

Seqirus Media Monitoring

13th Dec 2017

Seqirus mentions

Egg-based production faulted as experts predict vaccine might be just 10% effective this season

Based on data from Australia, scientists warn that this season's flu shot might be only 10% effective. And the reason might lie in the method by which the majority of flu vaccines are made: in eggs. Scientists now stress the importance of a universal flu vaccine and are championing new paths away from the egg-based manufacturing process. Recombinant and cell-based platforms are two other vaccine technologies currently available. Sanofi, through its recent acquisition of Protein Sciences, markets the Flublok family, the only recombinant-based flu shots approved in the U.S. Seqirus' Flucelvax is also the only FDA-approved cell-based flu vaccine. Seqirus just started manufacturing its cell-based flu vaccines on a commercial scale this season

<https://www.fiercepharma.com/vaccines/egg-based-production-at-fault-for-flu-shot-s-mere-10-effectiveness-year>

US Influenza Activity Increasing in the United States

Influenza activity is on the rise across the United States, with several influenza activity indicators higher than what is typically seen for this time of year, according to the CDC Morbidity and Mortality Weekly Report. Circulating influenza viruses collected since October 1, 2017 that were tested demonstrated sensitivity to all 3 antiviral medications available for use against influenza including: oseltamivir, zanamivir, and peramivir

<http://contemporaryclinic.pharmacytimes.com/acute-care/us-influenza-activity-increasing-in-the-united-states>

News of Note—GlaxoSmithKline's Shingrix, Seqirus expansion and more

Among the news of note this week was that Seqirus is investing \$9 million to expand its North Carolina flu vaccine manufacturing plant

<https://www.fiercepharma.com/r-d/news-note-glaxosmithkline-s-shingrix-seqirus-expansion-and-more>

Pandemic Influenza News

DEFRA: HPAI in Europe - Outbreak Assessment #17

A newly reassorted H5N6 virus has been detected in the Netherlands; it is of a different lineage than the Asian H5N6 virus which circulates in China, and that impacted Japan, South Korea, and Taiwan last winter. It has been described as being a combination of the H5N8 virus that arrived in Europe last year and a European LPAI HxN6 virus.

<http://afludiary.blogspot.com/2017/12/defra-hpai-in-europe-outbreak.html>

Additional sources: ([The Poultry Site.com](#)) ([Farming UK](#))

Hong Kong suspends import of poultry products from Dutch province

Food safety authority of China's Hong Kong Special Administrative Region has ordered to suspend import of poultry products from a province of the Netherlands due to bird flu outbreak there.

http://news.xinhuanet.com/english/2017-12/12/c_136820518.htm

No Change in Human-to-Human H7N9 Transmission Risk Over Time

Despite the increase in the number of human infections with avian influenza A (H7N9) virus during the fifth epidemic in China, a new study suggests no change in the risk of transmission of the virus among humans over time. The investigators will continue to study the epidemiology of human infections with influenza A (H7N9) virus, including a severity assessment, the spectrum of illness in

infected persons, and transmission dynamics. "We expect a sixth epidemic of human infections with influenza A (H7N9) virus this coming winter and need to be prepared to assess any changes in the epidemiology that could signal an increasing pandemic threat," Dr. Zhou concluded

<http://www.contagionlive.com/news/no-change-in-human-to-human-h7n9-transmission-risk-over-time>

South Korea beefs up bird flu quarantine measures

South Korea vowed Tuesday to strengthen quarantine measures in duck farms in its southwestern region as a fresh outbreak of highly pathogenic bird flu caused alarm in the major duck producing area. "If additional cases of highly pathogenic bird flu are discovered, we will continue to adopt tight quarantine measures to enhance safety ahead of PyeongChang Olympics," Heo Tae-yoong, a senior ministry official, said

<http://english.yonhapnews.co.kr/business/2017/12/12/0501000000AEN20171212005800320.html>

Industry News

Pharma warning of Brexit impact to public-health emergencies

UK pharma industry leaders have warned of the potential impact of Brexit on Europe's capacity to respond to a continent-wide public-health emergency, as they step up their drive to ensure the sector's interests are addressed when the next phase of negotiations begins. The Association of the British Pharmaceutical Industry and the BioIndustry Association said that Europe's ability to manage big public-health crises related to the use of medicines could be at risk if the UK were excluded from cross-EU incident management planning

<https://www.ft.com/content/caea442e-df41-11e7-8f9f-de1c2175f5ce>

Additional sources: (Daily Telegraph)

Sanofi Pasteur exec: Dengvaxia is 'a safe and efficacious vaccine'

An official from Sanofi Pasteur, manufacturer of Dengvaxia dengue vaccine, has denied negligence on the part of the company, saying that permanently removing the vaccine from the Philippine market would be a disservice to Filipinos. "We at Sanofi Pasteur assure each and every one of you that Dengvaxia is, and continues to be, a safe and efficacious vaccine," he added

<http://newsinfo.inquirer.net/951429/sanofi-pasteur-exec-dengvaxia-is-a-safe-and-efficacious-vaccine>

Additional sources: (The Street)

Academic studies

The science behind man flu

A researcher has studied whether the term 'man flu' has some scientific basis. He explains that 'some evidence clearly supports men having higher morbidity and mortality from viral respiratory illness than women because they have a less robust immune system. However, conclusions may be limited by author bias, inclusion of some low level evidence, and not reporting a critical appraisal of the studies cited. Additionally, the differences observed in these studies may not be representative of all respiratory viruses, and differences may be hidden within studies that did not stratify the various viruses or other differences between the sexes.'

<http://www.bmj.com/content/359/bmj.j5560>

Researchers developing, testing nanovaccine to protect against the flu virus

Researchers from Iowa State University, the University of Iowa and the University of Wisconsin-Madison - all of them affiliated with Iowa State's Nanovaccine Institute - are working together to develop and test what they think could be a better way to fight the flu. What the researchers are doing is loading synthesized influenza proteins into nanoparticles. Those nanoparticles are about 300 billionths of a meter across and are made from biodegradable polymers. The nanoparticles are incorporated into a nasal spray and delivered with a sniff

<https://www.news.iastate.edu/news/2017/12/12/flunanovaccine>

Pediatric influenza news

"I said no to flu jab late in pregnancy...but ended up fighting for my life in intensive care"

An expectant mum who contracted swine flu which developed into pneumonia and sepsis is urging all pregnant women to have the flu jab. She contracted the virus and midwives had to deliver her baby early, while she was in intensive care and woke up a week later.

<http://www.dailypost.co.uk/news/flu-jab-pregnancy-intensive-care-14029507>

Vaccination is best protection against flu during pregnancy

Public Health Wales is urging pregnant women to protect themselves and their unborn babies against flu by having the free NHS vaccine. Anne McGowan, nurse consultant at Public Health Wales, said: 'If a pregnant woman catches flu it can cause severe complications to mother and baby; one quick, simple vaccination will help to protect the woman and will also give added protection to her baby during their first months of life.'

<http://www.communitypractitioner.co.uk/news/2017/12/vaccination-best-protection-against-flu-during-pregnancy>

Over 65's influenza news

Post-flu risks a growing concern for the elderly

Infectious disease experts are warning that flu can lead to an increased risk of heart attack, stroke and disability in elderly patients for months after they have recovered from their illness. Evidence has been growing over the last several years about post-flu risks that most people and even some physicians don't know about, according to William Schaffner, MD, professor of Preventive Medicine and Infectious Disease at Vanderbilt University School of Medicine. Schaffner said the high-dose influenza vaccine is effective in older adults with four times as much vaccine as the normal vaccine. A second vaccine for the elderly was licensed for the first time last year and has an adjuvant.

<http://www.tennessean.com/story/news/local/robertson/2017/12/12/post-flu-risks-growing-concern-elderly/108547208>

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Ageing impairs innate immune response to flu

Ageing impairs the immune system's response to the flu virus in multiple ways, weakening resistance in older adults, according to a Yale study. The research reveals why older people are at increased risk of illness and death from flu, the researchers said. They concluded that "in older adults, we might have to use a different strategy to treat and immunize against flu." "We need to find a way to boost antiviral defense that does not rely on interferon production. For vaccines, we need to find an adjuvant that would still stimulate the innate immune response in older adults."

<https://news.yale.edu/2017/12/12/aging-impairs-innate-immune-response-flu>

General Influenza News

Is "Man Flu" Real? Men Suffer More When Sick, Study Suggests

'Man flu' may have some scientific basis after all: men may really experience worse symptoms than women after catching a respiratory virus, a new review suggests. In a search of the scientific literature, Dr Kyle Sue found evidence that men may have a weaker immune response to the viruses that cause flu or the common cold, and as a result, men may have a greater risk for serious symptoms, and even death, from these viruses

<https://www.livescience.com/61164-man-flu-real.html>

Additional sources: (The Times) (The Guardian) (USA Today) (The Globe and Mail) (CNN) (RTE Online)

Is The Flu Vaccine Effective? Conflicting Reports Raise Questions

As flu season begins across the U.S. concerns, are being raised about the effectiveness of the vaccine. Experts say this year's flu shot might only be 10 percent effective against a prevalent strain of the virus, based on a study looking at Australia's flu season. Speaking to WWJ Health Reporter Dr. Deanna Lites, Dr. Shaun Jayakar — a family medicine specialist from St. John Hospital in Detroit —

said it's too soon to draw these conclusions. The CDC recommends people get vaccinated against the flu

<http://detroit.cbslocal.com/2017/12/12/is-the-flu-vaccine-effective-conflicting-reports-raise-questions/>

Additional sources: ([Mercury News](#))

Anti-vax views must not derail France's compulsory vaccine law

France has the world's worst anti-vax attitudes: a 2016 survey showed that 41 per cent of people there say vaccines are unsafe. A new law will take force there on 1 January to up the number of mandatory childhood vaccines to 11 from three. It has provoked a polemic, despite being sound. The problem seems to be the neglect by officials of the main drivers of vaccine hesitancy

<https://www.newscientist.com/article/2156197-anti-vax-views-must-not-derail-frances-compulsory-vaccine-law/>

Influenza peak time is approaching, how many will get sick over Xmas?

The influenza strain will increase towards Christmas, but the major outbreak probably occurs once after the New Year, according to the National Institute of Public Health. The virus types currently in circulation in Norway are A (H3N2 and Influenza B / Yamagata, which affected the elderly in last year's season. "It is the older age groups who are most seriously ill from influenza A (H3N2) and influenza B / Yamagata. Hospitalizations and deaths can be expected, says a spokesperson. Studies indicate that large sections of the population had good protection against influenza A (H1N1) and A (H3N2) influences before the start of the season, indicating that the outbreak of the year is getting less severe, with fewer ill than last winter.

<http://www.dagbladet.no/nyheter/influensatoppen-naermer-seg---mange-vil-bli-syke-i-julen/69069268>

SRHD helps dissect study on effectiveness of flu vaccine

Spokane Regional Health District is stressing to the public that a study specific to Australia speaking to the effectiveness of this year's flu vaccines is not necessarily predictive of what we should expect in the U.S. Local health officials are still strongly recommending getting this year's flu shot. They believe that the influenza vaccination will provide meaningful protection against severe illness, hospitalization, and death

<http://www.kxly.com/news/local-news/srhd-helps-dissect-study-on-effectiveness-of-flu-vaccine/671249263>

Influenza is here! Expect a major outbreak just after New Year

The influenza strain will increase towards Christmas, but the major outbreak will probably occur just after the New Year, according to the National Institute of Public Health. "In most parts of the country there is currently very low influenza activity. However, we see a slight increase week by week indicating that an outbreak is on the cards. Many will probably be sick by Christmas, but it will be only after the New Year most will be affected, according to Siri H. Hauge, Department Director of the Public Health Institute .

<http://www.nordlys.no/influenza/helse/jul/influenzaen-kommer-har-beregnet-tidspunkt-for-utbruddstoppen/s/5-34-750196>

Since flu clinics opened across the province on Oct. 23, there have been more than 250,000 doses of influenza vaccine administered as of Dec. 2

Dr. Saqib Shahab is impressed by the number of Saskatchewan residents who have rolled up their sleeves to get flu shots. From the time flu clinics opened across the province on Oct. 23, there have been 250,520 doses of influenza vaccine administered as of Dec. 2. That's an 11-per-cent increase compared to last year (225,341 doses) and is more than the number for 2015 (224,953 doses) for the same point in the season

<http://thestarphoenix.com/storyline/since-flu-clinics-opened-across-the-province-on-oct-23-there-have-been-more-than-250000-doses-of-influenza-vaccine-administered-as-of-dec-2>

The Flu Shot Is Not Just About You

Richard Webby, PhD, member of the infectious disease department at St. Jude Children's Research Hospital and one of a select group of scientists responsible for determining which flu vaccines will be put into circulation each year, writes about the process behind determining the next flu vaccine and urges all to get vaccinated every year against the flu in order to protect themselves but also other, more vulnerable, people

<http://time.com/5052980/flu-season-2017-flu-shot/>

Why You Need the Flu Shot Every Year

A look at the process of determining the flu vaccine each year and its complexities: "Our vaccine process is sort of always one step behind because of this long production process and trying to update the vaccine to what's circulating," Dr. Scott Hensley, an associate professor of microbiology at the University of Pennsylvania, said. The World Health Organization meets twice a year, once for the Southern Hemisphere and once for the Northern Hemisphere, to examine global flu surveillance and recommend the flu strains they expect will cause the most illness. "This puts a huge burden on manufacturers," Dr. Ruth Karron, an epidemiology professor, said. In the Northern Hemisphere, they learn the W.H.O. recommendations in February and have only about six months to make vaccines. They sell it very cheaply, Dr. Karron said, about \$10 to 20 a dose, and have to throw away anything unsold at the end of the season

<https://www.nytimes.com/2017/12/12/smarter-living/why-you-need-the-flu-shot-every-year.html>

Online map lets users see where the flu has struck

In Switzerland, grippenet.ch was launched on Monday. People are asked to join the site and answer a weekly questionnaire on flu symptoms, and the results are presented as a map. Some doctors disagree with the principle and would prefer data on the severity of the virus and whether the flu vaccine strains were well matched

<http://www.20min.ch/ro/news/geneve/story/Carte-en-ligne-pour-suivre-l--volution-de-la-grippe-25091907>

One Hasty Study Doesn't Mean That "Man Flu" Is Real

Written by Canadian researcher and family medicine doctor Kyle Sue, a tongue-in-cheek journal article "explores whether men are wimps or just immunologically inferior" with regard to the flu. While the studies Sue cites are certainly reputable, that doesn't actually mean the man flu as it's commonly understood is real. Sabra Klein of Johns Hopkins University Bloomberg School of Public Health and several other experts have criticized the conclusions of Sue's research

http://www.slate.com/articles/health_and_science/medical_examiner/2017/12/a_recent_study_argues_that_man_flu_is_real_but_a_closer_look_suggests_otherwise.html

NIAID Director Recounts Lessons from Infectious Disease Outbreaks

Anthony Fauci, MD, Director of NIAID since 1984, recently shared lessons learned from his tenure confronting emerging infectious disease threats through the span of 5 presidential administrations. Regarding the 2009 H1N1 pandemic, he writes that "This experience served as a striking reminder of the inadequacy of our pandemic preparedness capabilities and underscored the need, now being actively pursued, to develop platform technologies that can be applied rapidly to develop vaccines for evolving outbreaks"

<http://www.mdmag.com/medical-news/niaid-director-recounts-lessons-from-infectious-disease-outbreaks>

Hospitals working to stop spread of flu virus

Hospitals in the Ottawa area are asking for the community's help to reduce the spread of infection as the flu season came early this year. Staff at the hospitals will be stepping up prevention and monitoring during the peak of the season, which is expected to hit in the new year. Hospitalizations from influenza are already higher than expected

<http://www.cbc.ca/news/canada/ottawa/flu-season-hospital-ottawa-sickness-1.4444670>

The flu jab: Why you and your family need to get vaccinated

A mother talks about the flu complications that left her little girl with permanent brain damage and urges others to get vaccinated. The flu vaccine is free on the NHS for those who are pregnant or over 65, or have a condition that means they are more prone to developing complications from flu. Primary school children from reception class to year four are being offered nasal spray vaccine this year. Yet overall, just half of those eligible bother with the jab – well below the 75 per cent uptake the World Health Organisation advises

<https://www.express.co.uk/life-style/health/891256/flu-jab-you-your-family-vaccinated>

French flu jab campaign targets younger healthy people

The French annual flu vaccination campaign has reminded the public why it can be a good idea to get the jab, even if you are aged between 20-60 years old and in good health. Usually, the vaccination campaign targets vulnerable people aged 65 and over; those who have compromised immune systems; or those with historic health problems and offers free vaccinations for those in need. However, it has also warned that other groups could benefit from the injection too

<https://www.connexionfrance.com/French-news/French-flu-jab-campaign-targets-younger-healthy-people>

Better flu prevention supported by private clinic federation in France

In France, a private clinics federation (FEHAP) is taking concrete measures to support better flu prevention, by covering all of its own staff's voluntary flu vaccinations. The federation is also asking its members to do the same for their employees. There is a high level of mistrust of vaccines in France at the moment

<http://www.caducee.net/actualite-medicale/13759/prevention-contre-la-grippe-la-fehap-s-engage.html>

Burden of disease

Connecticut Reports its First Flu-Related Death This Season

Doctors in Connecticut warn that the flu is something to take seriously and people should get vaccinated. "Connecticut this week just reported its first case of a death related to influenza in the state, so it certainly can have pretty severe consequences," said UConn Health Chief of the Division of Infectious Diseases Dr. Kevin Dieckhaus. The latest update from the state's health department says 197 people tested positive for the illness so far this season and "one influenza-associated death in an individual greater than 65 years of age has been reported."

<https://www.nbcconnecticut.com/news/local/Connecticut-Reports-its-First-Flu-Related-Death-This-Season-463586333.html>

Additional sources: (Patch) (Greenwich Daily Voice)

H1N1 influenza outbreak reported in Kumasi City, Ghana

In late November, an outbreak of influenza A H1N1 was reported Kumasi Academy Senior High School in Ghana, with 13 cases of severe acute respiratory illness. Since that time, the Ghana Ministry of Health has reported 77 cases with four deaths (case fatality rate 5.2%). The majority of the cases, 66%, were males and over 95% of the cases are teenagers. Thus far, the disease is still localized in the school as no cases have been reported among community members

<http://outbreaknewstoday.com/h1n1-influenza-outbreak-reported-kumasi-city-ghana-18240/>

Additional sources: (starrfmonline.com) (Modern Ghana)

Flu cases on the rise

The CDC advises people to get a flu vaccine by the end of October, but early December is still ahead of the typical flu season peak, which is usually between December and March. "As long as the flu is still circulating in your community, it's not too late," said Lisa Grohskopf, M.D, Medical Officer at the CDC. In North Idaho, flu cases are on the rise. There were six hospitalizations and one flu-related death in the region in November. The current rate of hospitalizations for influenza has increased to

12.9/100,000 population

http://www.cdapress.com/local_news/20171212/flu_cases_on_the_rise

Flu season picking up steam early with unusual spikes

A huge spike in the number of flu cases could portend a particularly bad year for the flu in Arizona. New figures from the Arizona Department of Health Services show there already have been 1,143 cases so far this season. That compared with 157 at the same time last year. What makes this number so potentially alarming is the timing: The number of new cases reported each week does not normally peak until February. People are advised to get vaccinated

http://www.eastvalleytribune.com/news/flu-season-picking-up-steam-early-with-unusual-spikes/article_784e6b2e-deb4-11e7-b508-7f6e0202e29d.html

Saskatchewan influenza activity on the rise with experts urging flu vaccine

Influenza activity has begun to surge across Canada and Saskatchewan is no exception. According to surveillance data conducted by the province on influenza rates, confirmed cases this flu season are up 60 per cent compared to the same time last year.

<https://globalnews.ca/news/3910523/saskatchewan-influenza-flu-vaccine/>

Report Says Rio Grande Valley Leading Cases of Influenza In Texas During First Week Of Flu Season

The Rio Grande Valley is leading the state of Texas with an increase in cases of influenza this season. That is according to the latest Walgreens Flu Index Report. The CDC reports at least seven influenza-related deaths this season. Doctors say it could be due to the large amount of strains that exist

<http://www.rgvproud.com/news/local-news/report-says-rio-grande-valley-leading-cases-of-influenza-in-texas-during-first-week-of-flu-season/879487813>

Flu season hits Northern Colorado early and hard

Flu season has hit particularly hard in Larimer and Weld counties in Colorado. Influenza started showing up in October and the numbers have been steadily climbing, said Dr. Trevor Bush, a family medicine specialist and medical director of UHealth Urgent Care facilities in Northern Colorado. As of Dec. 2, at least 325 patients statewide had been hospitalized with influenza this season, more than triple the 62 patients who had been hospitalized by the same time last year, according to the Colorado Department of Public Health and Environment

<http://www.coloradoan.com/story/money/business/2017/12/12/flu-season-hits-early-and-hard-larimer-county/940769001/>

Swine flu cases in Jeddah under control: Official

In Saudi Arabia, the Jeddah General Directorate of Health Affairs has confirmed that hundreds of swine flu (H1N1) cases have been recently reported in Jeddah, however, no deaths have been recorded. The infectious disease has long been under control, and no longer a threat, according to a health official

<http://www.arabnews.com/node/1208171/saudi-arabia>

News Scan for Dec 12, 2017 Smallpox drug review; Flu rise in North America, Asia; Cholera in Kenya, Zambia

The WHO released a new global influenza update showing that influenza is on the rise in North America, Western and Central Asia, and Europe. In North America, the predominant strain has been influenza A, H3N2. Europe, however, has more influenza B circulating at this time. Both influenza A and B have been detected in Asia. In Western Africa, influenza A (H1N1) detections increased in Cote d'Ivoire and Ghana. Influenza B detections were reported in Central African Republic and Mozambique

<http://www.cidrap.umn.edu/news-perspective/2017/12/news-scan-dec-12-2017>