Objective 1: increase in seasonal vaccine use

Health experts advise swine flu vaccines for high-risk groups
2 January 2015 / Times of India
Faced with a sudden spurt of swine flu cases in Hyderabad resulting in more than 30 positive cases, including six deaths in December, both government and private health experts are now advising high-risk category people to go in for trivalent flu vaccine shots as a preventive measure even as the city reported two fresh positive cases on the first day of the new year on Thursday. The identified high-risk categories likely to be susceptible to H1N1 include diabetics, children below 5 years and elderly above 60 years, post-transplant patients, chronic kidney patients and pregnant and post-partum women.

New York City Requiring Flu Shots for Pre-schoolers
3 January 2015 / New York Times
New York City pre-schoolers will be heading back to class next week with memories of new holiday toys, vacation adventures, and, health officials hope, a flu shot. In fact, because of a new city requirement, young children can, for the first time in the city’s history, be excluded from class if they have not received a flu vaccination

Timing of vaccine key to checking swine flu, says study
6 January 2015 / India Today
With government response for tackling swine flu cases limited to preventive measures, scientists have concluded that the timing of its vaccination is critical for maximum effect. A study has concluded that people in New Delhi will benefit most if they are vaccinated for influenza in spring (between May and June). The study, driven by US-based Centre for Disease Control and Prevention, focused on New Delhi and Srinagar to determine the links between the weather and the effectiveness of influenza-like illness, including swine flu (H1N1).

CDC: Flu vaccine only 23 percent effective this season, but still better than nothing
15 January 2015 / CIDRAP
A preliminary analysis indicates that this year's flu vaccine, which is not well matched to the predominant circulating flu strain, is only 23% effective in protecting people, the Centers for Disease Control and Prevention (CDC) announced.

New cases in H1N1, but vaccines still old
15 January 2015 / Pune Mirror
With a sudden spike in H1N1 over the last eight days, Delhi and Maharashtra have been alerted to a state of high preparation to tackle the disease. However, the vaccine administered for H1N1 has not been replenished yet, and the health department continues to store the old vaccine, Nasovac, which is past its expiry date.

Pays de la Loire : la grippe H3N2 s'installe dans la région
20 January 2015 / France3-regions.francetvinfo.fr
La grippe se répand dans notre région, tous les postes d'observation le confirment, depuis 3 semaines l'épidémie est bien là, le pic est attendu pour la fin de janvier, une grippe de type H3N2 qui devrait plutôt toucher les personnes âgées
The draft February 2015 ACIP meeting agenda is now available
22 January 2014 / CDC Home page
The ACIP holds three meetings each year at the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia to review scientific data and vote on vaccine recommendations. During committee meetings, members present findings and discuss vaccine research and scientific data related to vaccine effectiveness and safety, clinical trial results, and manufacturer's labeling or package insert information. Outbreaks of vaccine-preventable disease or changes in vaccine supply also are reviewed during these meetings. Vaccine recommendations include the age(s) when the vaccine should be given, number of doses needed, dosing interval, and precautions and contraindications to administration of vaccines.

India swine flu outbreak 'kills 75'
28 January 2015/ BBC (UK),
An outbreak of swine flu in India has killed at least 75 people in just over six weeks, officials say. Health officials said most of the deaths have been reported from the southern state of Telangana and Rajasthan state in the north. Experts investigating the cause of the outbreak say low winter temperatures are to blame.

Objective 2: increase in vaccine production capacity

Novartis receives approval in Canada for Fluad Pediatric™, the first vaccine designed to help better protect infants from seasonal flu
7 January 2015 / PRNewswire
Novartis announced today that Health Canada has approved Fluad Pediatric™ (MF59®adjuvanted seasonal trivalent influenza vaccine) for use in children 6 months to less than 2 years of age. Fluad Pediatric™ is the first vaccine developed specifically for infants to help elicit a robust immune response against seasonal influenza (also commonly known as flu)

Advances and challenges in the development and production of effective plant-based influenza vaccines.
Traditional modes of influenza vaccine manufacturing are failing to satisfy the global demand because of limited scalability and long production timelines. In contrast, subunit vaccines (SUVs) can be produced in heterologous expression systems in shorter times and at higher quantities. Plants are emerging as a promising platform for SUV production due to time efficiency, scalability, lack of harbored mammalian pathogens and possession of the machinery for eukaryotic post-translational protein modifications. Here, the authors review ongoing efforts and challenges to producing influenza SUV candidates in plants and discuss the likelihood of bringing these products to the market.

Pandemic and Avian Influenza Vaccine Industry Global and Chinese Market Research Reports
21 January 2015 / PR newswire
This is a on the current state of the global Pandemic Influenza Vaccine industry with a focus on the Chinese market. The report provides key statistics on the market status of the Pandemic Influenza
Vaccine manufacturers and is a source of guidance and direction for companies and individuals interested in the industry.

**Swine flu vaccine makers wary about ramping up production. Companies say stocks of the vaccine available to treat emergency situations**

26 January 2015 / Business Standard India

With cases of swine flu on the rise in the recent one and a half months across the country, vaccine makers are on a wait-and-watch mode before they scale up production of their epidemic flu vaccines. Pharma majors like Ahmedabad-based Zydus Cadila, Delhi-based Panacea Biotech, Hyderabad-based Bharat Biotech, and Pune-based Serum Institute of India, have variants of the epidemic flu vaccine in their kitty.

**Assessing the Programmatic Suitability of Vaccine Candidates for WHO Prequalification - Revision 2014.**

January 2014 / WHO Department of Vaccines and Biologicals

As part of the WHO vaccine pre-qualification (PQ) process, product summary files (PSFs) are assessed by the WHO PQ Secretariat to determine the suitability of the vaccine for the immunization services where it is intended to be used. This document aims:

- To clearly describe the screening process and its set of rules by which all prospective vaccine prequalifications will be judged in terms of their programmatic suitability for developing country public sector immunization programmes
- To indicate very clear preferences for future vaccines that will result in greater compliance with developing country needs and that will facilitate universal immunization without requiring massive and unrealistic investment in additional cold chain capacity, human resources, waste disposal facilities, etc.

**Objective 3: research and development**

**Universal flu vaccine in development, could be ready soon**

13 January 2015 / UPI

Researchers at Mount Sinai Health System say a universal flu vaccine is currently in the works. While the vaccine has yet to prove it can protect humans, researchers say the science is sound and the vaccine may soon be a reality.

**Study: H10 evolution in China highlights threat to public health**

15 January 2015 /CIDRAP

Twelve years of surveillance of H10 avian flu viruses in poultry and migratory birds in southern China—tracing the origins of the H10N8 and H10N6 strains—demonstrate the severe threat to public health posed by the viruses as they reassort in the fertile influenza ecosystem of China, according to findings of a study in the Journal of Virology.

**Antigenic Differences between AS03 Adjuvanted Influenza A (H1N1) Pandemic Vaccines: Implications for Pandemrix-Associated Narcolepsy Risk.**


Vaccine-attributable risk of narcolepsy reported so far with the AS03 adjuvanted H1N1 vaccination Pandemrix has been manifold compared to the AS03 adjuvanted Arepanrix, which contained differently produced H1N1 viral antigen preparation. The findings of this study provide a link between
Pandemrix and narcolepsy. Although detailed mechanisms of Pandemrix in narcolepsy remain elusive, our results move the focus from adjuvant(s) onto the H1N1 viral proteins.

**Breakthrough may impact flu vaccination**
20 January / Medical Press
An analysis of 10 years’ worth of data on human influenza B viruses has shed new light on the pathogen which can cause the seasonal flu. Findings from this study could help make flu immunization programs more effective; by better targeting vaccines or by eventually eliminating one of the flu lineages completely. “The research shows that school aged children are more susceptible than adults to influenza B virus lineages, especially the Victoria lineage.” “This younger population should be targeted for the use of the quadrivalent influenza vaccines.” This new study shows that it may be important to use these vaccines for a specific population.

**Outbreak news**
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**H5**

**One Case of Human Infection with H5N6 Virus in China is Reported to WHO**
1 January 2015 / Infection Control Today (USA)
On Dec. 23, 2014, the National Health and Family Planning Commission (NHFPC) of China notified the World Health Organization (WHO) of one laboratory-confirmed case of human infection with avian influenza A(H5N6) virus. Details of the case are as follows: A 58-year-old male from Guangzhou city, Guangdong Province developed symptoms on Dec. 4. He was admitted to a hospital on Dec. 9 and is now in critical condition. The patient has history of exposure to live poultry.

**Highly pathogenic avian flu found in Jeju,**
21 January 2015 / The Korea Bizwire
Amid the discovery of avian influenza in Jeju for the first time in Korea this year, the virus was found to be highly pathogenic. On January 20, the provincial government retrieved two dead spotbill ducks at a habitat for migratory birds in Gujwa, Jeju, and found that they were infected by AI after testing them with a simple check-up kit. After an in-depth analysis of the viruses, it was found that the AI is highly pathogenic. It was the first time since April last year that highly pathogenic AI was found in Jeju.

**Egypt’s bird flu death toll rises to 9 in 2015: Health Ministry**
28 January 2015 / Cairo Post
A 31-year-old woman died of H5N1 avian flu in Giza Tuesday, marking the 9th death in the country from the disease in 2015, the Health Ministry announced in a statement.

**Nigeria confirms bird flu outbreak in 11 states**
29 January 2015 / Xinhua
The Nigerian government on Wednesday confirmed the outbreak of bird flu in 11 states. Minister of Agriculture and Rural Development Akinwumi Adesina made the disclosure at an emergency meeting on Avian Influenza with state commissioners for agriculture in Abuja, the capital of Nigeria.
Nigeria, Israel, West Bank fight avian flu in poultry
29 January 2015 / CIDRAP
HSN1 avian influenza has erupted in new outbreaks in Nigeria, Israel, and probably Palestine's West Bank in recent days, as a winter of high avian flu activity continues. In addition, US officials reported more details on the highly pathogenic HSN8 outbreak on a California turkey farm, including that the farm housed 145,000 birds before the virus surfaced.

Avian flu rampages in Taiwan, hits China, India
29 January 2015 / CIDRAP
Taiwan yesterday reported more than 100 avian flu outbreaks of three different subtypes, affecting hundreds of thousands of poultry, while China and India reported fresh outbreaks as well. In addition, Bulgaria reported finding the highly pathogenic avian influenza (HPAI) virus HSN1 in a wild bird, while Nigerian officials said HSN1 outbreaks have struck lately in 11 states around the country.

H7
Shanghai reports first HSN9 case of 2015
19 January 2015 / Shanghaiist
The Shanghai Health and Family Planning Commission confirmed that a 69-year-old Shanghai resident was infected with the HSN9 bird flu virus on Saturday. It's unclear how the patient, surnamed Zhang, contracted the virus, although close contact with infected poultry at places such as wet markets is a typical source of transmission.

Yibada: Scientists discover new way to reduce HSN9 symptoms
22 January 2015 / YIBADA
An antibody has been discovered by Chinese scientists in Beijing that will potentially reduce the effects of HSN9 symptoms in monkeys.

China HSN9 avian influenza count tops 500, Guangdong reports 28 this month
29 January 2015 / Outbreak News Today (USA),
The Hong Kong Centre for Health Protection (CHP) of the Department of Health (DH) is today (January 29) closely monitoring three additional human cases of avian influenza A(HSN9) notified by the Health and Family Planning Commission of Guangdong Province (GDHFPC), and again urged the public to maintain strict personal, food and environmental hygiene both locally and during travel. This brings the total HSN9 avian flu cases reported from Guangdong province to 28 since the beginning of the year. To date, 502 human cases of avian influenza A(HSN9) have been reported by the Mainland health authorities.

Second HSN9 bird flu case confirmed in B.C.; husband of first patient
31 January 2015 / CTV News
A British Columbia man suspected of having been infected with HSN9 bird flu has tested positive for the virus, the deputy provincial health officer said Thursday. The unidentified man is the second Canadian known to have been infected with the virus.

H10
Study: H10 evolution in China highlights threat to public health
CIDRAP / 15 January 2015
Twelve years of surveillance of H10 avian flu viruses in poultry and migratory birds in southern China—tracing the origins of the H10N8 and H10N6 strains—demonstrate the severe threat to public health posed by the viruses as they reassort in the fertile influenza ecosystem of China, according to findings of a study in the Journal of Virology.