

Seqirus Media Monitoring

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Seqirus mentions

Can we re-tool existing manufacturing facilities to help produce vaccines in the UK?

In the fight against coronavirus, while drug discovery and manufacture is a global effort, the UK's lack of facilities, with only two manufacturing locations across the region, leaves it racing to catch up with the huge pharmaceutical might of China, the US and Germany. Lives could depend on it, experts caution. Right now, Britain has two main vaccine facilities, both near Liverpool, run by AstraZeneca and Seqirus. GSK, meanwhile, does not manufacture vaccines in the UK, instead making the bulk of its output in Belgium. Compared to other regions, this is pretty dire. Industry groups suggest that as much as 80pc of pharmaceutical ingredients are produced in China and India and, even elsewhere in Europe, other countries have more facilities. In France, Sanofi alone has three production sites for vaccines.

<https://www.telegraph.co.uk/technology/2020/03/17/can-re-tool-existing-manufacturing-facilities-help-produce-vaccines/>

Industry News

Biotech That Doubled on Covid-19 Frenzy Readies New Flu Vaccine

Novavax may be in for more wild swings as it prepares to report results at the end of this month for an experimental flu vaccine for the elderly. The company's shares have more than doubled this year amid speculation that it could come up with a preventative treatment for the coronavirus. But with Novavax still testing that in animals, investors are looking more closely at its flu vaccine results. NanoFlu looked to spur on better antibody responses than Sanofi's Fluzone High-Dose in prior results from a mid-stage study. Data expected by the end of this month could send shares soaring, or put Novavax closer to penny stock territory. Still, if Novavax's flu vaccine works and manages to get regulatory approval, it will face some daunting competitors including Roche, the maker of Tamiflu, as well as GlaxoSmithKline and Sanofi.

<https://www.bloomberg.com/news/articles/2020-03-17/biotech-that-doubled-on-covid-19-frenzy-readies-new-flu-vaccine>

First patients dosed with Moderna's COVID-19 vaccine

The first person in the world to be injected with a COVID-19 vaccine – a 43-year-old mother from Seattle in the US – was dosed with Moderna's candidate yesterday. She was one of four people to be immunised with the mRNA-based vaccine, called mRNA-1273, in the study, which is being conducted by the US National Institutes of Health. Pfizer and BioNTech have signed a letter of intent to co-develop another potential mRNA coronavirus vaccine aimed at preventing COVID-19 infection – BNT162 – in all world markets outside China. The two companies, who are already working together on an mRNA-based influenza vaccine, say they could start clinical testing of BNT162 by the end of next month.

https://www.pmlive.com/pharma_news/first_patients_dosed_with_modernas_covid-19_vaccine_1329372

Open Orphan: Flu vaccine data showcased in peer reviewed article

The results of a successful phase IIb trial of a potential flu vaccine being developed by an Open Orphan joint-venture have been written up in a peer-reviewed article carried by a scientific journal. The data from FLU-v 004 challenge study underlined its ability to reduce mild-to-moderate symptoms of the illness. FLU-v has been developed by Imutex, 49%-owned by Open Orphan unit

hVIVO, as the first 'universal', broad-spectrum influenza vaccine. Imutex, meanwhile, is scheduling meetings with regulators on both sides of the Atlantic ahead of further trials.

<https://www.proactiveinvestors.co.uk/companies/news/914978/open-orphan-flu-vaccine-data-showcased-in-peer-reviewed-article-914978.html>

Novel high-density microarray patch (HD-MAP) can deliver vaccines directly to the skin

Vaxxas, a clinical-stage biotechnology company commercializing a novel vaccination platform, announced the publication in the journal PLoS Medicine of groundbreaking clinical research indicating the broad immunological and commercial potential of Vaxxas' novel high-density microarray patch. Using influenza vaccine, the clinical study of Vaxxas' HD-MAP demonstrated significantly enhanced immune response compared to vaccination by needle/syringe.

https://www.eurekalert.org/pub_releases/2020-03/tyn-nhm031720.php

Pandemic Influenza News

The Pentagon held an exercise for a flu pandemic 14 years ago. Here's what was learned.

More than a decade before the coronavirus swept across the globe filling hospitals and roiling economies, the Pentagon quietly conducted an exercise to see how its secret bunker system built in case of nuclear war would stand up to a flu pandemic. The 2006 exercise revealed just how hard it is to keep infected personnel out of a closed facility. It also underlined the limitations of massive Cold War-era bunker systems, especially for threats like a pandemic. In 2006, as the H5N1 "bird flu" virus was spreading around the world, the Defense Department held an exercise that tested its ability to continue operations from Raven Rock in the event of a pandemic. The 2006 exercise, which has not been previously reported, involved simulating a pandemic that would require moving personnel quickly into Raven Rock

<https://news.yahoo.com/the-pentagon-held-an-exercise-for-a-flu-pandemic-14-years-ago-heres-what-was-learned-090026091.html>

Academic studies

News Scan for Mar 17, 2020 - Flu-related hospital readmission; Global flu decrease

Patients hospitalized with the flu—especially those with underlying illnesses—are likely to be readmitted to the hospital within 1 year and even somewhat likely to be readmitted within a month, according to a study published today in the Journal of Infectious Diseases. Readmitted patients had more underlying illnesses than those who did not return to the hospital and tended to be older and female. Reasons for readmission at 30 days included pneumonia, acute chronic obstructive pulmonary disease/asthma exacerbation, septicemia, acute respiratory failure, and acute kidney failure.

<http://www.cidrap.umn.edu/news-perspective/2020/03/news-scan-mar-17-2020>

Comparing Social media and Google to detect and predict severe epidemics

Internet technologies have demonstrated their value for the early detection and prediction of epidemics. In diverse cases, electronic surveillance systems can be created by obtaining and analyzing on-line data, complementing other existing monitoring resources. This paper reports the feasibility of building such a system with search engine and social network data. Concretely, this study aims at gathering evidence on which kind of data source leads to better results. Data have been acquired from the Internet by means of a system which gathered real-time data for 23 weeks. Data on influenza in Greece have been collected from Google and Twitter and they have been compared to influenza data from the official authority of Europe. The data were analyzed by using two models: the ARIMA model computed estimations based on weekly sums and a customized approximate model which uses daily sums. Results indicate that influenza was successfully monitored during the test period.

<https://www.nature.com/articles/s41598-020-61686-9>

New kind of CRISPR technology to target RNA, including RNA viruses like coronavirus

CRISPR-based genetic screens have helped scientists identify genes that are key players in sickle-cell anemia, cancer immunotherapy, lung cancer metastasis, and many other diseases. However, these genetic screens are limited in scope: They can only edit or target DNA. For many regions of the human genome, targeting DNA may not be effective, and other organisms, such as RNA viruses like coronavirus or flu, cannot be targeted at all with existing DNA-targeting CRISPR screens. Now, in an important new resource for the scientific community published today in Nature Biotechnology, researchers in the lab of Neville Sanjana, PhD, at the New York Genome Center and New York University have developed a new kind of CRISPR screen technology to target RNA.

https://www.eurekalert.org/pub_releases/2020-03/nygc-nk031620.php

Pediatric influenza news

What Parents Need to Know About Coronavirus

The new coronavirus is spreading rapidly throughout the world — and parents are increasingly on edge. For now, Dr. Schaffner said, if you and your kids still haven't received a flu shot, get one. According to the C.D.C., flu activity is still high in the United States, and has caused anywhere from 22,000 to 55,000 deaths so far this season, with at least 144 in children. "Parents are used to the flu, so they don't worry as much about it," Dr. Schaffner said. "But taking steps to protect their children from it are much more important."

<https://www.nytimes.com/2020/03/17/parenting/coronavirus-children-pregnant-women.html>

Over 65's influenza news

Coronavirus: Health professionals and elderly first in queue for flu vaccine this year

In New Zealand, the Government is urging people to get vaccinated against the common flu to avoid taking up hospital resources that could be used to treat Covid-19. This year's vaccine campaign has been brought forward by two weeks, and the total 1.77 million vaccinations - 400,000 more than last year - will be prioritised for the elderly and most vulnerable, as well as health professionals in anticipation of the further spread of Covid-19

https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12317607

General Influenza News

Govt Begins Largest Ever Flu Vaccine Campaign Early

This year's flu vaccine campaign in New Zealand will be the biggest ever with 400,000 more vaccines available in 2020, compared with last year. The announcement was made as Health Ministers David Clark and Julie Anne Genter launched a new COVID-19 public health campaign. Free flu vaccines will be available from GP clinics and selected pharmacies for certain people. "New Zealanders health is our top priority. Our strong advice is to get your flu vaccine early this year to protect yourself, your family and your colleagues against the spread of the flu," said Health Minister David Clark.

<https://www.scoop.co.nz/stories/PA2003/S00129/govt-begins-largest-ever-flu-vaccine-campaign-early.htm>

Additional sources: (TVNZ 1) (Stuff.co.nz) (SunLive) (MSN.com)

In the coronavirus pandemic, we're making decisions without reliable data

The current coronavirus disease, Covid-19, has been called a once-in-a-century pandemic. But it may also be a once-in-a-century evidence fiasco. Although successful surveillance systems have long existed for influenza, the disease is confirmed by a laboratory in a tiny minority of cases. In the U.S., for example, so far this season 1,073,976 specimens have been tested and 222,552 (20.7%) have tested positive for influenza. In the same period, the estimated number of influenza-like illnesses is between 36,000,000 and 51,000,000, with an estimated 22,000 to 55,000 flu deaths. Note the uncertainty about influenza-like illness deaths: a 2.5-fold range, corresponding to tens of

thousands of deaths. Every year, some of these deaths are due to influenza and some to other viruses, like common-cold coronaviruses.

<https://www.statnews.com/2020/03/17/a-fiasco-in-the-making-as-the-coronavirus-pandemic-takes-hold-we-are-making-decisions-without-reliable-data/>

Aussie doctor pushes for free flu vaccine

Australia's doctors have sent an open letter to the state and federal governments raising their grave concerns about coronavirus. The letter asks for strict lockdown and social distancing measures to be enforced to avoid a spread that would put hospitals under serious pressure. UNSW immunologist Professor John Dwyer tells Ben Fordham we will need to take strict measures when it comes to public transport and that the flu vaccine should be made free this year.

<https://www.4bc.com.au/aussie-doctors-urge-government-to-lockdown/>

What effect will winter have on coronavirus in Australia?

As the southern hemisphere winter looms, cooler temperatures may affect the behaviour of the new coronavirus – and of people, who tend to spend more time close together indoors. Dr Kirsty Short, a virologist at the University of Queensland, said: “My concern is that [in winter] people tend to be in closer contact and it coincides with our flu season. “My main concern is that when you think of the healthcare system, that does get pushed in a bad flu season. If we combine a moderate flu season with a moderate coronavirus season, that could be problematic.” “To minimise the pressure on the health system it will be important for the community to adopt public health prevention measures, get vaccinated and staying at home when unwell – practising social distancing.”

<https://www.theguardian.com/world/2020/mar/17/what-effect-will-winter-have-on-coronavirus-in-australia>

Are coronavirus precautions lowering flu infection rates?

Are coronavirus precautions lowering flu infection rates? “Logically, they will. But we will only know this when the season is over,” former CDC official Dr. Robert Amler said. Amler noted there is overlap between coronavirus and the flu because “they look very similar.” The efforts to tame the new virus will also control the flu in the process. He said: “The full spectrum will only be known as we get through a season or two of this virus. This is all the more reason for people to get flu shots so their symptoms don't get confused with the flu.” To public health experts, the huge number of flu deaths is exactly why extraordinary steps should be taken to try to prevent the new coronavirus from spreading widely.

<https://www.foxnews.com/health/are-coronavirus-precautions-lowering-flu-infection-rates>

Is coronavirus worse than flu? How contagious and deadly regular flu is compared to coronavirus

While the two present a lot of similar symptoms, there is significant evidence already to suggest that coronavirus poses a very different threat to seasonal flu. Although the flu kills thousands of people every year, it is much more of a known quantity than the coronavirus. Regular flu is something we are well used to dealing with, as Dr Anthony Fauci from America's National Institute of Allergy and Infectious Diseases explained: "I can tell you all, guaranteed, that as we get into March and April, the flu cases are going to go down. You could predict pretty accurately what the range of the mortality is and the hospitalizations" Fauci said. "The issue now is that there's a lot of unknowns."

<https://www.scotsman.com/health/coronavirus-worse-flu-how-contagious-and-deadly-regular-flu-compared-coronaviruses-2447317>

Burden of disease

The 2019-2020 flu season, charted

Between 36 million and 51 million people have been stricken with the flu as of March 7, according to the latest CDC data. According to Friday's Weekly Influenza Surveillance report from CDC, 48 states

were experiencing widespread flu activity in the week ending in March 7, while Oregon was experiencing regional flu activity and Hawaii and Washington, D.C., were experiencing local flu activity. CDC estimated that there have been at least 22,000 deaths related to the flu so far this season.

<https://www.advisory.com/daily-briefing/2020/03/17/flu-update>

16 influenza-related deaths reported in Monroe County

Sixteen people have died from influenza in Monroe County, NY, according to the most recent data provided by the Monroe County Department of Health. That number is four more than what was reported on March 9. A total of 5,356 cases of influenza have been confirmed by a lab so far this flu season. Of those cases, 703 have resulted in hospitalizations.

<https://www.whec.com/rochester-new-york-news/16-people-died-from-the-flu-in-monroe-county/5676583/>

Flu Surveillance in Animals

India reports bird flu cases in three separate locations

Several cases of bird flu have been reported in India, prompting authorities to order the culling of poultry. Kerala's government said it had deployed special squads to cull all poultry within a 1km radius of the epicentre of the outbreak in Parappanangadi. Authorities said they would cull around 4,000 chickens, ducks and pet birds to prevent the spread of the disease.

<https://www.independent.co.uk/news/world/asia/india-bird-flu-kerala-cull-ducks-pets-a9404396.html>

Bird flu outbreaks detected in India and Philippines

Cases of bird flu have been detected in both India and the Philippines resulting in a cull of over 12,000 quails, chickens and ducks. Authorities in the Philippines announced an outbreak of the highly infectious H5N6 subtype on Monday (16 March). Elsewhere, Indian authorities announced on 14 March that several cases of bird flu had been reported in Parappanangadi

https://www.farminguk.com/News/bird-flu-outbreaks-detected-in-india-and-philippines_55220.html

North Carolina reports low-pathogenic avian flu

As part of routine surveillance for H5/H7 avian influenza, H7 low-pathogenic avian influenza (LPAI) was detected in a commercial turkey breeder and two turkey meat flocks in North Carolina, according to a report from the World Organization for Animal Health (OIE).

<https://www.feedstuffs.com/news/north-carolina-reports-low-pathogenic-avian-flu>