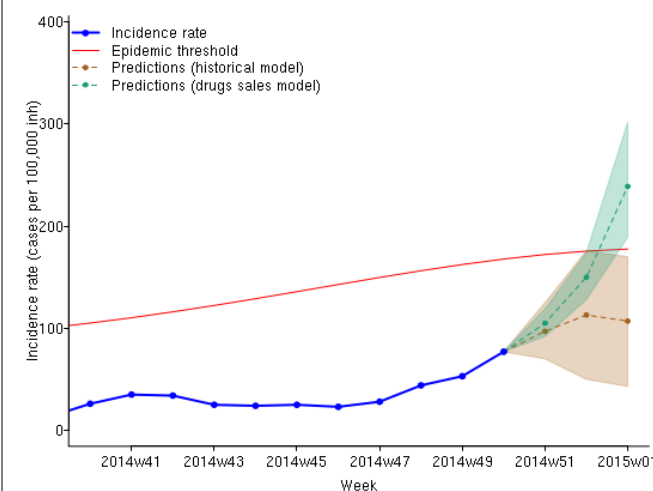Map of data spatial interpolation.
The interpolation is based on the departmental incidence.
(cases per 100,000 inhabitants)
Maps available at http://www.sentiweb.fr/

Predictions

Sentinelles Network, Influenza-like illness, Metropolitan France

Incidence rate in blue,
epidemic threshold in red calculated by a periodic regression model [1]
(in cases per 100,000 inhabitants).

Predicted incidence rate for the next three weeks
based on a forecast model on historical data [2] (in brown),
and on drug sales [3] (in green)
(IMS-Health partenership)

Acute diarrhea

Results from the electronic surveillance of communicable diseases from 12/08/2014 to 12/14/2014.

ACUTE DIARRHEA
High activity, increasing

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 253 cases per 100,000 inhabitants (95% CI [224 ; 282]), 160,000 new cases, on the increase over the previous week and just **below** the epidemic threshold (269 cases per 100,000) [1].

At the regional level, the highest incidence rates were noted in: Limousin (361 cases per 100,000 inhabitants), Provence-Alpes-Côte-d'Azur (342) and Ile-de-France (338) *(the regional data are presented at the end of this newsletter).*

Regarding the cases reported last week, the median age was 23 (3 months to 100 years). Males accounted for 50% of the cases. These cases showed no particular sign of severity: the percentage of hospitalization was estimated at 0.9% (95% CI [0.0 ; 1.8]).

Forecast: according to the forecast model based on historical data [2], the level of activity of acute diarrhea would increase and exceed the threshold next weeks *(see the graph hereafter)*.

A second detection model of gastroenteritis epidemics is based on medication sales [3] (IMS-Health research partnership). Last week two of the four drugs classes monitored has exceeded their alert threshold, confirming an increased activity.
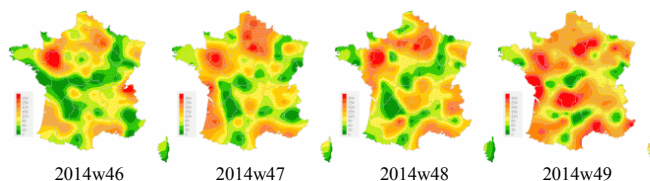
More information about this surveillance

The Sentinelles network team

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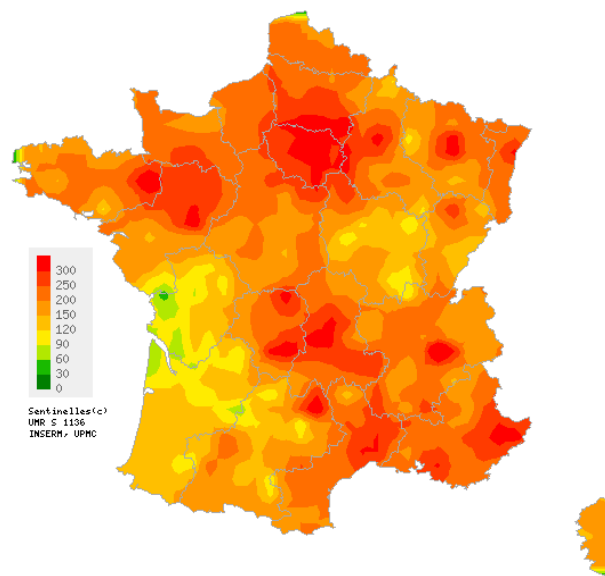
[2] Viboud C, et al. *Prediction of the spread of influenza epidemics by the method of analogues. Am J Epidemiol.* 2003 Nov 15;158(10):996-1006

[3] Pelat C, et al. *A method for selecting and monitoring medication sales for surveillance of gastroenteritis. Pharmacoepidemiol Drug Saf.* 2010 Oct;19(10):1009-18.

Current activity

| 2014w46 | 2014w47 | 2014w48 | 2014w49 |

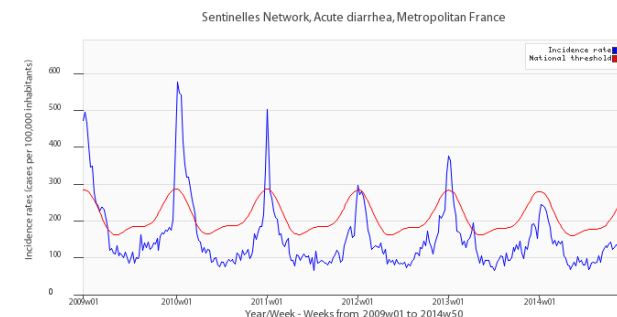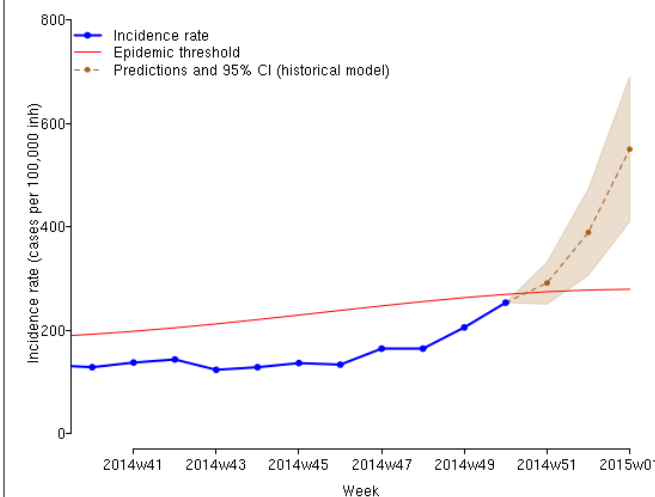Consolidated data for the last 4 weeks

Week 2014w50
Map of data spatial interpolation.
The interpolation is based on the departmental incidence.
(cases per 100,000 inhabitants)
Maps available at http://www.sentiweb.fr/

Predictions

Sentinelles Network, Acute diarrhea, Metropolitan France

Incidence rate in blue,
epidemic threshold in red calculated by a periodic regression model [1]
(in cases per 100,000 inhabitants).

Predicted incidence rate for the next three weeks
based on a forecast model on historical data [2] (in brown)
(IMS-Health partenership)

Chickenpox

Results from the electronic surveillance of communicable diseases from 12/08/2014 to 12/14/2014:

CHICKENPOX
Low activity

In metropolitan France, last week, the incidence rate of Chickenpox seen in general practice was estimated at 13 cases per 100,000 inhabitants (95% CI [7 ; 19]).

Five moderate regional clusters were reported in Alsace (38), Centre (30), Limousin (23), Corse (23) and Rhône-Alpes (20). *
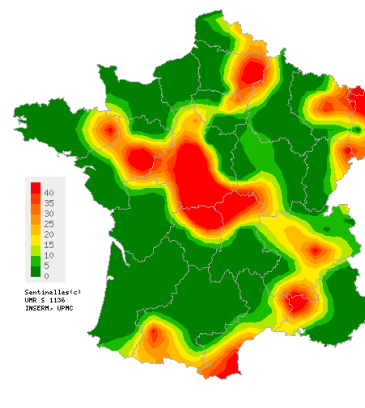
More information about this surveillance

The Sentinelles network team

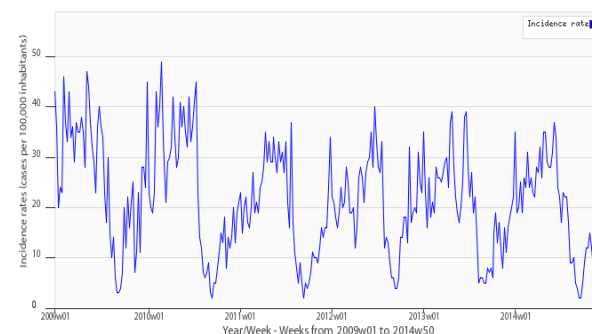* *The regional data are presented at the end of this report.*

Observed situations and National incidence trend

Week 2014w50 (in cases per 100,000 inhabitants)

Map of spatial data interpolation based on incidence rates
at the « departement » (NUTS 3) level.
Maps available at http://www.sentiweb.fr

Sentinelles Network, Chickenpox, Metropolitan France

Incidence rate in blue
(in cases per 100,000 inhabitants).

National incidence rates (per 100 000 inhabitants) over the past 3 weeks	2014w50 (non consolidated)	2014w49	2014w48
	Incidence rate estimation [95% confidence interval]	Incidence rate estimation [95% confidence interval]	Incidence rate estimation [95% confidence interval]
INFLUENZA-LIKE ILLNESS	77 [61 ; 93]	53 [43 ; 63]	44 [34 ; 54]
ACUTE DIARRHEA	253 [224 ; 282]	205 [185 ; 225]	164 [146 ; 182]
CHICKENPOX	13 [7 ; 19]	10 [6 ; 14]	6 [2 ; 10]

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

Regional incidence rates for week 2014w50 (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]
Alsace	85 [0 ; 181]	334 [144 ; 524]	38 [0 ; 102]
Aquitaine	77 [0 ; 182]	85 [0 ; 194]	0 [0 ; 0]
Auvergne	38 [0 ; 95]	263 [124 ; 402]	14 [0 ; 53]
Basse-Normandie	111 [0 ; 252]	87 [19 ; 155]	0 [0 ; 0]
Bourgogne	218 [0 ; 594]	77 [14 ; 140]	3 [0 ; 15]
Bretagne	84 [0 ; 242]	224 [110 ; 338]	14 [0 ; 39]
Centre	76 [27 ; 125]	162 [81 ; 243]	30 [0 ; 60]
Champagne-Ardenne	9 [0 ; 31]	228 [103 ; 353]	0 [0 ; 0]
Corse	84 [7 ; 161]	62 [0 ; 124]	23 [0 ; 64]
Franche-Comté	188 [0 ; 401]	236 [49 ; 423]	6 [0 ; 46]
Haute-Normandie	95 [0 ; 213]	222 [54 ; 390]	0 [0 ; 0]
Ile-de-France	126 [67 ; 185]	338 [239 ; 437]	12 [0 ; 34]
Languedoc-Roussillon	50 [0 ; 108]	294 [157 ; 431]	15 [0 ; 44]
Limousin	106 [9 ; 203]	361 [149 ; 573]	23 [0 ; 67]
Lorraine	14 [0 ; 69]	238 [64 ; 412]	15 [0 ; 52]
Midi-Pyrénées	0 [0 ; 0]	183 [76 ; 290]	4 [0 ; 15]
Nord-Pas-de-Calais	230 [111 ; 349]	189 [80 ; 298]	17 [0 ; 50]
Pays-de-la-Loire	58 [0 ; 119]	228 [92 ; 364]	14 [0 ; 54]
Picardie	0 [0 ; 0]	210 [0 ; 426]	18 [0 ; 78]
Poitou-Charentes	4 [0 ; 17]	29 [0 ; 120]	0 [0 ; 0]
Provence-Alpes-Côte-d'Azur	12 [0 ; 32]	342 [189 ; 495]	8 [0 ; 23]
Rhône-Alpes	117 [59 ; 175]	275 [202 ; 348]	20 [0 ; 41]

Table 2 : Incidence rates estimation with 95% confidence interval, for each indicator, for each French regions, for week 2014w50 .

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