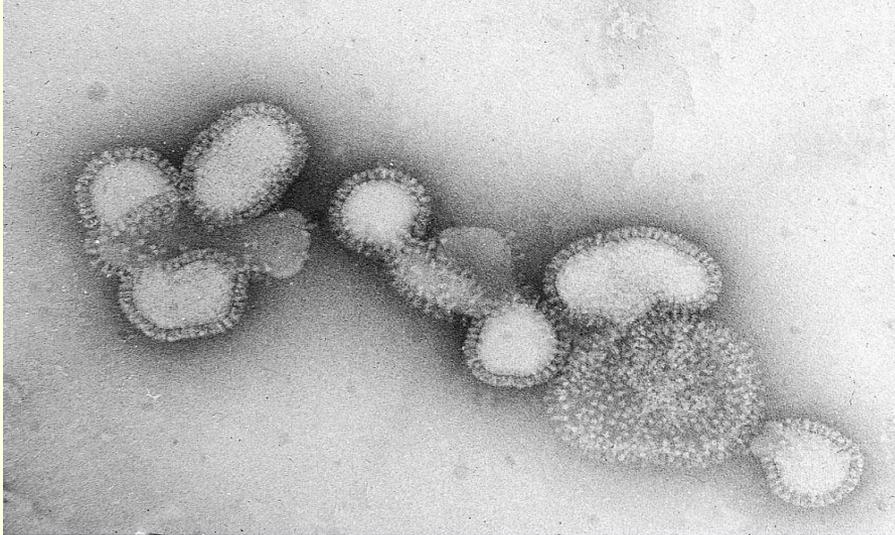
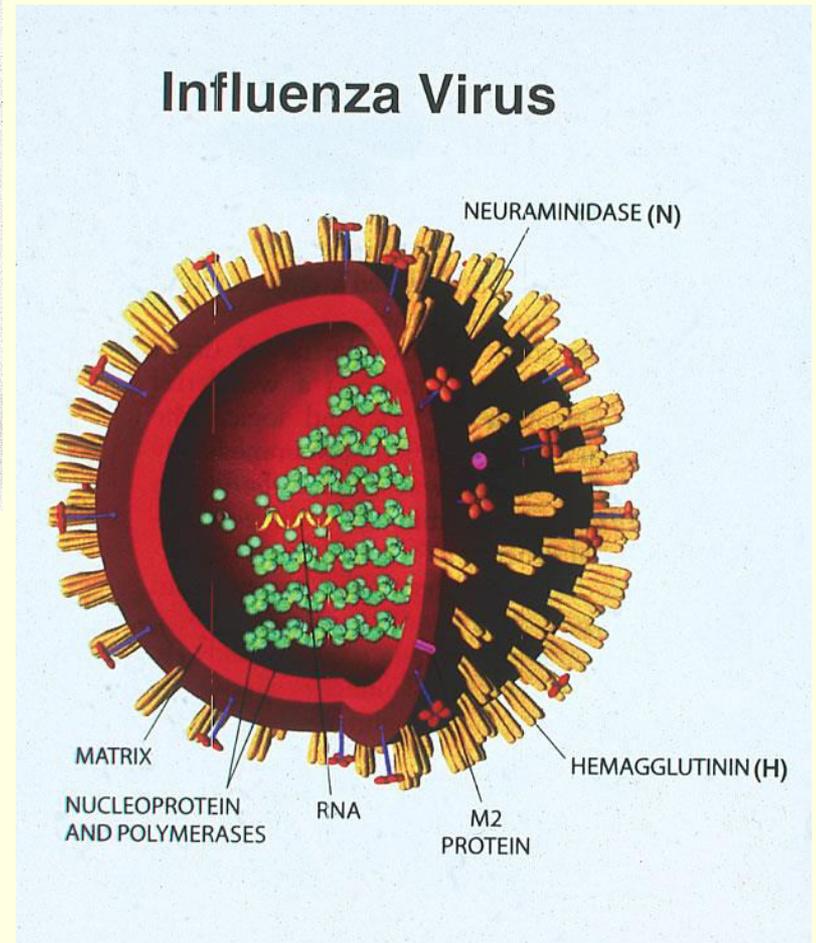


Actualités sur la Grippe



Pr. Amine SLIM
Congrès National STPI
4 mai 2017



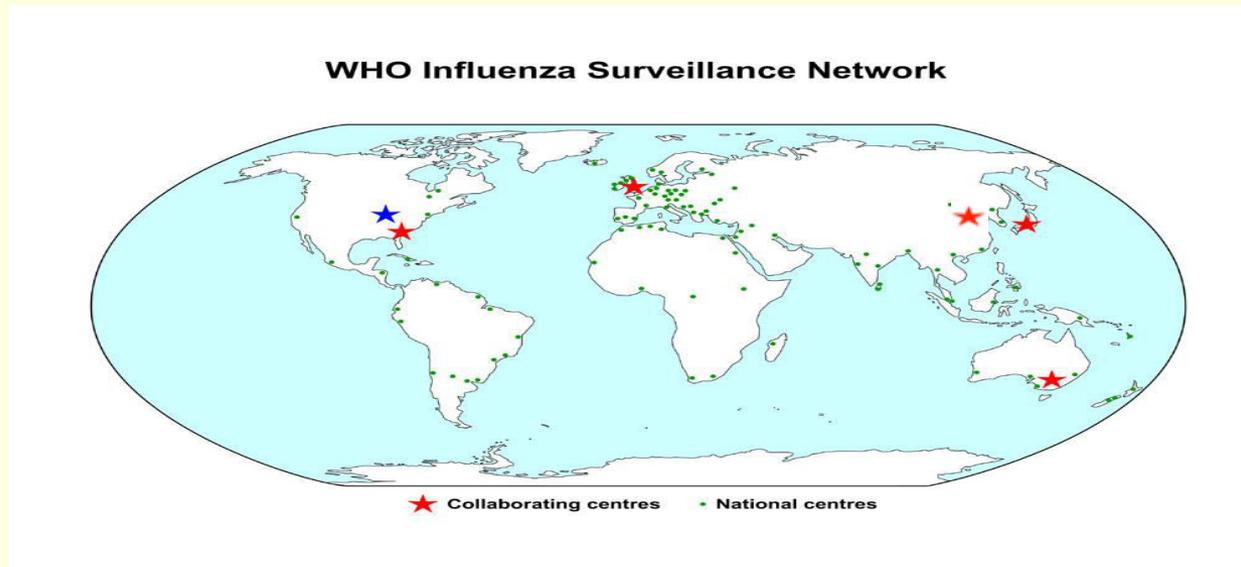
La Grippe , c'est quoi?

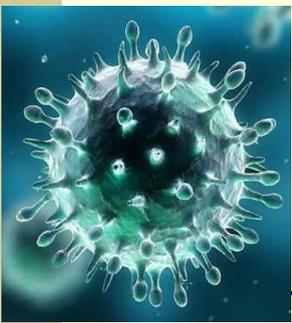
- Maladie virale survenant par épidémies annuelles
- Périodiquement, pandémies environ tous les 10-20 ans
- Clinique trompeuse +++
- Possibilité de Pandémie à grippe « aviaire » à l'horizon 2020
- OMS: Plans nationaux d'urgence à établir et à tester
- Traitement: nouvelles molécules à préserver ++
- Prévention: Vaccination régulière des personnes « à risque » +++



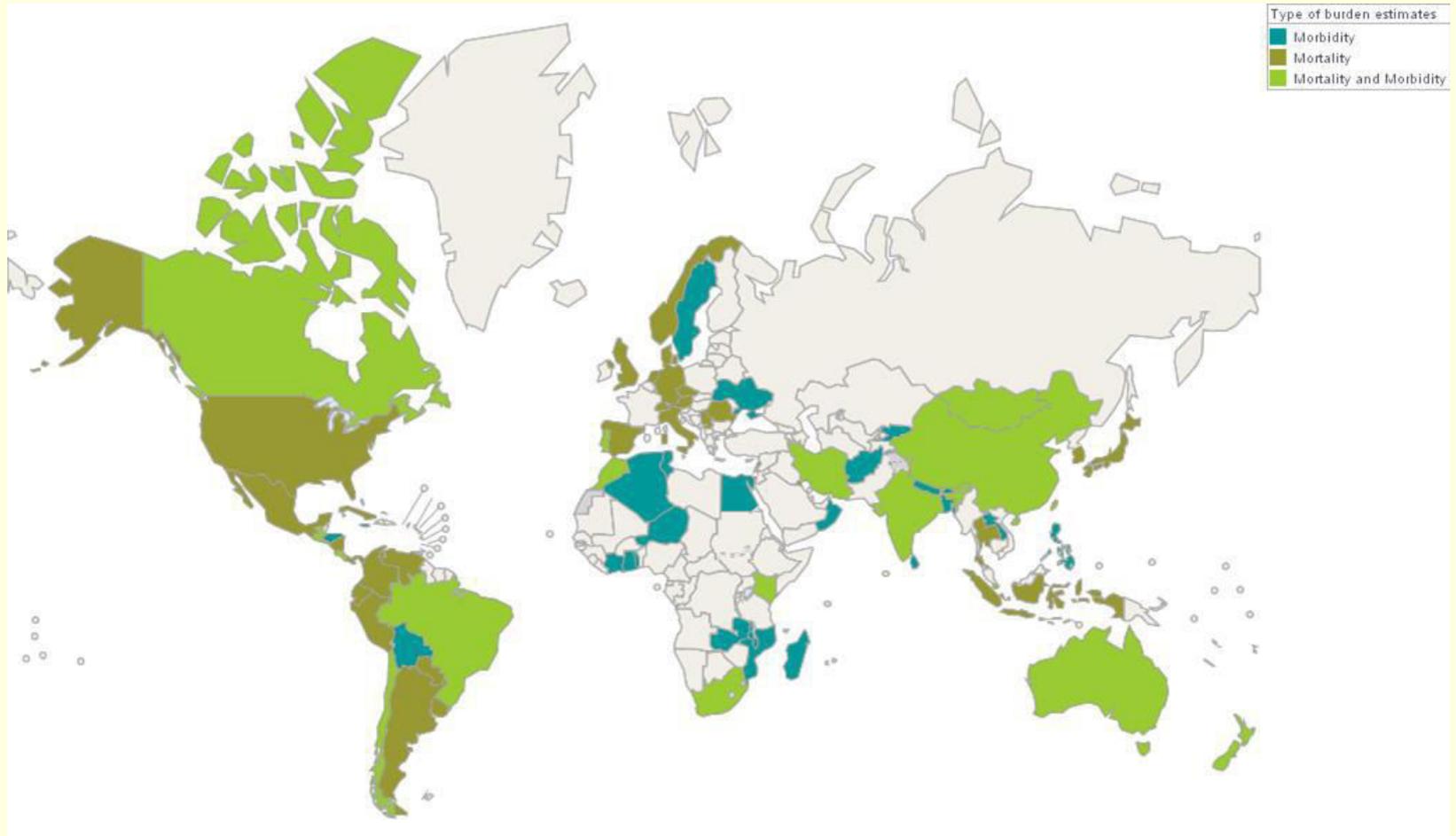
Surveillance internationale

- Depuis 1948 :
 - 1er réseau international de référence de l'OMS
 - 5 centres de référence mondiaux : Atlanta , Londres, Yokohama ,Melbourne, Beijing (H5,H7)
 - Centres de référence nationaux : 109 pays(140 labos)





Réseau GIHSN en 2017



Saison grippale 2016-2017



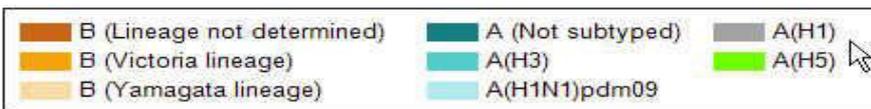
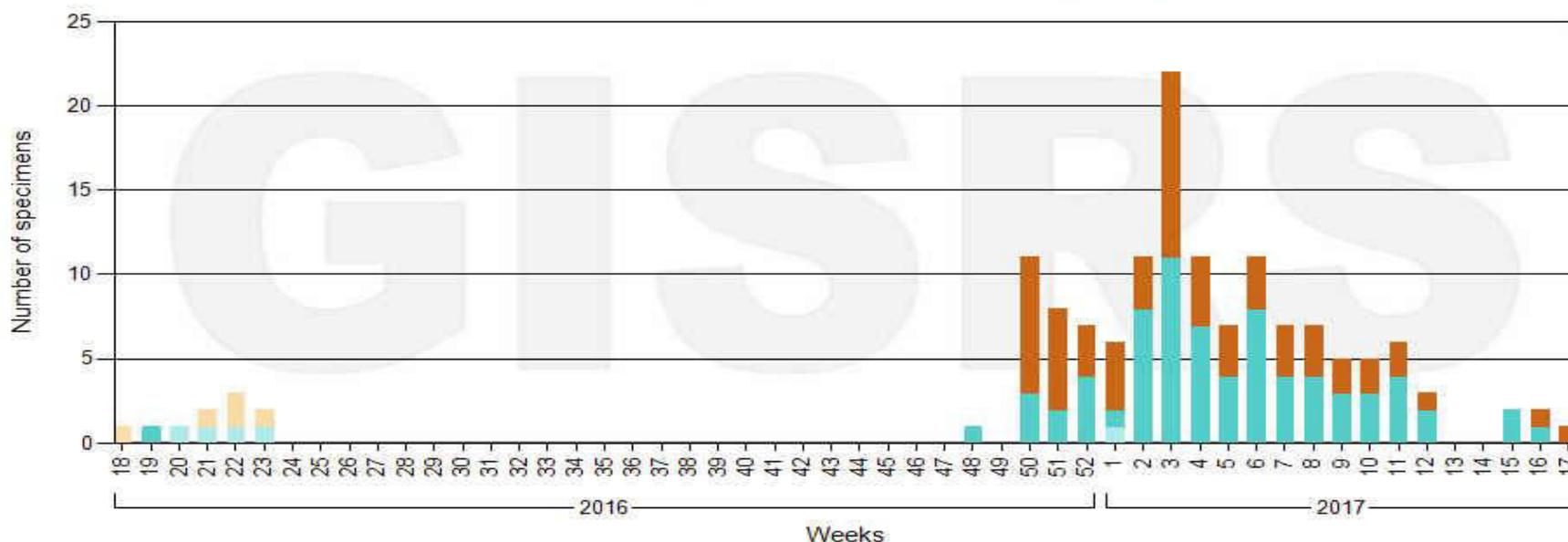
Influenza Laboratory Surveillance Information

by the Global Influenza Surveillance and Response System (GISRS)

generated on 02/05/2017 09:02:04 UTC

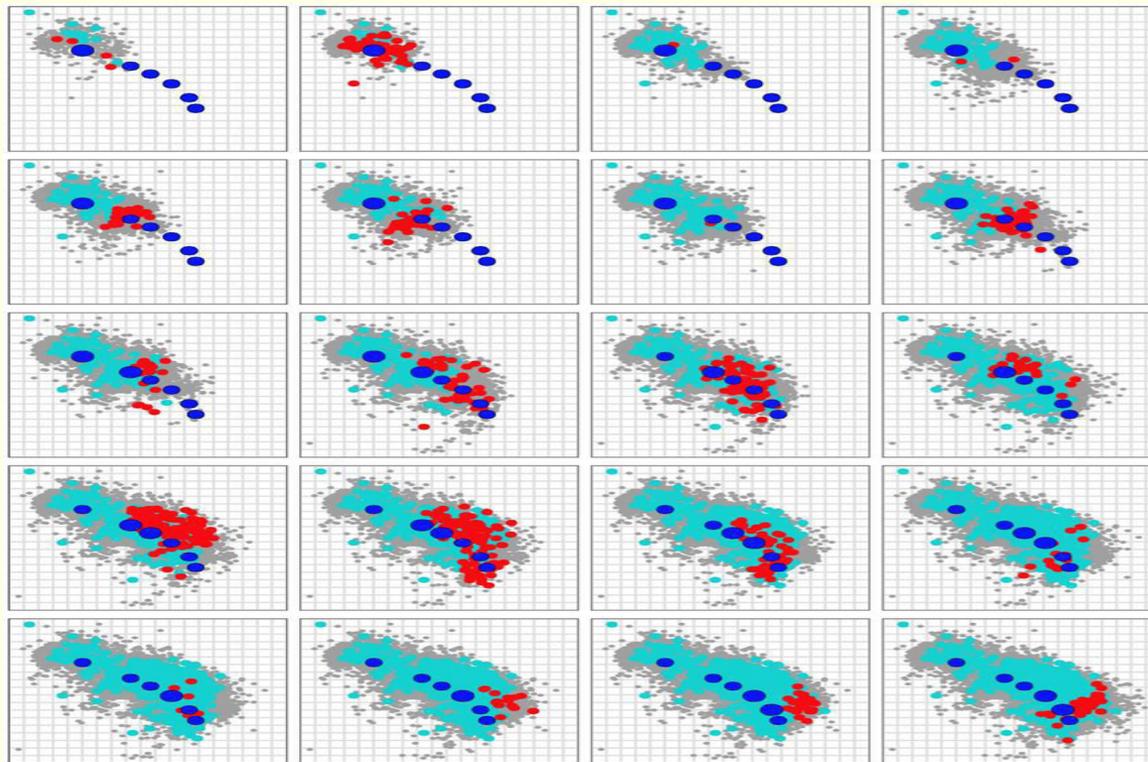
Tunisia

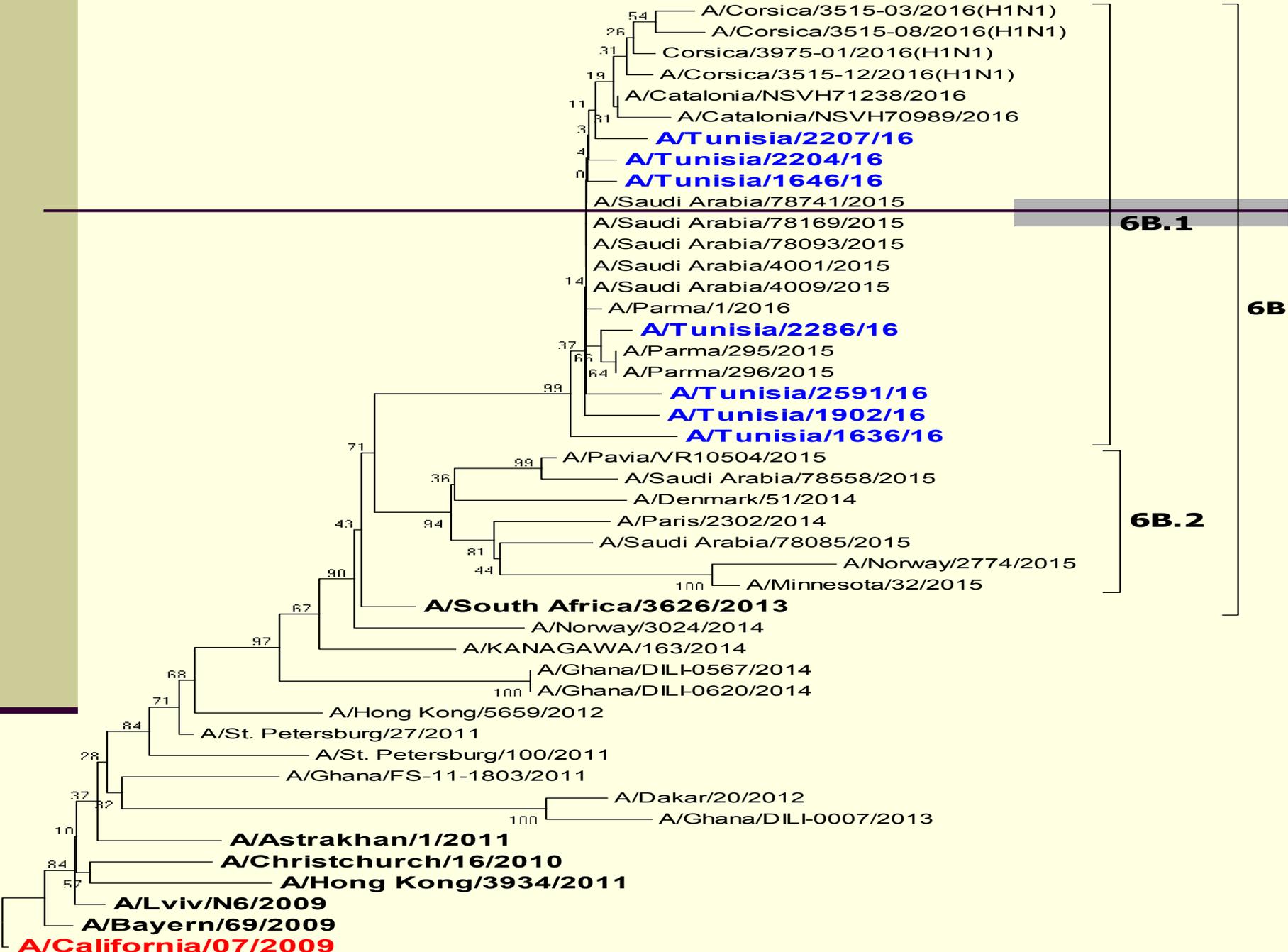
Number of specimens positive for influenza by subtype



Variations antigéniques depuis 2014

H1N1v, H3N2v, H5N1, H5N6, H7N2, H7N9, H9N2 et H10N8 ...





54 A/Corsica/3515-03/2016(H1N1)
 26 A/Corsica/3515-08/2016(H1N1)
 31 Corsica/3975-01/2016(H1N1)
 19 A/Corsica/3515-12/2016(H1N1)
 11 A/Catalonia/NSVH71238/2016
 31 A/Catalonia/NSVH70989/2016
A/Tunisia/2207/16
A/Tunisia/2204/16
A/Tunisia/1646/16

A/Saudi Arabia/78741/2015
 A/Saudi Arabia/78169/2015
 A/Saudi Arabia/78093/2015
 A/Saudi Arabia/4001/2015
 14 A/Saudi Arabia/4009/2015
 A/Parma/1/2016
A/Tunisia/2286/16
 37 A/Parma/295/2015
 64 A/Parma/296/2015

99 **A/Tunisia/2591/16**
A/Tunisia/1902/16
A/Tunisia/1636/16

71 A/Pavia/VR10504/2015
 99 A/Saudi Arabia/78558/2015
 36 A/Denmark/51/2014
 43 94 A/Paris/2302/2014
 81 A/Saudi Arabia/78085/2015
 44 100 A/Norway/2774/2015
 100 A/Minnesota/32/2015

A/South Africa/3626/2013
 A/Norway/3024/2014
 67 97 A/KANAGAWA/163/2014
 68 A/Ghana/DILI-0567/2014
 71 100 A/Ghana/DILI-0620/2014

84 A/Hong Kong/5659/2012
 28 84 A/St. Petersburg/27/2011
 100 A/St. Petersburg/100/2011
 37 82 A/Ghana/FS-11-1803/2011
 100 A/Dakar/20/2012
 100 A/Ghana/DILI-0007/2013

A/Astrakhan/1/2011
A/Christchurch/16/2010
A/Hong Kong/3934/2011
A/Lviv/N6/2009
A/Bayern/69/2009
A/California/07/2009

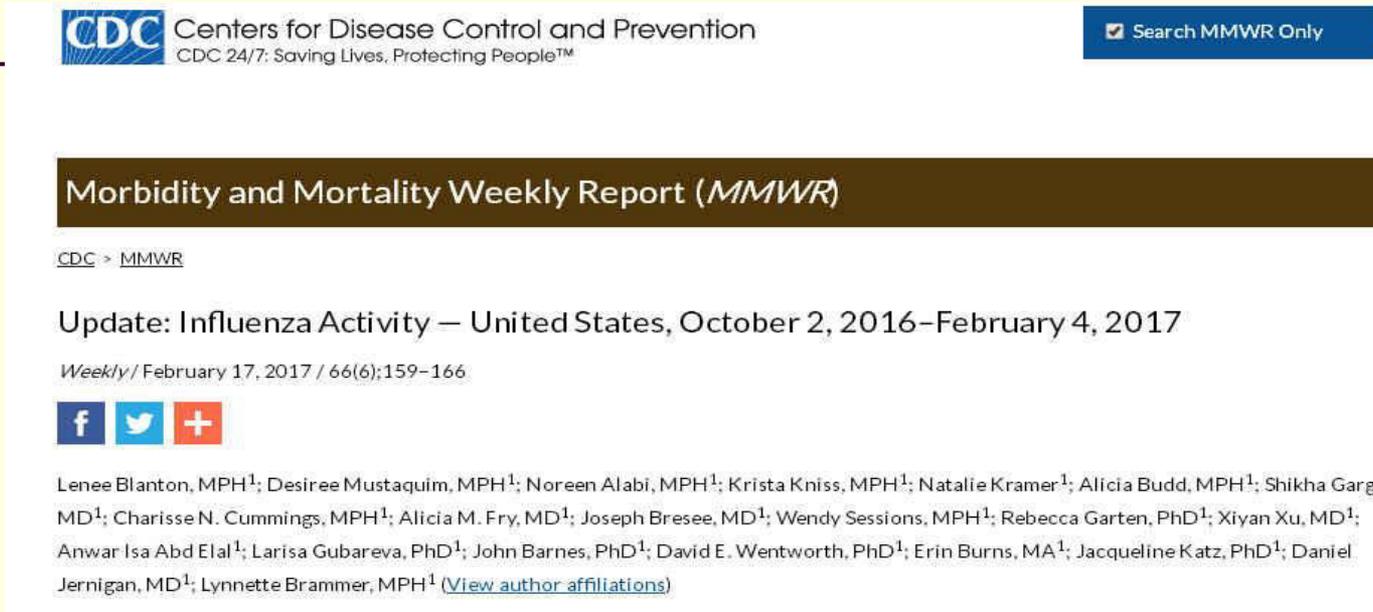
6B.1

6B

6B.2

0,002

Efficacité de la protection vaccinale 2016-2017



CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People™

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Morbidity and Mortality Weekly Report (MMWR)

[CDC](#) > [MMWR](#)

Update: Influenza Activity – United States, October 2, 2016–February 4, 2017

Weekly / February 17, 2017 / 66(6);159–166

[f](#) [t](#) [+](#)

Lenee Blanton, MPH¹; Desiree Mustaquim, MPH¹; Noreen Alabi, MPH¹; Krista Kniss, MPH¹; Natalie Kramer¹; Alicia Budd, MPH¹; Shikha Garg, MD¹; Charisse N. Cummings, MPH¹; Alicia M. Fry, MD¹; Joseph Bresee, MD¹; Wendy Sessions, MPH¹; Rebecca Garten, PhD¹; Xiyan Xu, MD¹; Anwar Isa Abd Elal¹; Larisa Gubareva, PhD¹; John Barnes, PhD¹; David E. Wentworth, PhD¹; Erin Burns, MA¹; Jacqueline Katz, PhD¹; Daniel Jernigan, MD¹; Lynnette Brammer, MPH¹ ([View author affiliations](#))

- CDC Report Update: Influenza Activity — United States, October 2, 2016–February 4, 2017 MMWR Weekly Report / February 17, 2017 / 66(6);159–166
- Summary Dominating virus : H3N2 Vaccine Effectiveness for preventing medically attended cases Over all: **48%** (CI 37%-57%) For H3N2: **43%** and for B: **73%**

Composition du vaccin 2017-2018

WHO HQ Geneva: 2 March 2017

- It is recommended that trivalent vaccines for use in the 2017-2018 northern hemisphere influenza season contain the following:
 - an **A/Michigan/45/2015 (H1N1)pdm09-like** virus;
 - an **A/Hong Kong/4801/2014 (H3N2)-like virus**; and
 - a **B/Brisbane/60/2008-like virus**.
- It is recommended that quadrivalent vaccines containing two influenza B viruses contain the above three viruses and a **B/Phuket/3073/2013-like virus**.



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**Médecine et
maladies infectieuses**

Médecine et maladies infectieuses 47 (2017) 11–17

Original article

Influenza B burden during seasonal influenza epidemics in France

Analyse du poids de la grippe B dans les épidémies de grippe saisonnière en France

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Received 25 January 2016; received in revised form 13 April 2016; accepted 29 November 2016

Available online 3 January 2017

Abstract

Context. – Seasonal flu outbreaks are linked to the circulation of influenza virus type A or B. Special attention has always been paid to influenza A epidemics; but recently, several studies have investigated the impact of influenza B virus epidemics, particularly as, since the 1980s, two antigenically different influenza B lineages co-circulate, raising the issue of vaccine matching.

Objectives. – We present the results of influenza B burden during nine influenza seasons (2003–2013) and vaccine matching of the circulating lineages.

Patients and methods. – Clinical and virological influenza surveillance data, collected by the Regional Groups for Influenza Surveillance Network in France, allows for studying the burden of influenza in the practice of the population of ambulatory care physicians.

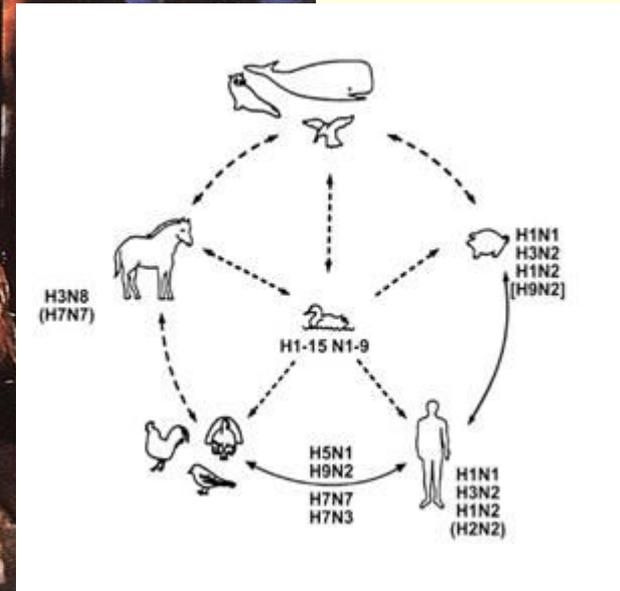
Results and conclusion. – Our analysis is based on 37,801 samples, of which 12,036 were virologically confirmed influenza cases (31.8%), including 3576 cases of influenza B (29.7% of influenza cases). Influenza B viruses significantly circulated during six seasons. For each season, the influenza B epidemic peaked later than the influenza A epidemic. Influenza B is very common in children of school age but also affects other age groups. Finally, more than one-third of the analyzed influenza B viruses belonged to a different lineage than the one used in the composition of the trivalent vaccine. Our results are comparable to those described in other countries.

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Téléconférence avec CDC 20 Février 2017

- "At the teleconference held earlier this week, CDC reported that they had detected a few influenza B viruses of the B/Victoria lineage that had a two amino acid deletion at residues 162 and 163 of HA1.
- This site is prone to insertions/deletions and it is the site at which the deletion occurred that differentiates viruses of the B/Victoria lineage from those of the B/Yamagata lineage. There was variability seen at this site prior to the Yamagata/Victoria diversification
- I think it would be worth looking out for influenza B viruses like these for detailed analysis should they have emerged already in your country or should they emerge over the next few weeks or months."

La grippe H5N1 : Hong-Kong 2005



Janvier 2006 → Grippe aviaire: La psychose !!



Egypte: promenade le long du Nil





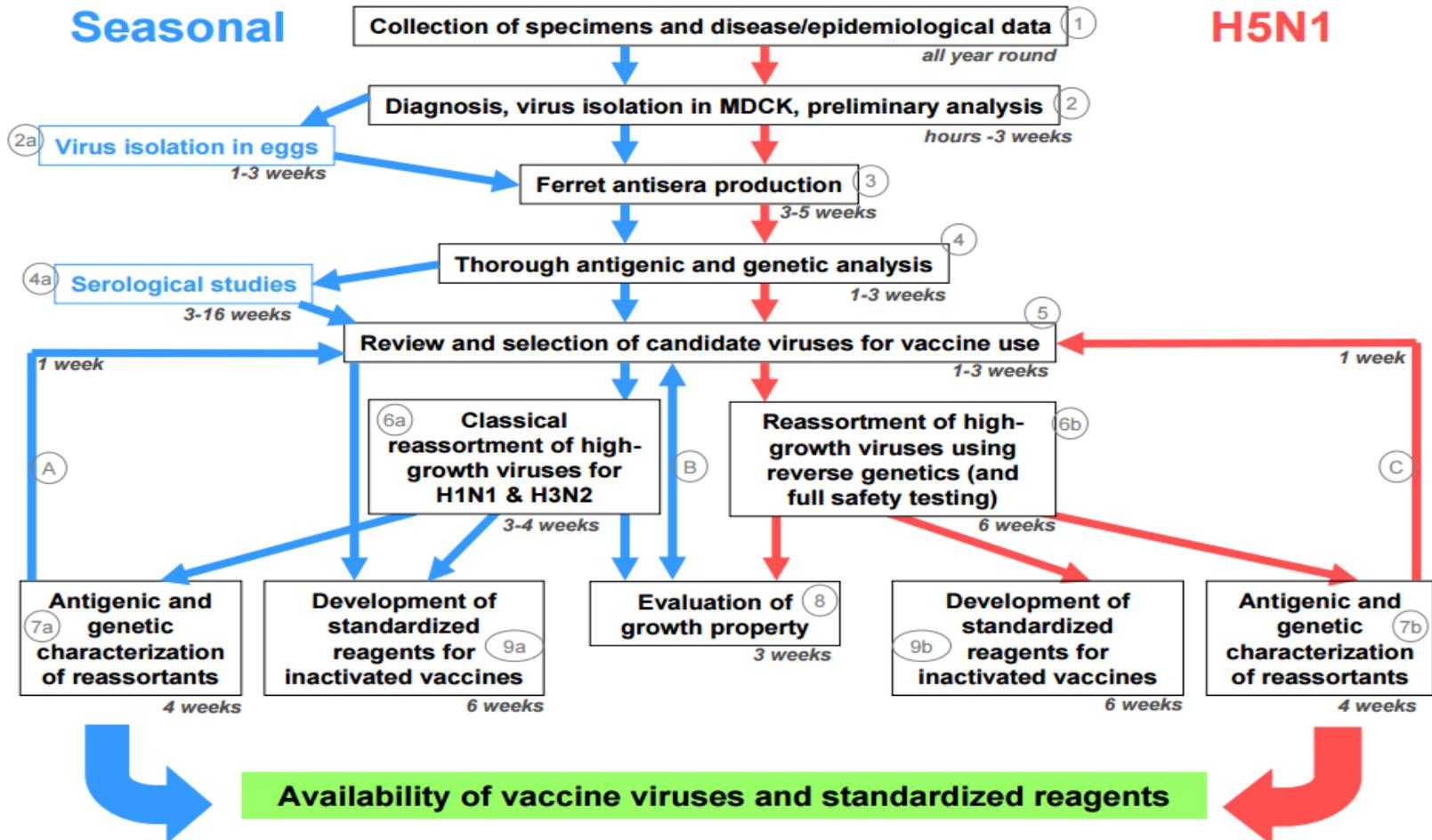
Alerte au lac Ichkeul



- Novembre-Décembre 2017
- Souche A/H5N8 détectée et confirmée (clade 4 proche d'une souche Russe)
- Quarantaine et fermeture du lac
- Commission nationale réactivée
- Pas de cas humain à ce jour

Etapas de production d'un vaccin grippal

Process of influenza vaccine virus selection and development



Quel sera le prochain virus pandémique?

