Objective 1: increase in seasonal vaccine use

Cold Comfort: Adults May Catch Flu Only Once in Five Years!
4 March 2015 / NDTV
Researchers from Imperial College London have found that after the age of 30, people generally only get the flu about twice a decade or simply put, once in every five years! While children get flu on an average every other year, flu infections become less frequent as people progress through childhood and early

India tackles H1N1 influenza outbreak
14 March 2015 / The Lancet
India is dealing with a seasonal H1N1 influenza outbreak that has affected several states, causing more cases and deaths than previous winter outbreaks. Sanjit Bagchi reports.

Turkey alarmed as swine flu kills 4 people in 5 days
17 March 2015 / Todays Zaman, Turkey
Turkey has been alarmed over a possible outbreak of swine flu after four people died from the officially named H1N1 virus in the last five days, as the Ministry of Health announced on Tuesday that 16 people have been killed by the disease in Turkey since the start of 2014.

Ready-to-use flu vaccine in sight
18 March 2015 / Times of India
Serum Institute of India (SII) has developed a ready-to-use influenza vaccine that promises to offer protection against three influenza viruses, including swine flu.

New vaccine for deadly H3N2 virus flu mutation being produced by CSL in Australia
22 March 2015 / The Daily Telegraph, Australia
In 2012 Lachlan Neylan was left brain damaged after being given the CSL Fluvax shot in 2012 at age 22 months, two years after it had been banned ...

Confirman muerte de madre e hija por gripe A (H1N1) en Risaralda
25 March 2015 / La Tarde, Spain
La Secretaría de Salud departamental confirmó que de acuerdo a los exámenes epideomológicos, dos mujeres del municipio de La Virginia que fallecieron en el hospital San Jorge de Pereira, perdieron la vida a causa de la influenza A H1N1.

La grippe devrait coûter environ 180 millions d'euros cette année
26 March 2015 / Le Monde
La grippe, qui a fortement touché la France cet hiver, devrait coûter environ 180 millions d'euros, a déclaré le directeur de l'Assurance-maladie, Nicolas Revel, dans un entretien publié jeudi 26 mars par Les Echos. « Chaque année, une provision de dépense de 100 millions d'euros [consultations, médicaments, arrêt de travail] est faite », a-t-il expliqué. Mais « compte tenu de l'ampleur de l'épidémie cette année, le surcoût devrait être d'environ 80 millions d'euros », a précisé le directeur général de la Caisse nationale d'assurance-maladie (CNAM), jugeant « totalement farfelu » le chiffre d'un milliard évoqué dans la presse.
**Objective 2: increase in vaccine production capacity**

**Vaccines from a reactor**
2 March 2015 Phys & Org
In the event of an impending global flu pandemic, vaccine production could quickly reach its limits, as flu vaccines are still largely produced in embryonated chicken eggs. Udo Reichl, Director at the Max Planck Institute for Dynamics of Complex Technical Systems, and his colleagues have therefore been working on a fully automated method for production in cell cultures that could yield vaccines in large quantities in a crisis.

**Green Cross wins contract from PAHO for flu vaccine worth 3.2 billion Won**
4 March 2015 / Business Korea
In a bid to supply medicines in the southern hemisphere in 2015, Green Cross won the contract to supply flu vaccines worth US$2.9 million (3.2 billion won) from the Pan American Health Organization (PAHO), under WHO, which is one of the world’s largest demand sources of vaccines.

**Objective 3: research and development**

**Outbreak news**

**H5**

**Role of wild birds in US H5N2 outbreaks questioned**
18 March 2015 / CIDRAP
The USDA reported that the Minnesota, Missouri, and Arkansas H5N2 isolates looked more than 99% similar to the Washington pintail duck virus. The notion that wild birds played a key role in bringing highly pathogenic avian influenza (HPAI) viruses from Asia to western North America and more recently to the Midwest has been implicit in government statements about recent outbreaks. But some wildlife disease experts are warning against jumping to easy conclusions.

**Avian influenza A (H5N1) in Egypt, update**
21 March 2015 / WHO
The Ministry of Health and Population of Egypt has notified the World Health Organization (WHO) of an additional 17 human cases of avian influenza A(H5N1). With these new cases, the total number of avian influenza A (H5N1) cases in Egypt stands at 116, including 36 deaths for the period of 1 January to 17 March 2015. Since it was first reported in March 2006, a total of 318 human cases of avian influenza A(H5N1), including 112 related deaths (case–fatality rate = 35.2%) have been reported in Egypt.

**Reuters: U.S. developing bird flu vaccine, no distribution plans yet**
23 March 2015 / Reuters
The U.S. government is developing a vaccine to protect poultry from new strains of avian flu that have recently killed birds from Arkansas to Washington state. Within two months, scientists at a U.S. Department of Agriculture (USDA) research lab in Georgia will test the vaccine on chickens to see
how well it prevents them from getting sick and dying of the virus, which the government says is spread by wild birds.

**H7**

*tudy shows H7N9 diversity, human threat*

11 March 2015 / CIDRAP

An analysis of viruses from the second wave of H7N9 avian flu in China that began in late 2013 shows a rapid expansion both geographically and in genetic diversity, which poses a challenge to disease control and demonstrates the potential of H7N9 to emerge as a pandemic strain in humans, according to a study summarized in a letter to *Nature*.

**Co-infection with Avian (H7N9) and Pandemic (H1N1) 2009 Influenza Viruses, China**

April 2015 / Emerging Infectious Diseases

*Wanju Zhang et al.*

In a retrospective study, we identified co-infection with A(H1N1)pdm09 and novel avian-origin H7N9 virus in a 61-year-old female patient from the urban area of Shanghai, China.

**H9**