Objective 1: increase in seasonal vaccine use

ACIP recommendations for use of seasonal influenza vaccines
7 August 2015 / Infectioncontrol News, USA
The CDC’s MMWR provides a report that updates the 2014 recommendations of the Advisory Committee on Immunization Practices (ACIP) regarding the use of seasonal influenza vaccines.

Swine flu: Only 40 pregnant women take free vaccine in Mumbai
12 August 2015 / Hindoustan Time, India
The Maharashtra state health department’s swine-flu vaccination programme for pregnant women has received dismal response, with just 40 pregnant women voluntarily taking the vaccine in Mumbai. For the first time ever, the health department is providing ‘free swine-flu vaccination’ to pregnant women, as they are the most vulnerable to the H1N1 infection that has affected 2,130 people in Mumbai and killed 31.

More than 30 doses of bioCSL Fluvax given to young children despite health authority warnings
14 Aug 2015 / ABC Net, Australia
Health authorities are concerned that more than 30 doses of bioCSL Fluvax have been given to Australian children aged under five this winter, despite warnings not to give it to young children. Since late 2010, bioCSL Fluvax has not been registered for use in children aged less than five years because it causes unacceptably high rates of side events, specifically fevers and febrile convulsions, in children under five. Health authorities said alternative vaccines for young children are Vaxigrip, Vaxigrip Junior and Fluarix.

Flu jab drive to address last year’s ‘failure’
17 August 2015 / BBC News, UK
Ministers are urging people not to be put off by failures of the flu vaccine last year. They say those who qualify for a free jab, or spray for children, should take up the offer this winter as it offers the most effective cover against flu. Last winter it emerged that the seasonal flu vaccine used offered barely any cover against the main strain of flu encountered in the UK.

Introducing Seasonal Influenza Vaccine in Low Income Countries: An Adverse Events Following Immunization (AEFI) and Acceptability Survey in Lao PDR
24 August 2015 / ECEID, Atlanta, USA
M. Phengxay et al.
In 2012, Lao PDR introduced seasonal influenza vaccine based on evidence of seasonal influenza occurrence. This study showed that high acceptability of seasonal influenza vaccine by survey participants corresponded with recognized public demand that greatly exceeded supplies. Lao PDR was able to mobilize and leverage resources, setting an example for other low income countries in introducing seasonal influenza vaccine.

Influenza vaccine also prevents heart attacks, UNSW study finds
27 August 2015 / Sydney Morning Herald, Australia
A study by University of NSW researchers has found that people who have been vaccinated against influenza are 29 per cent less likely to have a heart attack - representing a greater protective effect than ceasing smoking and nearly as much as taking statins. They are now advocating that the flu vaccine be provided free of charge to everybody aged over 50, extending the current scheme that makes it available to people over 65.
Objective 2: increase in vaccine production capacity

**Daiichi Sankyo puts $80m into Tokyo vaccine plant**
10 August 2015 / FiercePharma

The Japanese drugmaker is investing ¥10 billion ($79.7 million) to add a new building at its Kitasato Daiichi Sankyo Vaccine's main production site in Saitama Prefecture, according to the Nikkei Asian Review. The site has two existing facilities, one that makes a mumps vaccine, the other making influenza vaccines. The new building, which may be complete as soon as this month, is expected to manufacture some new offerings, the Review reports.

The drugmaker and partner Terumo in April filed for approval of a new seasonal flu jab that uses a short-needle intradermal injection.

**CSL posts 1.4 US$ billion record profit on flu vaccine gains**
12 August / ABC Net, Australia

The big global vaccine and blood products maker CSL has reported a record full year profit of $US1,379 million ($1,884), spurred on by its acquisition of the Novartis flu vaccine business. The profit was 6 per cent higher than last year’s result and in line with consensus forecasts.

Total sales increased 2 per cent to $US5,459 million ($7,460). The fast-tracked purchase of the Novartis business positions CSL as the second largest influenza vaccine manufacturer in the world and has helped turn around the fortunes of the 'bioCSL' business which reported an 18 per cent increase in sales of flu shots.

**US dominates worldwide flu vaccine industry market**
20 August 2015 / Vaccine News Daily

Business consulting firm RNCOS recently published a report showing that the U.S. dominates the worldwide influenza vaccine industry market thanks to several factors, including needle-free drug delivery techniques. The 89-page report, titled “Global Influenza Vaccine Market Outlook 2020,” said that the U.S. accounted for 50 percent of the world’s influenza vaccine industry market in 2014.

Other issues driving the industry’s success in the U.S. are increasing health care expenditures, the introduction of new vaccines, rising awareness, advancing technologies and increasing health consciousness.

**New future for Speke flu jab site after CSL Behring takeover**
27 August 2015 / Liverpool Echo, UK

The new owner of Speke’s flu vaccine plant, which employs almost 600 staff, insists the Speke Boulevard site is core to its business. CSL Behring, based in King of Prussia, Pennsylvania in the US, announced an agreement to buy the plant from its Swiss-based owner Novartis last October in a £175m deal. The US group has flu vaccine manufacturing plants in America, Germany and Australia. It said the addition of the Speke site to its bioCSL subsidiary, now called Seqirus, would create a “diversified product portfolio and strong pre-pandemic and pandemic franchises” in its countries of operation.

**Takeda expands vaccine platform rights with Nanotherapeutics agreement**
27 August 2015 / Fierce Vaccines

Takeda has inked an agreement to expand its rights to the Vero cell technology platform for vaccines production from Florida’s Nanotherapeutics, Inc. Takeda will gain access to the Vero technology to commercialize its pandemic and seasonal flu vaccines for Japan and other regions and to develop vaccines beyond flu. Takeda began using the Vero platform when it signed a deal with Baxter in 2010 to license rights for the development of pandemic and seasonal flu vaccines for the Japanese market. It’s currently working with the platform on TAK-850, a cell-based seasonal flu vaccine, also for use in Japan.
SK Chemicals Commercializes Korea’s Frist Cell Culture-based Flu Vaccine
28 August 2015 / Business Korea, South Korea

“Our company will use the release of SkyCellFlu as a springboard to change the current market conditions where half of the vaccines consumed in the nation are produced in other countries. Furthermore, we will penetrate overseas markets,” said a spokesperson for SK Chemicals during a launch event for SkyCellFlu at the Plaza Hotel in Seoul on Aug. 19. SkyCellFlu is the world's second cell-cultured influenza vaccine for adults, and the first one for children and adolescents under the age of 18. The new flu vaccine proved to be as efficient and safe as existing ones, or even better, according to the results of clinical trials targeting adults, children, and teenagers. SkyCellFlu was approved by the Ministry of Food and Drug Safety (MFDS) in Dec. 2014, and L House, SK Chemicals’ vaccine production facility capable of producing up to 140 million doses a year, will be in charge of the first shipment of supplies”.

Objective 3: research and development

New Evidence Associates Narcolepsy with Pandemic Flu Vaccine
6 August 2014 / Neurology Today
Talan J.

Researchers found an increased frequency of antibodies to hypocretin receptor 2 in narcoleptic patients with a history of Pandemrix vaccination that were cross-reactive with influenza nucleoprotein

Researchers apply new approach to make improved nasal spray flu vaccine
10 August 2015 / News Medical

Johns Hopkins Bloomberg School of Public Health researchers say they have developed a method that could make a nasal spray flu vaccine effective for those under two and over 49 - two groups for which the vaccine is not approved. By studying the weakened flu virus that is the basis for the nasal spray vaccine in cells from human nasal and sinus cavities, the researchers say they have determined that the virus can be weakened (for young children) or strengthened (in older people) enough to create an appropriate immune response in people of all ages.

AS03 adjuvant enhances immune response to H7N9 vaccine
18 August 2015 / Healio Infectious Disease News

The AS03 and MF59 adjuvants appear to bolster immune responses to two doses of an inactivated H7N9 influenza vaccine, with the AS03 adjuvant generating the highest titers, according to recent data. In the randomized, double blind, phase 2 trial, researchers at five U.S. sites enrolled 980 adults aged 19 years to 64 years from Sept. 18, 2013 to Nov. 22, 2013. Participants were randomly assigned to one of 10 study groups, and were administered various vaccine formulations. The H7N9 vaccine was administered sequentially, given on days 0 and 21 at hemagglutinin doses of 3.75 μg, 7.5 μg, 15 μg, and 45 μg. Vaccines were given with or without AS03 or MF59 adjuvant included in the formulation. "These results imply that, of the options currently available utilizing adjuvants included in the national stockpile, based on the immune response data, AS03 should be considered a first-line adjuvant for strategies incorporating an inactivated H7N9 vaccine in adults," the researchers wrote.

Vaxart Announces Lancet ID Publication of Influenza Tablet Vaccine Phase 1 Results
23 August 2015 / Business Wire

Vaxart’s H1N1 influenza tablet vaccine demonstrated protective immunity based on Hemagglutinin Inhibition Assay (HAI) with HAI titer increases comparable to increases reported for currently approved influenza vaccines. HAI titers are an important standard used by industry and the U.S. Food and Drug Administration (FDA) for determining protective immunity.
Scientists are closer to a universal flu vaccine  
24 August 2015 / Daily News New York, USA

Scientists have taken a major step towards creating a vaccine that works against multiple strains of influenza, according to two studies published Monday in top journals. A "universal vaccine" is the holy grail of immunization efforts against the flu, a shape-shifting virus which kills up to half a million people each year, according the World Health Organization. In the two studies, published in Nature and Science, researchers tested new vaccines on mice, ferrets and monkeys that duplicate another, more stable, part of the virus.

Outbreak news

H5

Four countries report new high path AI outbreaks  
12 August 2015 / CIDRAP News, USA

Four countries reported new highly pathogenic avian influenza detections yesterday, involving H5N1 in Nigeria, Russia, and Vietnam and both H5N2 and H5N8 in Taiwan, according to separate reports to the World Organization for Animal Health (OIE).

Report finds $1.2 billion in Iowa avian flu damage  
18 August 2015 / CIDRAP, USA

Iowa took an economic hit of about $1.2 billion stemming from the death of more than 30 million hens and 1.5 million turkeys because of avian flu this past spring, according to a report commissioned by the Iowa Farm Bureau Federation (IFBF) released yesterday. In addition, H5 avian flu affected thousands of poultry in multiple outbreaks in both Palestine and Nigeria.

H6

H7

H7N9 studies shed light on Chinese poultry patterns, gender differences  
24 Aug 2015 / CIDRAP News, USA

Two recent studies revealed more about H7N9 avian influenza patterns in China, one showing a link between virus contamination in poultry markets and human illnesses and one suggesting that women of childbearing age may be more vulnerable to the virus. The poultry sampling study took place in Zhejiang province, one of the hardest hit during China's H7N9 outbreaks. The team from China published their findings yesterday in Public Library of Science (PLoS) One.

H9

H10