

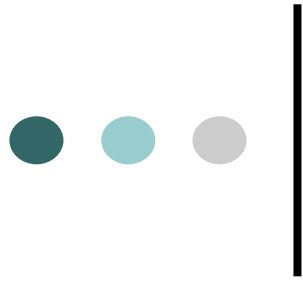


Premier bilan de la grippe H1N1 dans les urgences et réanimation de France

O. Leroy

**Service de réanimation et maladies
infectieuses**

CH de Tourcoing 59

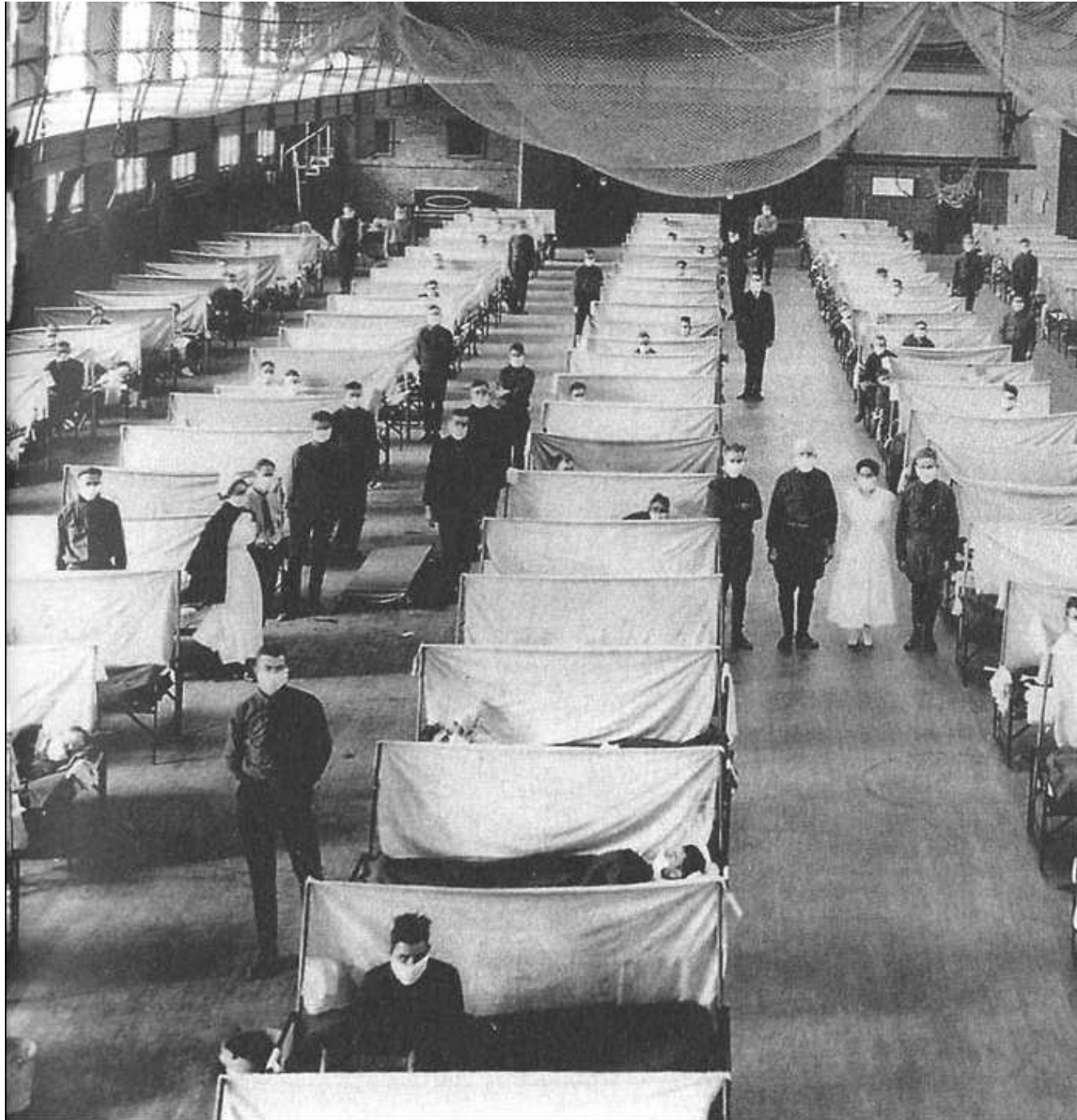


La grippe espagnole, 1918-1919

La plus grande pandémie du XX^e siècle

À peine sortis du premier conflit mondial, l'Europe et le monde connaissent un nouveau fléau. Entre février 1918 et avril 1919, la pandémie de grippe dite « espagnole » aurait atteint la moitié de la population mondiale et tué vingt à quarante millions de personnes.

On estime qu'en France, 165 000 personnes y ont succombé.



Traitements utilisés en 1918

Antiseptiques externes:

- menthol
- eucalyptus
- phénol
- acide salicylique

Antiseptiques internes:

- arsenic
- argent et or colloïdaux

Immunothérapie:

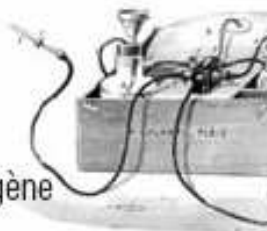
- sérums: humain, animal
- vaccins: antipneumocoque, streptocoque, bacille de Pfeiffer, staphylocoque doré

Traitement symptomatique:

- stimulants: strychnine, adrénaline fraîche, huile de camphre, caféine, digitaline
- antipyrétiques: quinine, aspirine
- anticongestifs: saignées

Mesures adjuvantes:

- abcès de fixation
- injection sous cutanée d'oxygène





Epidémie 2009-2010

The NEW ENGLAND JOURNAL *of* MEDICINE

ORIGINAL ARTICLE

Pneumonia and Respiratory Failure from
Swine-Origin Influenza A (H1N1) in Mexico

Epidémie 2009-2010

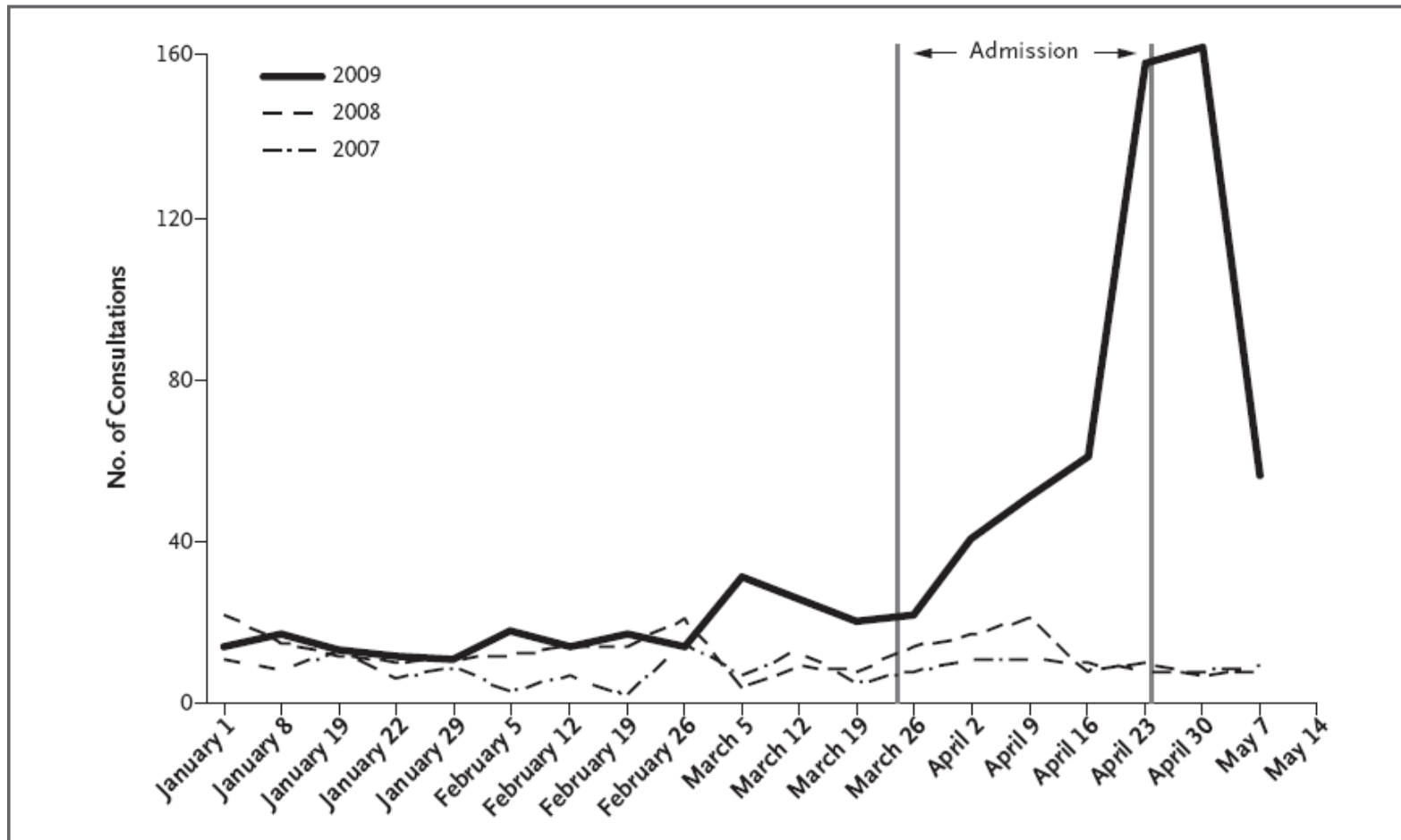


Figure 1. Emergency Room Consultations for Pneumonia or Respiratory Infection, Including Influenza-like Illness, at the National Institute of Respiratory Diseases of Mexico.



Epidémie 2009-2010

- **Que s'est-il passé au cours de l'hiver dans l'hémisphère sud ?**



Epidémie 2009-2010

ORIGINAL ARTICLE

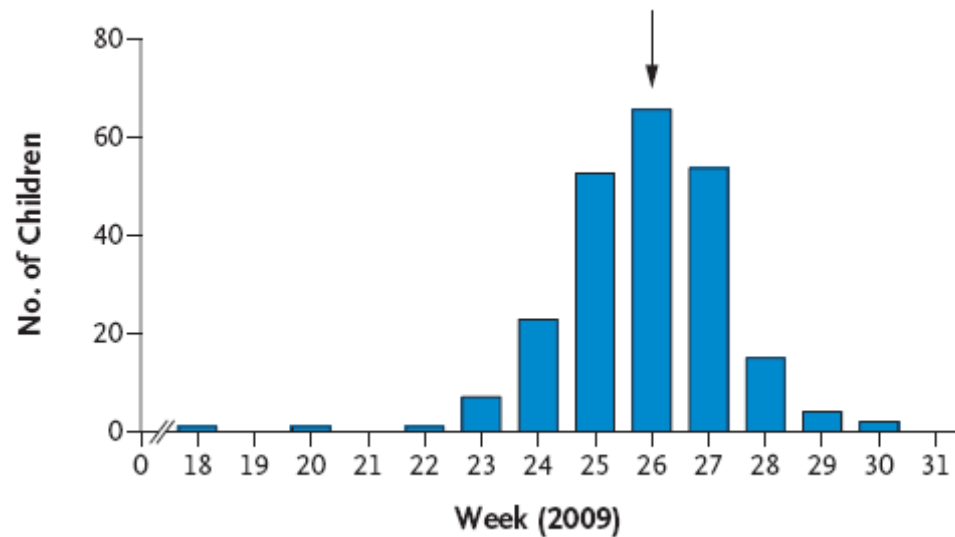
Pediatric Hospitalizations Associated with 2009
Pandemic Influenza A (H1N1) in Argentina



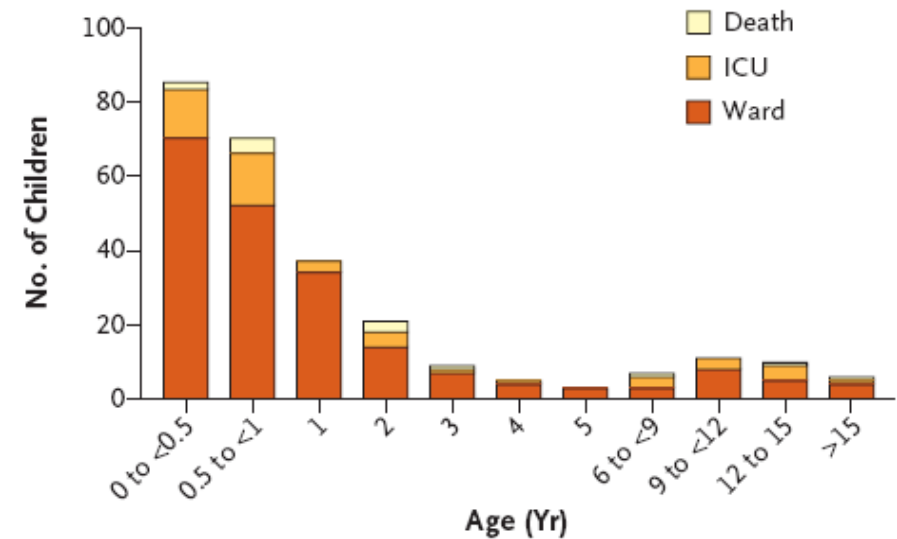
Epidémie 2009-2010

- The Buenos Aires metropolitan area has an estimated pediatric population (<18 years of age) of 3.8 million.

A No. of Hospitalizations



C Severity of Illness





Epidémie 2009-2010

MAJOR ARTICLE

Impact of the Novel Influenza A (H1N1)
during the 2009 Autumn-Winter Season
in a Large Hospital Setting in Santiago, Chile

Epidémie 2009-2010

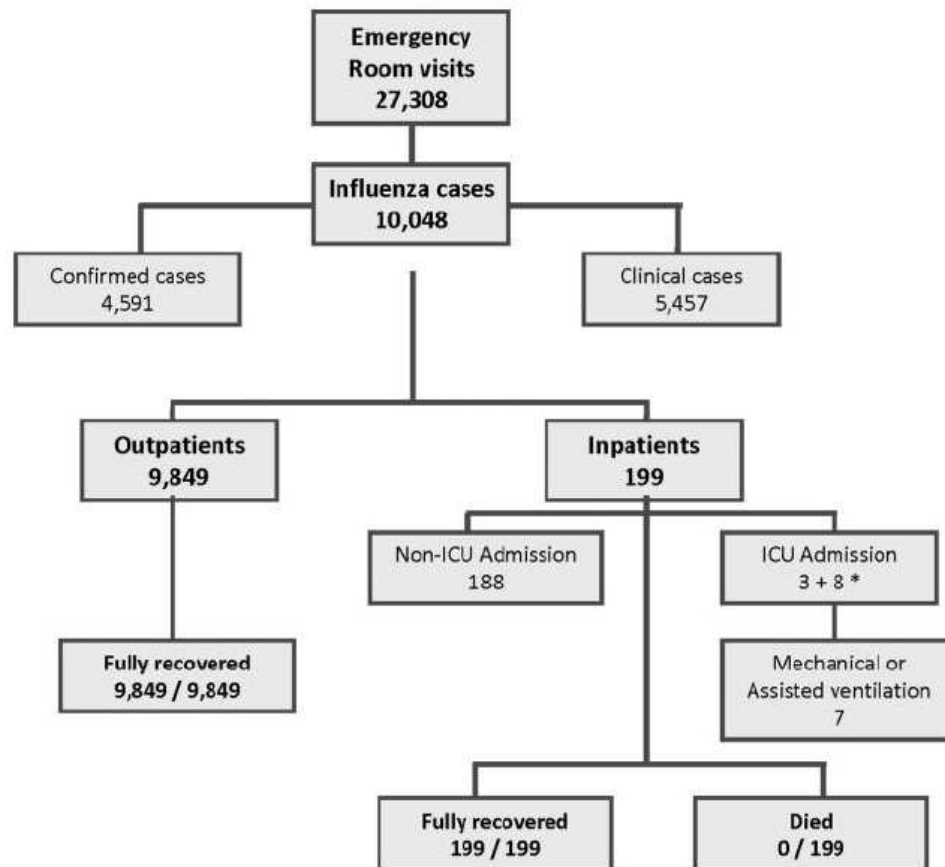


Figure 1. Flowchart of influenza-associated emergency department visits for the 2-month influenza epidemic period (from 17 May to 17 July 2009).

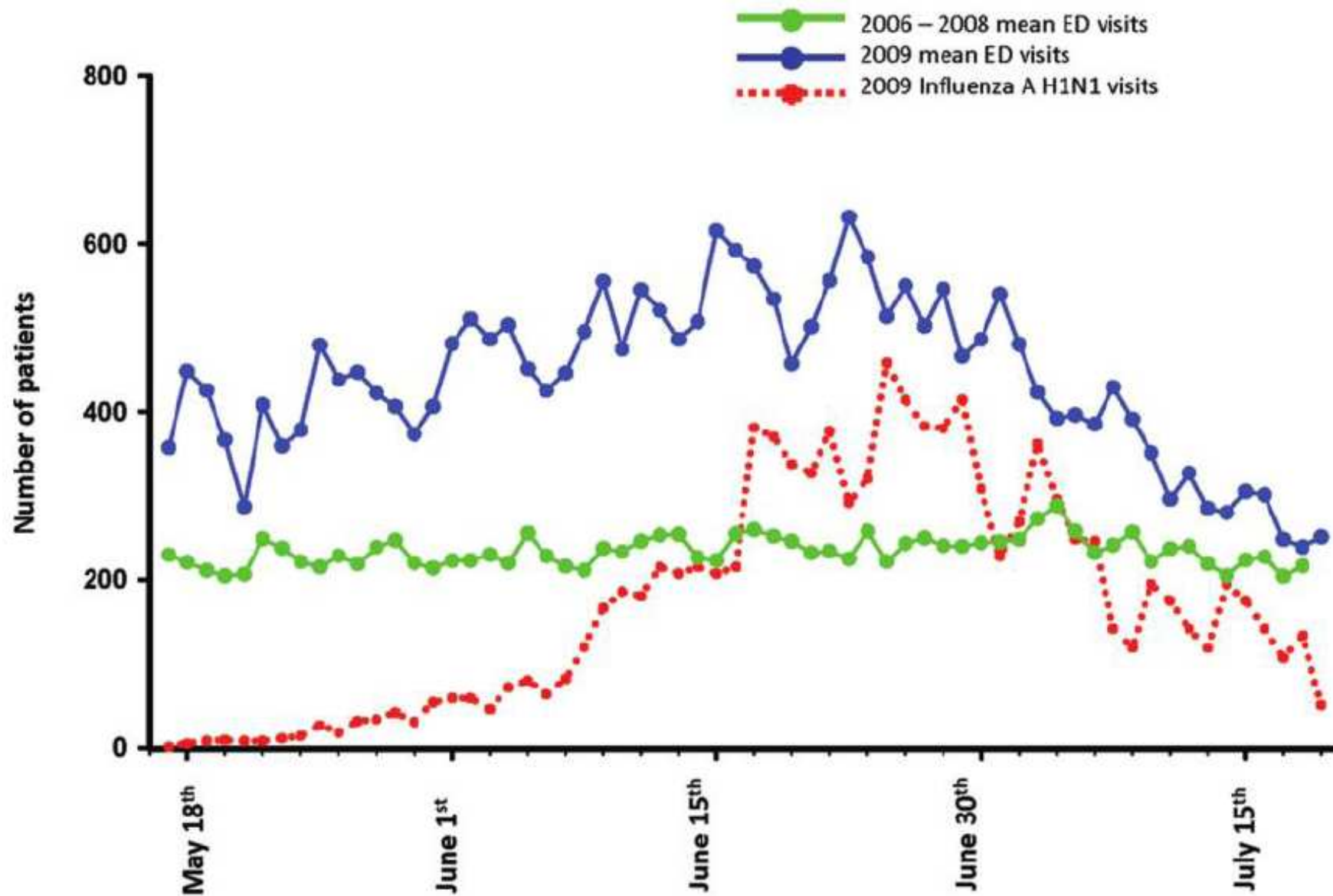


Figure 2. Line graph showing comparison of daily emergency department (ED) visits occurring during the 2-month epidemic period for years 2006–2008 and year 2009, including influenza-associated visits for 2009.



Epidémie 2009-2010

The NEW ENGLAND
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NOVEMBER 12, 2009

VOL. 361 NO. 20

Critical Care Services and 2009 H1N1 Influenza in Australia and New Zealand

The ANZIC Influenza Investigators*



Epidémie 2009-2010

- Australie.

- **Superficie** : 7 682 300 km² (environ 14 fois la France).

- **Population** : 20 601 000 habitants

- Nouvelle Zélande

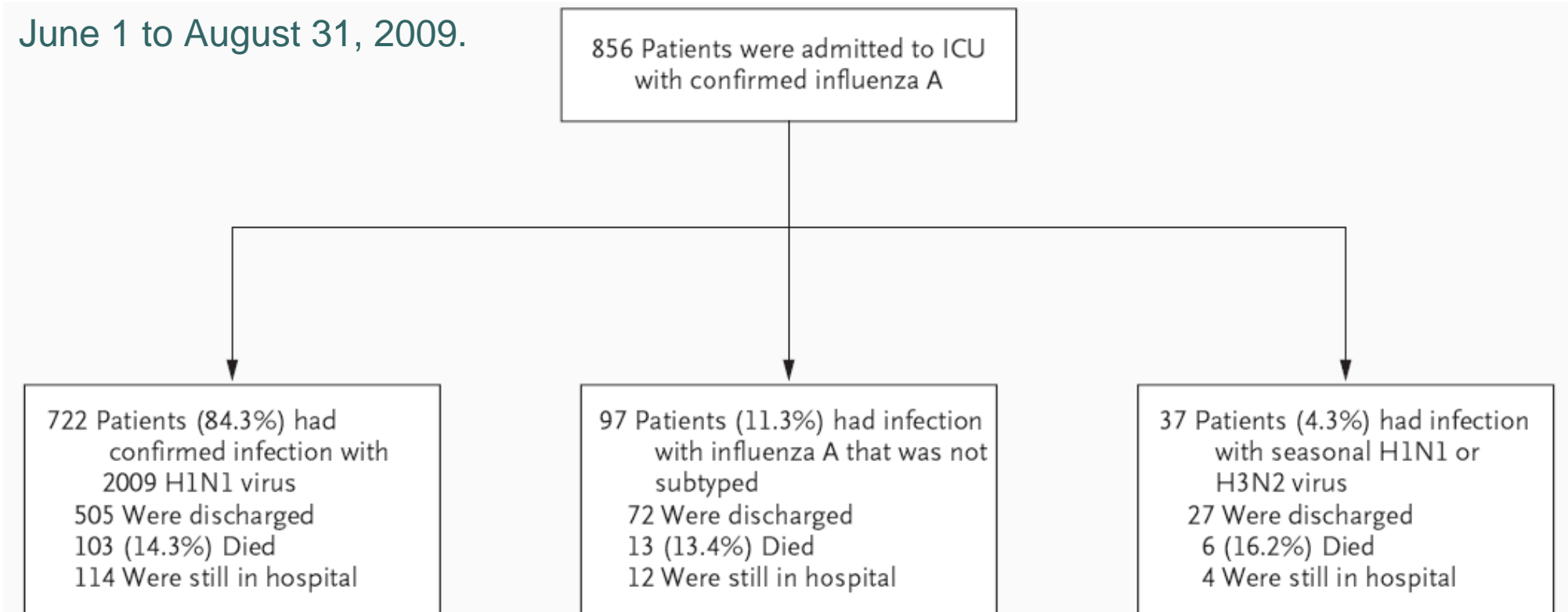
- **Superficie** : 269 680 km² (environ 1/2 fois la France)

- **Population** : 4 173 000 d'habitants



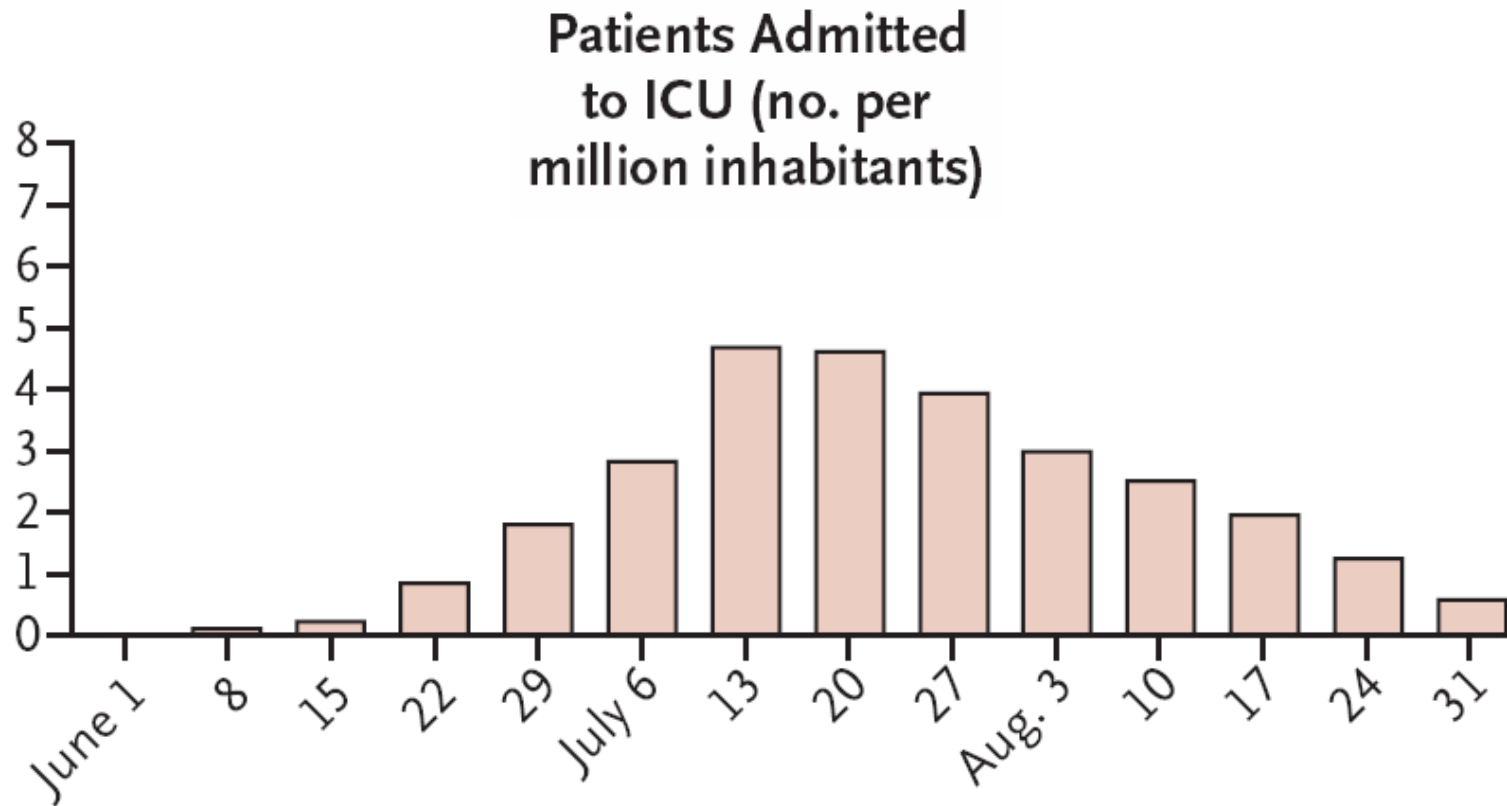
Epidémie 2009-2010

Figure 1. Enrollment and Follow-up of Patients with Influenza A Admitted to Intensive Care Units (ICUs) in Australia and New Zealand.





Epidémie 2009-2010



Epidémie 2009-2010

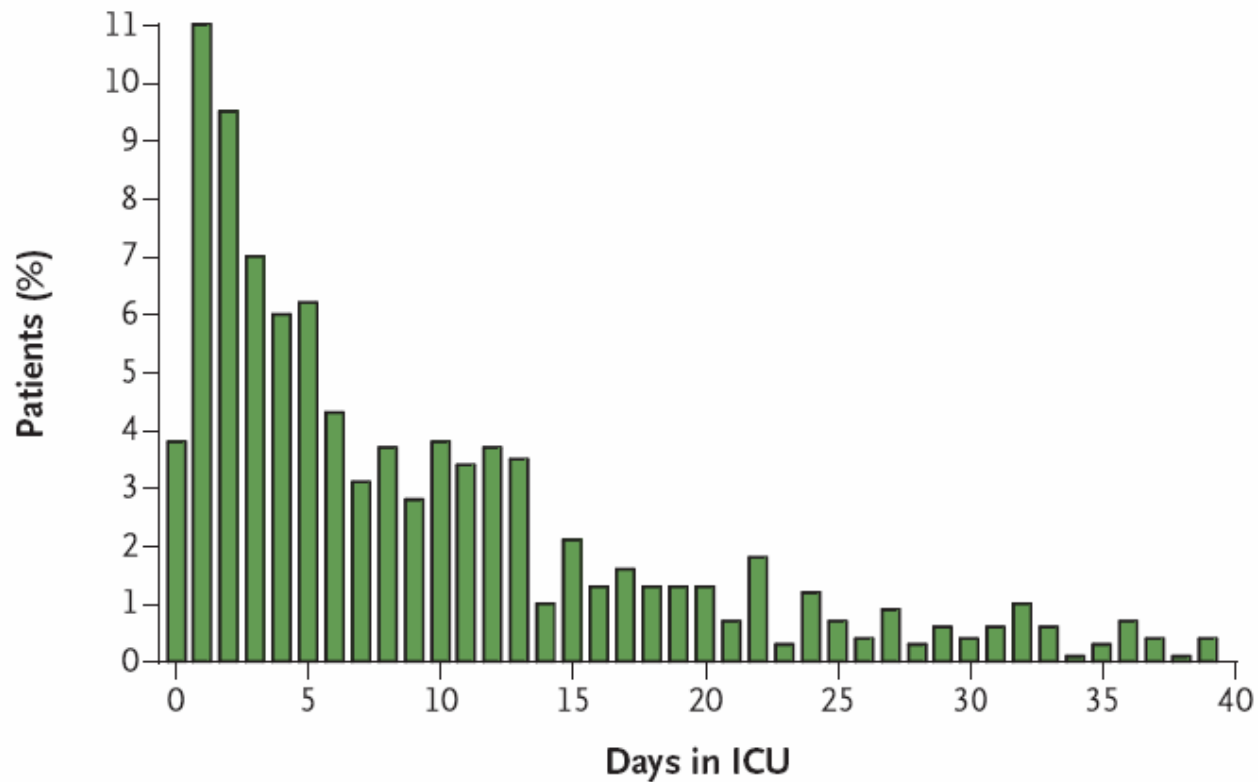
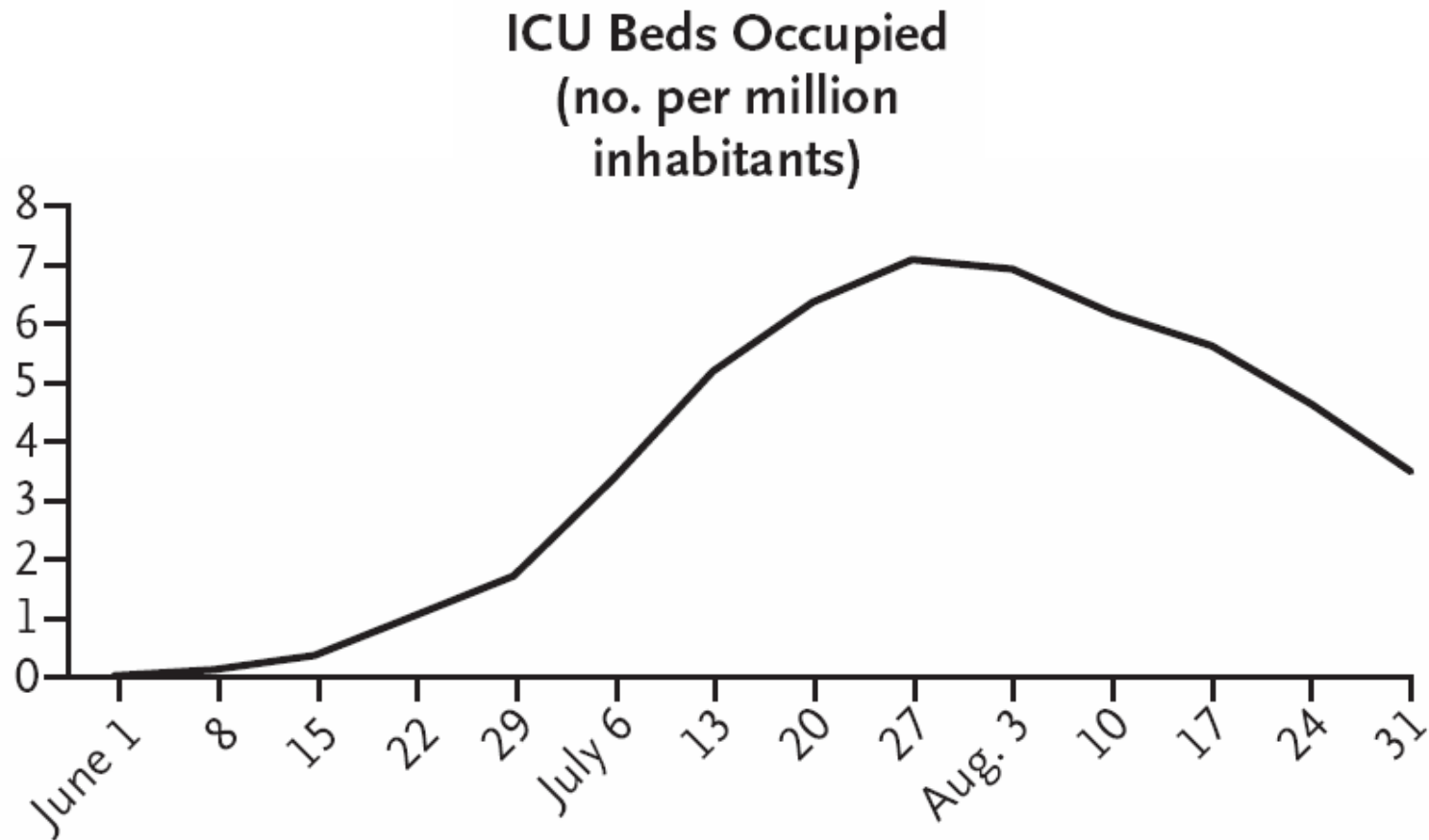
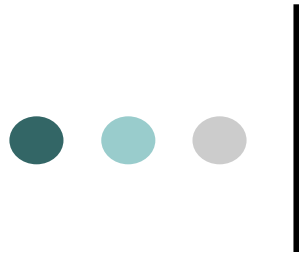


Figure 3. Length of Stay in the Intensive Care Unit (ICU) among Patients with 2009 H1N1 Influenza.



Epidémie 2009-2010





Intensive Care Med (2010) 36:428–443
DOI 10.1007/s00134-010-1759-y

SPECIAL ARTICLE

Charles L. Sprung
Janice L. Zimmerman
Michael D. Christian
Gavin M. Joynt
John L. Hick
Bruce Taylor
Guy A. Richards
Christian Sandrock
Robert Cohen
Bruria Adini

Recommendations for intensive care unit and hospital preparations for an influenza epidemic or mass disaster: summary report of the European Society of Intensive Care Medicine's Task Force for intensive care unit triage during an influenza epidemic or mass disaster



Colour Code	Initial Assessment	48 hour Assessment	120 hour Assessment	Priority/Action
Blue	Exclusion Criteria* <u>or</u> SOFA > 11*	Exclusion Criteria <u>Or</u> SOFA > 11 <u>Or</u> SOFA 8 – 11 no	Exclusion Criteria* <u>or</u> SOFA > 11* <u>or</u> SOFA < 8 no	Medical Mgmt +/- Palliate & d/c from critical care
Red	SOFA < 7 <u>or</u> Single Organ Failure	SOFA score < 11 and decreasing	SOFA score < 11 and decreasing progressively	Highest
Yellow	SOFA 8 – 11	SOFA < 8 no	SOFA < 8 with < 3 point decrease in past 72h	Intermediate
Green	No significant organ failure	No longer ventilator dependant	No longer ventilator dependant	Defer or d/c, reassess as needed

Patients who are triaged as 'red' are given priority for ICU followed by those triaged as 'yellow'.

Patients categorized as 'blue/black' remain on the ward and receive palliative care



Grippe H1 N1 en France

Grippe H1 N1 en France

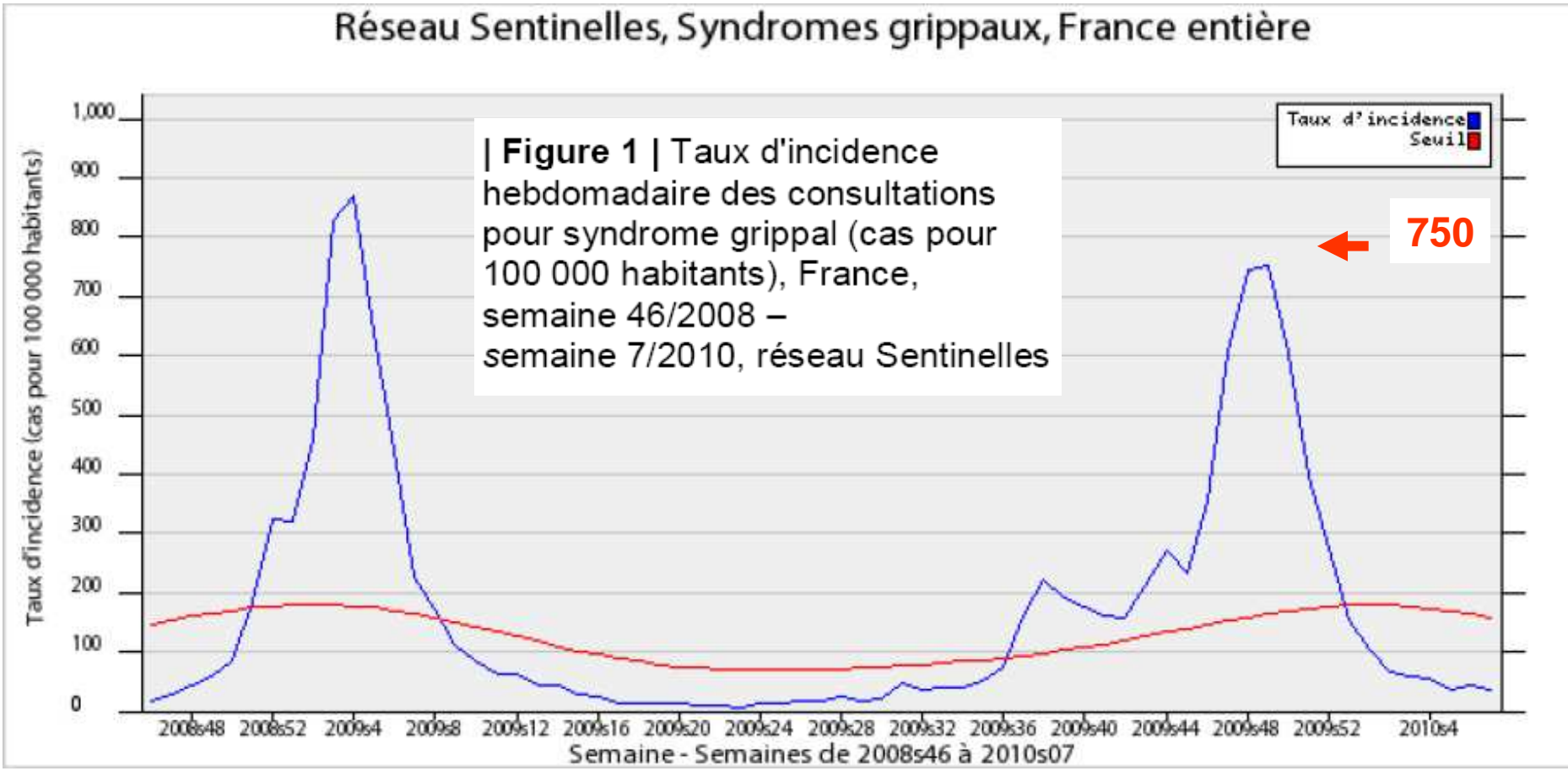
Estimations du nombre d'infections de grippe A(H1N1)2009 en France métropolitaine au 17 décembre 2009

Les estimations réalisées jusqu'au 6 décembre 2009 (données consolidées) et jusqu'à 13 décembre 2009 (données non consolidées) figurent dans le tableau ci-dessous :

	Estimations du nombre de personnes infectées en France métropolitaine	
	A partir des données du Réseau des Grog*	A partir des données du réseau Sentinelles*
Jusqu'à 6 décembre 2009	12 784 000	6 752 000
<i>Jusqu'au 13 décembre 2009 (données non consolidées)</i>	<i>14 806 000</i>	<i>7 918 000</i>

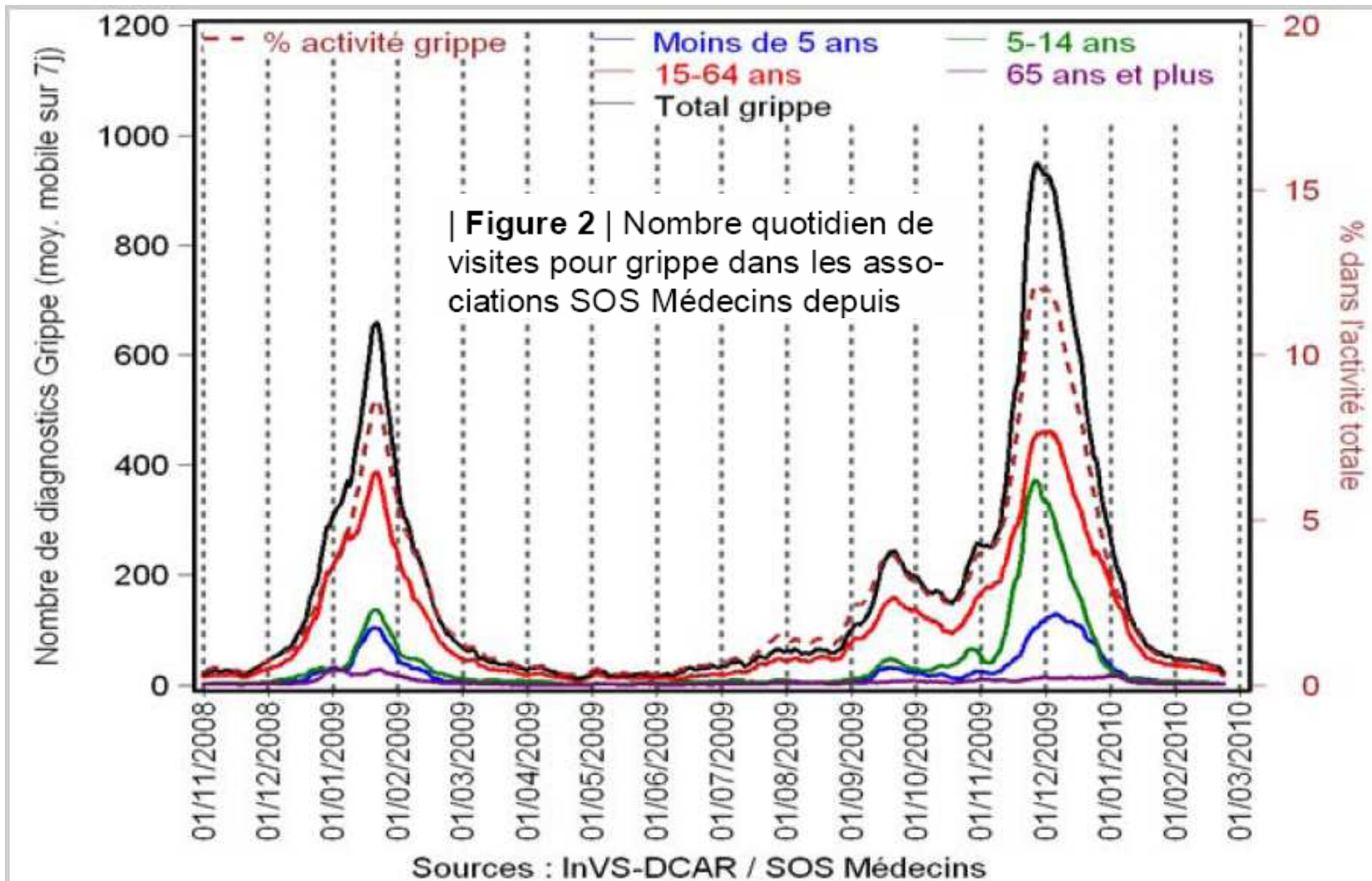
* Les différences d'estimations entre ces 2 réseaux sont le reflet de méthodologies de surveillance différentes. Ces méthodologies, avec leurs avantages et limites respectives, ont été précédemment décrites [1].

Grippe H1 N1 en France

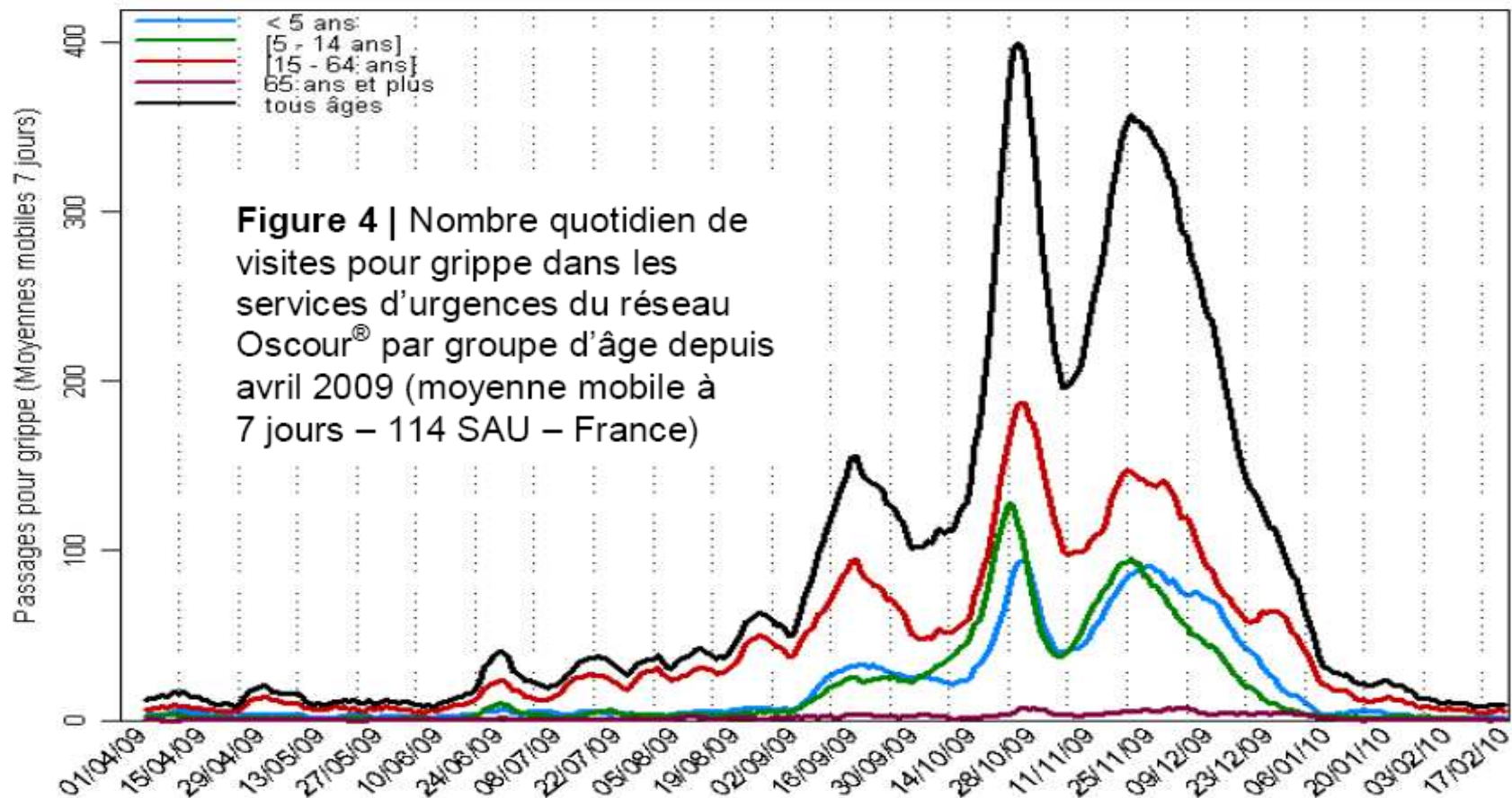


15/11/2009 01/01/2010

Grippe H1 N1 en France



Grippe H1 N1 en France: les services d'urgences



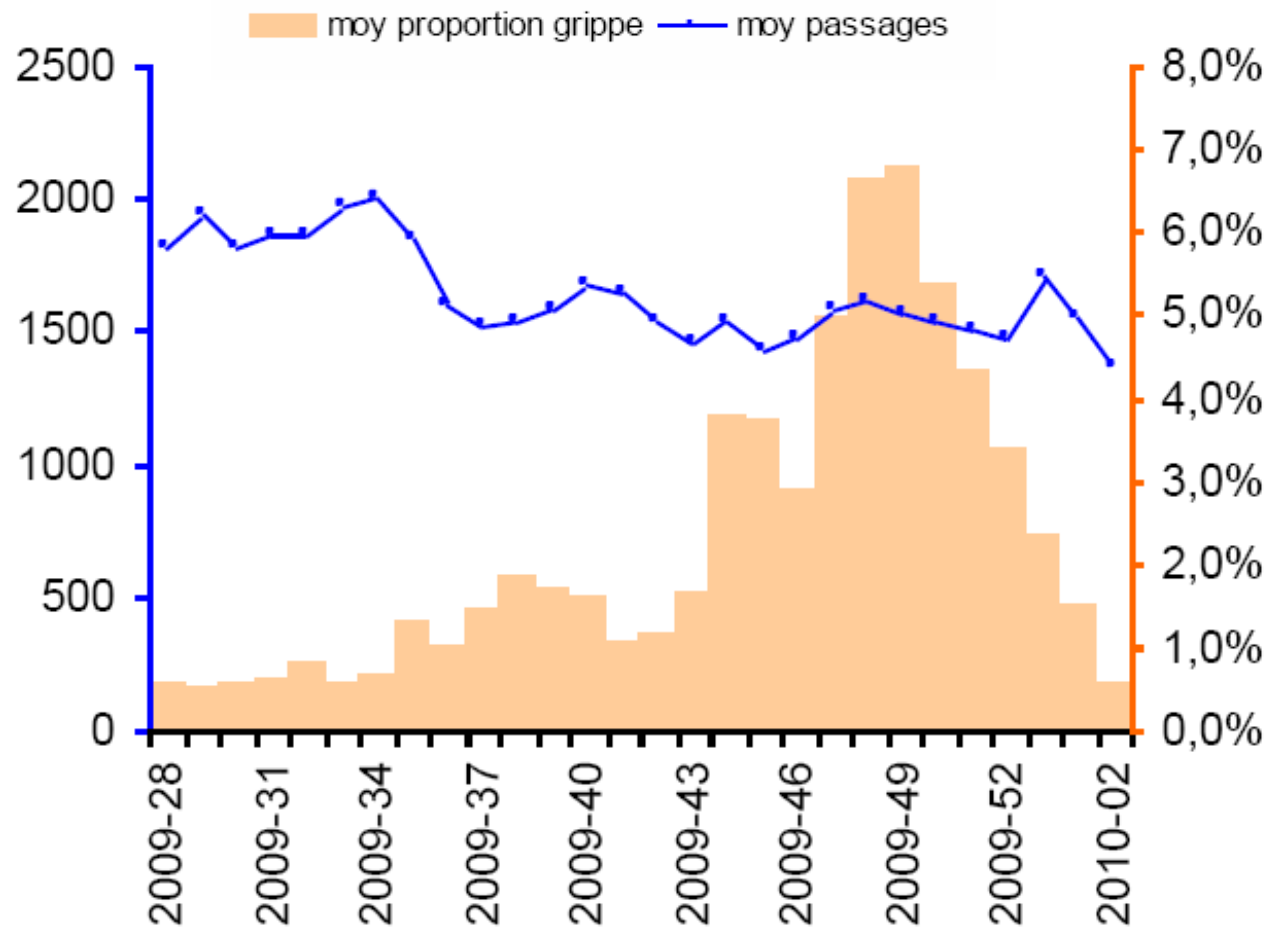
Grippe H1 N1 en PACA: les services d'urgence

- 20 services d'urgences
- Semaine 28/2009 à semaine 2/2010

- 321 095 passages
 - 1647 / jour
- ▶ 6906 grippés
 - ▶ 2% grippés

- 48 990 hospitalisations
 - 253 / jour
- ▶ 417 grippés
 - ▶ 1% grippés

Grippe H1 N1 en PACA: les services d'urgence

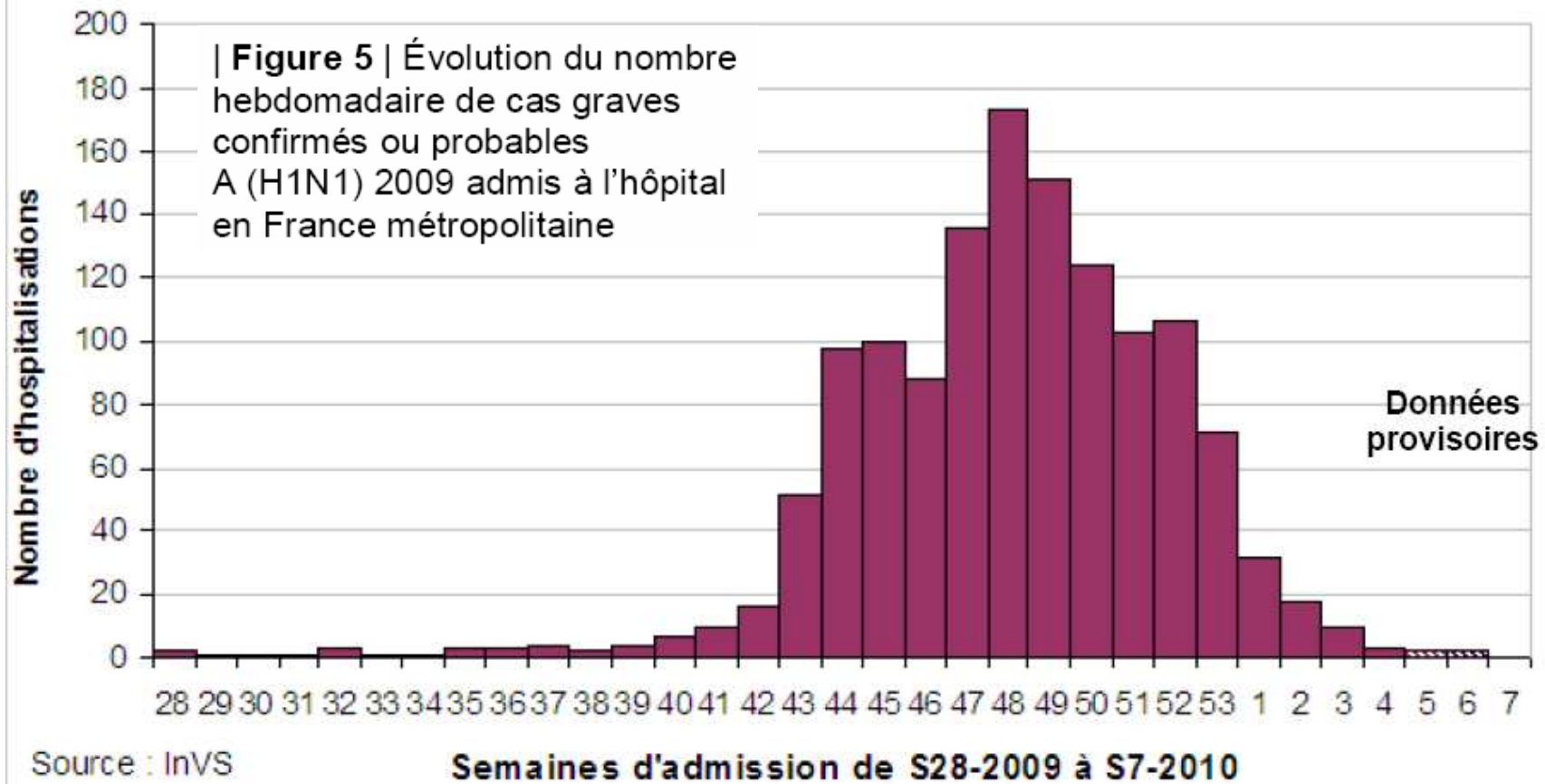




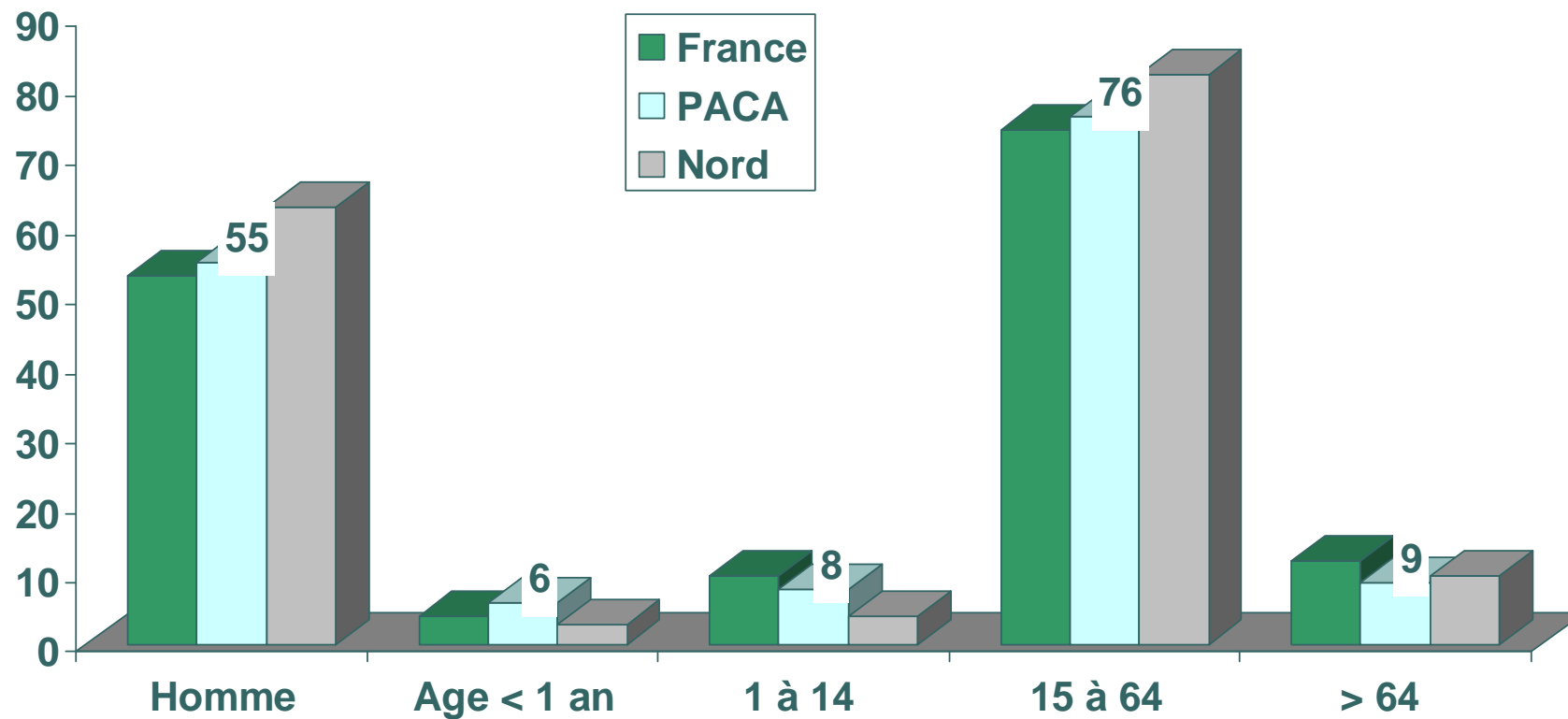
Grippe grave, admission en réanimation

- **En France métropolitaine, au 30 Mars 2010,**
 - **1331 cas de grippe grave.**
- **En région PACA (5 M d'habitants)**
 - **121 patients admis en réanimation.**
- **Dans le Nord- Pas de Calais (4 M d'habitants)**
 - **68 patients admis en réanimation**

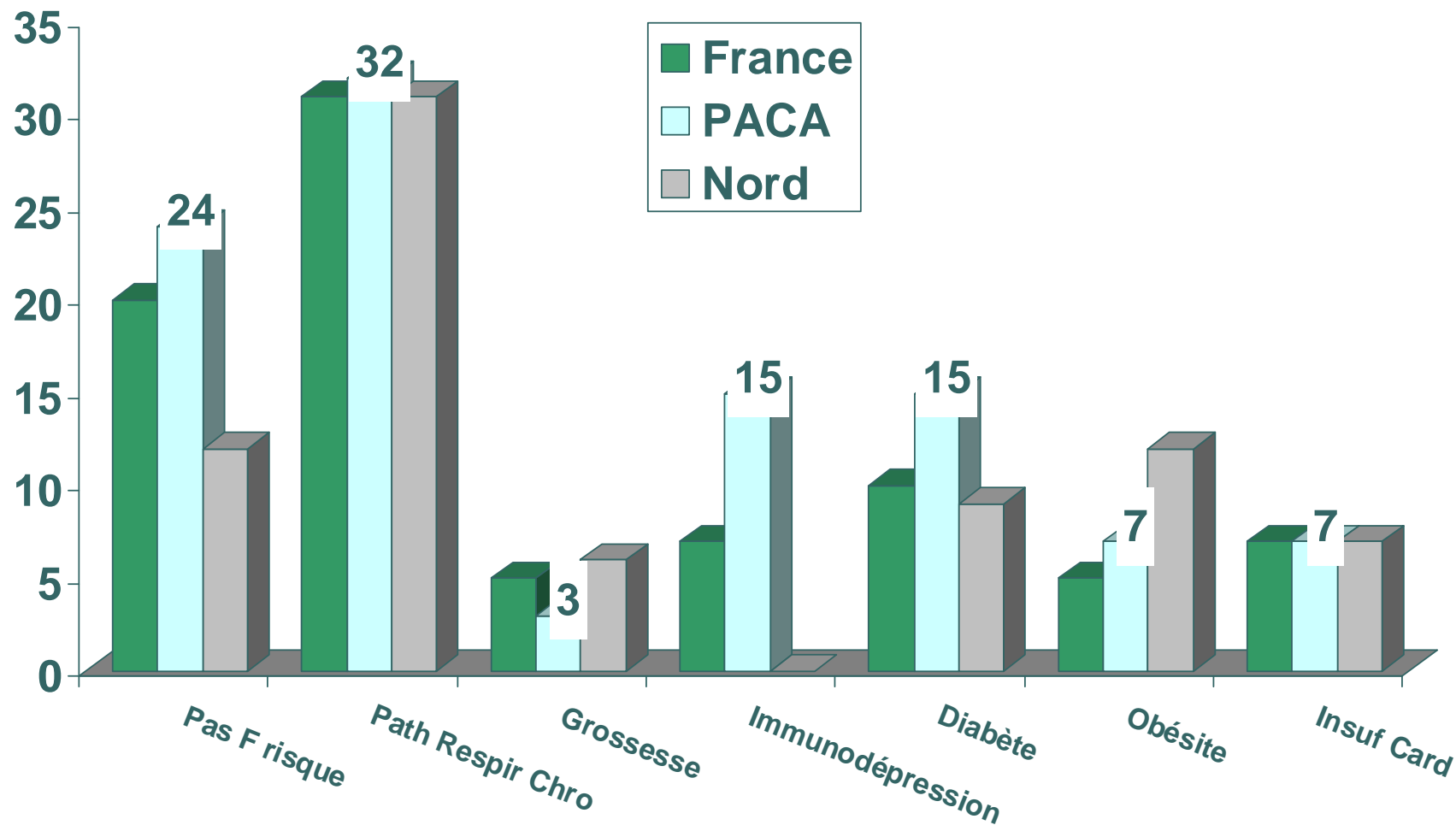
Grippe grave, hospitalisation



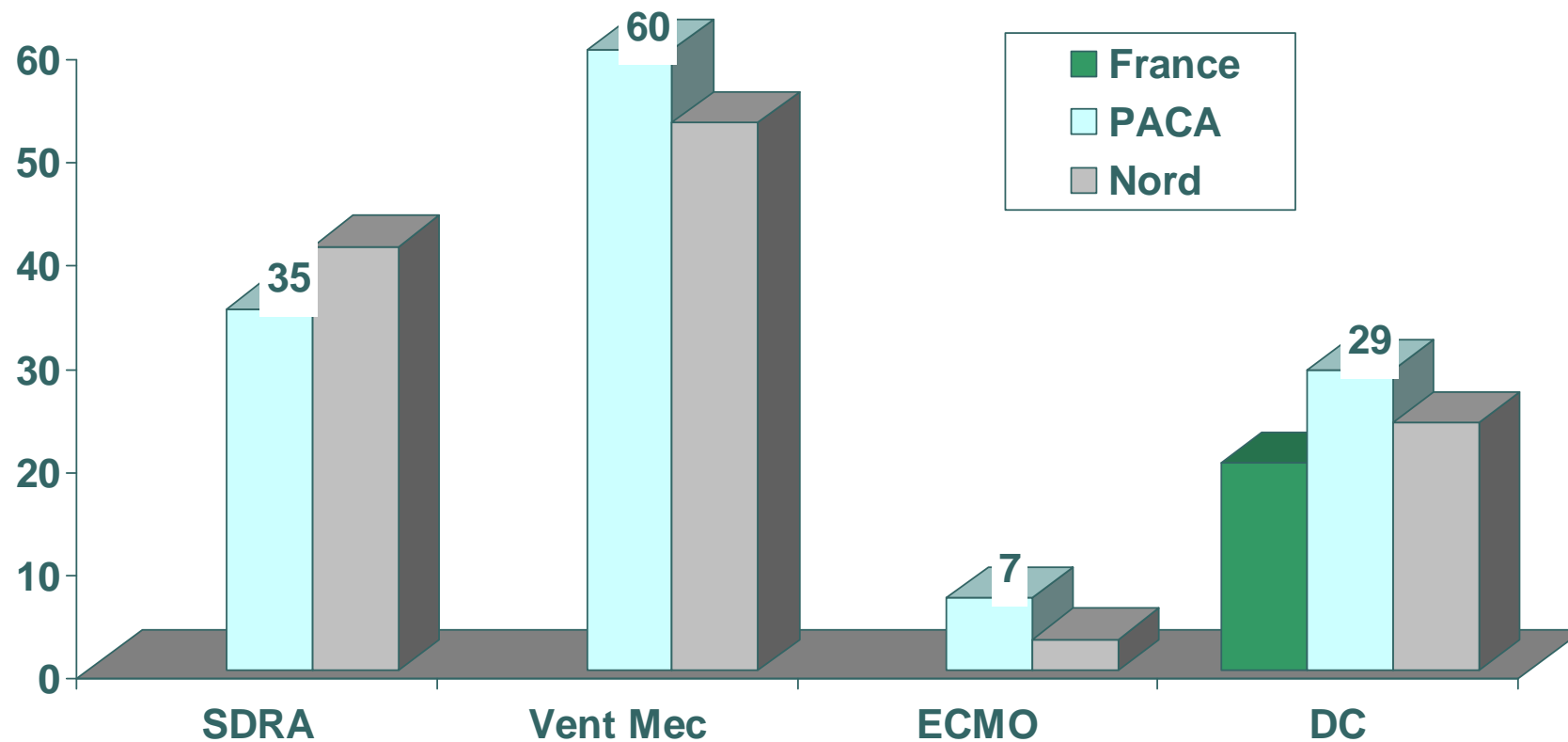
Grippe grave, admission en réanimation



Grippe grave, admission en réanimation



Grippe grave, admission en réanimation



Facteurs de risque de sévérité

TABLE 2

Factors associated with severe disease in hospitalised 2009 pandemic influenza A(H1N1) cases (multivariate analysis), France, 1 July–15 November 2009 (n=758)

		Severity of disease				AOR	95% CI
		Non-severe ^a		Severe			
		n	%	n	%		
Children							
Age (years)	<1	64	28%	16	33%	2.1 1	[0.9-4.5]
	1-14	162	72%	32	67%		
Risk factors	None	114	54%	15	33%	1 3-3	[1.5-7.0]
	At least one	96	46%	31	67%		
	Data not available	16		2			
Adults							
Age (years)	15-64	274	95%	178	91%	1 2.2	[1.1-4.8]
	65 or more	14	5%	18	9%		
Main risk factors ^b							
	Chronic respiratory disease	77	28%	65	33%	1.2	[0.8-1.9]
→	Pregnancy	67	23%	18	9%	0.5	[0.2-0.8]
	Diabetes	22	8%	26	13%	1.5	[0.8-2.8]
→	Obesity	10	3%	50	26%	9.1	[4.4-18.7]
	Immunosuppression	26	9%	19	10%	1.1	[0.6-2.2]

AOR: Adjusted odds ratio for age and underlying condition; CI: Confidence interval.

^a Admitted for at least 24h in a medical ward.

^b Risk factors were available for 463 cases. Multiple entries per patient possible.



Grippe grave, mortalité

Table 6: Cumulative number of SARI cases, weeks 40/2009 - week 10/2010

Country	Number of cases	Incidence of SARI cases per 100,000 population	Number of fatal cases reported	Incidence of fatal cases per 100,000 population	Estimated population covered
Austria	2813		33		
Belgium	1775	16.64			10668666
Cyprus	20		5		
Finland	1390		41		
France	1328		281		
United Kingdom	1488	3.77	62	0.16	39503332
Ireland	888		17		
Malta	156	37.72	1	0.24	413609
Netherlands	642	3.89	27	0.16	16521505
Romania	188	1.48	12	0.09	12684180
Slovakia	289		27		
Total	10977		506		39503332

Grippe grave, mortalité

TABLE 3

Risk factors for death, among hospitalised severe adult cases of 2009 pandemic influenza A(H1N1) (multivariate analysis), France, 1 July–15 November 2009 (n=140)

	Alive and discharged from ICU		Dead		OR aj	95% CI
	n	%	n	%		
Adults	108		32			
Age (years)					1.00	[0.97 – 1.03]
Main risk factors ^a						
Chronic respiratory disease	46	43%	10	31%	0.7	[0.3 – 1.9]
Diabetes	12	11%	9	28%	2.3	[0.8 – 7.0]
Obesity	19	16%	11	34%	2.6	[0.97 -7.0]
→ Chronic cardiac disease	5	5%	7	22%	6.6	[1.7-26.0]
→ Immunosuppression	9	8%	7	22%	3.5	[1.02-11.9]
Pregnancy	14	13%	1	3%	0.3	[0.04 – 3.0]

ICU: intensive care unit; OR aj: adjusted odds ratio; CI: confidence interval.

^a Multiple entries per patient possible.

Conclusion

