

Center for Infectious Disease Research and Policy University of Minnesota

CIDRAP Leadership Forum September Intelligence BRIEFING

September 30, 2015

1. Ebola Virus Disease

- West Africa epidemic update
- Wellcome Trust CIDRAP Ebola Vaccine Team B findings
- 2. Middle East respiratory syndrome coronavirus infection (MERS-CoV)
 - Arabian peninsula; Republic of Korea; genetic changes
- 3. Chikungunya
- 4. Legionellosis
- 5. Foodborne Diseases
- 6. Refugee migration & infectious disease issues
- 7. Seasonal influenza vaccines
- 8. Avian influenza (H5N2) in poultry
- 9. Other infectious disease issues



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Ebola data and statistics



Ebola data and statistics > Countries with intense transmission

Situation summary Data published on 24 September 2015

			•	•
Number of deaths	Number of cases			
Cumulative	Cumulative	Case definition	Data as of	Country
2080	3340	Confirmed	22 September 2015	Guinea
453	453	Probable		
Not available ⁱ	8	Suspected		
2533	3801	Total		
2 ¹	6 ¹	Confirmed	17 September 2015 9 May 2015	Liberia
Not available ⁱ	0 ⁱ	Probable		
Not available ⁱ	Not available ⁱ	Suspected		
2 ⁱ	6 ^j	Total		
Not available ^j	3151 ⁱ	Confirmed		
Not available ^j	1879 ⁱ	Probable		
Not available ^j	5636 ⁱ	Suspected		
4806 ^j	10 666 [/]	Total		
3589	8704	Confirmed	22 September 2015	Sierra Leone
208	287	Probable		
158	4855	Suspected		



Ebola outbreak - Home »

Ebola Situation Report - 23 September 2015





SUMMARY

There were 2 confirmed cases of Ebola virus disease (EVD) reported in the week to 20 September, both of which were in Guinea. Case incidence has remained below 10 cases per week since the end of July this year. Over the same period, transmission of the virus has been geographically confined to several small areas in western Guinea and Sierra Leone, marking a transition to a distinct, third phase of the epidemic. Improvements to rapid and accurate case investigation and contact tracing, rapid isolation and treatment, and effective engagement with affected communities have all played a crucial part in reducing case incidence to its current low level. A refined phase-3 response coordinated by the Interagency Collaboration on Ebola will build on these existing measures to drive case incidence to zero, and ensure a sustained end to EVD transmission. Enhanced surveillance capacity to rapidly identify a reintroduction (either from an area of active transmission or from an animal reservoir), or re-emergence of virus from a survivor, improved testing and counselling capacity as part of a comprehensive package to safeguard the welfare of survivors, and the increased use of innovative technologies—from vaccines to rapid diagnostic tests—are central to the phase-3 response framework. Accordingly, an increased emphasis will be placed on the monitoring and evaluation of these additional phase-3 measures in the coming weeks.



Cautious optimism as Ebola outbreak cases stay low

Filed Under: Ebola; VHF Lisa Schnirring | News Editor | CIDRAP News | Sep 09, 2015

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New Ebola cases in West Africa remained in the low single digits in today's weekly report, as the response achieved some key milestones last week, with signs that the region has gotten through the feared rainy season without a surge.

Guinea and Sierra Leone each reported a single case last week, according to an update today from the World Health Organization (WHO), though Sierra Leone recently reported a cluster of new cases that is not fully included in the report.

Bruce Aylward, MD, MPH, the WHO's assistant director-general in charge of Ebola outbreak response, told reporters at a media briefing today that the two countries are down to just three transmission chains,

UNMEER / Flickr cc

New WHO guidance covers a range of pregnancy-related Ebola issues.

with cases at two or three for the sixth week in a row. "Every one of these cases tells us a story on how we close this thing out," he said.



Guinea reports Ebola-free week, but Sierra Leone has 5 cases

Filed Under: Ebola; VHF Lisa Schnirring | News Editor | CIDRAP News | Sep 16, 2015

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For the first time in more than a year, Guinea passed a week without a new lab-confirmed Ebola case, but the news out of West Africa last week was tempered by a flare-up of activity in Sierra Leone, the World Health Organization (WHO) reported today in its latest update.

In Sierra Leone, new cases have been detected in two areas: Kambia district, which is battling a cluster of cases, and Bombali district, where a 16-year-old girl's Ebola death triggered the deployment of a rapid response team.



World Bank / Flickr cc

Guinea hasn't reported a case since Sep 1, when the last illness was detected in a transmission chain in Conakry's Ratoma area. The WHO added, however, that 200 contacts are still being monitored in the capital and in Dubreka district. Responders are on high alert, because 23 contacts have been lost to monitoring over the past 42 days, at least one of them considered high risk.



Ebola total grows by 2 with new cases in Guinea

Filed Under: Ebola; VHF Lisa Schnirring | News Editor | CIDRAP News | Sep 23, 2015

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Only two lab-confirmed Ebola cases were reported from the outbreak region last week, both in Guinea and both linked to a known transmission chain in Conakry, the World Health Organization (WHO) said today in its weekly update.

In Sierra Leone, the preliminary investigation into an isolated case detected the previous week in Bombali district suggests that a survivor was the source of the Ebola virus that killed a 16-year-old girl. During the same week the country had reported four cases in a cluster in Kambia district.



GlobalPartnership for Education / Flickr cc

The WHO said the number of weekly cases has remained below 10 since the end of July, with transmission limited to several small areas in Guinea and Sierra Leone, which it says is indicative of the third phase of the epidemic, with a new response phase to target it.

Case details

The WHO said Guinea's two new cases involve a 10-year-old girl who traveled from Conakry to Forecariah district and a 24-year-old woman whose illness was detected in the capital city. Though neither was on contact lists, both have strong epidemiologic links to a probable Ebola case-patient who died at the end of August.



High effectiveness found in Guinea Ebola ring vaccination trial

Filed Under: Ebola; VHF

Lisa Schnirring and Robert Roos | Staff Writers | CIDRAP News | Jul 31, 2015

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A ring vaccination trial in Guinea of a Canadiandeveloped Ebola vaccine showed it was highly effective against the disease, setting the scene for it quickly to become a useful response tool.

Researchers found that the vaccine was 100% effective in people who received it soon after possible exposure. The vaccine, called VSV-EBOV, uses an Ebola protein spliced into a vesicular stomatitis virus (VSV). It was developed in Canada and is licensed by NewLink Genetics and Merck.



UNICEF Guinea / Flickr cc

A World Health Organization (WHO)-sponsored team published the findings today in an early online edition of *The Lancet*.

An independent group that reviewed the findings urged that the trial continue, to look for more conclusive evidence on its ability to provide populations with "herd immunity" against the disease.

Wellcome Trust-CIDRAP Ebola Vaccine Team B

February 2015

Recommendations for Accelerating the Development of Ebola Vaccines

REPORT & ANALYSIS

wellcometrust

CIDRAP





Some health experts say the USA hasn't learned key lessons from Ebola experience

Liz Szabo, USA TODAY 6:22 p.m. EDT September 22, 2015

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(Photo: Wilmot Chayee, AP)

One year after doctors diagnosed the first Ebola patient in the USA, some experts question whether the country is prepared to deal with the next outbreak of a serious infectious disease.

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Ebola's appearance in Dallas last year was a "wakeup call" to the health system, showing that the United

States was far more vulnerable to the disease than most people assumed, said Stephen Morse, founding director at the Center for Public Health Preparedness at Columbia University's Mailman School of Public Health in New York.

While the number of Ebola cases in West Africa has dropped dramatically, the world still faces a number of dangerous infectious diseases, including bird flu and MERS, or Middle East Respiratory Syndrome, said Michael Osterholm, director of the University of Minnesota's Center for Infectious Disease Research and Policy.

"The next outbreak won't look like the one we prepared for with Ebola," said Jeffrey Duchin, health officer and chief of communicable disease, epidemiology and immunization for Seattle and King County in Washington state. "It could be much worse."

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Emergencies preparedness, response

Middle East respiratory syndrome coronavirus (MERS-CoV) maps and epicurves

21 - 27 September 2015



Confirmed global cases of MERS-CoV



The MERS Transmission Model





Three Saudi MERS cases as survey notes knowledge gaps in Hajj pilgrims

Filed Under: MERS-CoV

Lisa Schnirring | News Editor | CIDRAP News | Sep 24, 2015

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After 2 days with no new MERS-CoV cases, Saudi Arabia today announced three infections, two of them in Riyadh, as a survey found that people from Turkey who planned to make Hajj pilgrimages had little understanding of the disease and its risk factors.

The Hajj began on Sep 21 and is expected to draw more than 2 million travelers at a time when Saudi Arabia's capital is battling a large hospital-linked MERS-CoV (Middle East respiratory syndrome coronavirus) outbreak with smaller hot spots recently detected elsewhere, including the holy city of Medina.

Health worker infected

One of the two cases reported from Riyadh is likely related to the hospital outbreak at King Abdulaziz Medical City. The patient is a 27-year-old female foreign healthcare worker who was exposed to the virus in a health setting, according to a statement from



Al Jazeerah English

Hajj pilgrims in Mecca.

in LinkedIn

the country's Ministry of Health (MOH). She has an asymptomatic infection and is listed in stable condition.

FIGURE 2

Simplified transmission diagram illustrating the superspreading events associated with Cases 1, 14, 16 and fourthgeneration infections of MERS-CoV, South Korea, 11 May–19 June 2015 (n = 166)





Assessing the South Korea MERS outbreak: could it happen elsewhere? Published: Thursday 30 July 2015 at 8am PST

• ver the past 2 months, South Korea has been gripped by an outbreak of the Middle East respiratory syndrome coronavirus, but earlier this week the country declared itself to be virtually free of the killer virus.

"It is the judgment of medical experts and the government that people can now feel safe," stated Prime Minister Hwang Kyo-ahn in a government meeting on Tuesday, following the removal of the last person from quarantine the previous day.

The outbreak has caused great alarm across the country, with schools closing, tourists canceling visits and its economy dramatically slowing down as a result of Middle East respiratory syndrome (<u>MERS</u>). To date, there have been 185 confirmed cases in the country, with 36 people dying from the virus.

While South Korea has announced a "de facto end" to the outbreak, the World Health Organization (WHO) will not confirm an end until 28 days have passed without any new infections being reported - the last reported infection in South Korea was on July 4th, 2015.



While South Korea have announced a "de facto end" to the outbreak, WHO will not confirm an end until 28 days have passed without any new infections being reported.



Origin and Possible Genetic Recombination of the Middle East Respiratory Syndrome Coronavirus from the First Imported Case in China: Phylogenetics and Coalescence Analysis

Yanqun Wang^a, Di Liu^{b,c}, Weifeng Shi^d, Roujian Lu^a, Wenling Wang^a, Yanjie Zhao^a, Yao Deng^a, Weimin Zhou^a, Hongguang Ren^e, Jun Wu^b, Yu Wang^f, Guizhen Wu^a, George F. Gao^{a, b, f}, Wenjie Tan^a

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ABSTRACT

The Middle East respiratory syndrome coronavirus (MERS-CoV) causes a severe acute respiratory tract infection with a high fatality rate in humans. Coronaviruses are capable of infecting multiple species and can evolve rapidly through recombination events. Here, we report the complete genomic sequence analysis of a MERS-CoV strain imported to China from South Korea. The imported virus, provisionally named ChinaGD01, belongs to group 3 in clade B in the whole-genome phylogenetic tree and also has a similar tree topology structure in the open reading frame 1a and -b (ORF1ab) gene segment but clusters with group 5 of clade B in the tree constructed using the S gene. Genetic recombination analysis and lineage-specific single-nucleotide polymorphism (SNP) comparison suggest that the imported virus is a recombinant comprising group 3 and group 5 elements. The time-resolved phylogenetic estimation indicates that the recombination event likely occurred in the second half of 2014. Genetic recombination events between group 3 and group 5 of clade B may have implications for the transmissibility of the virus.



As Saudi MERS total grows, study hints at increased transmissibility

Filed Under: MERS-CoV

Lisa Schnirring | News Editor | CIDRAP News | Sep 09, 2015

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Saudi Arabia's government today reported two more MERS-CoV infections, one involving a healthcare worker likely infected in Riyadh's outbreak, and Chinese researchers detailed a comparison of recent samples that hints at increased transmissibility.

In other developments, the Saudi agriculture ministry announced new results from a large camel sampling project, which revealed that 3.3% of the country's animals are probably infected with MERS-CoV (Middle East respiratory syndrome coronavirus).

Two new cases, 1 death

One of the latest lab-confirmed cases involves a 25-year-old male Saudi healthcare worker in Riyadh whose contact with a suspected or confirmed MERS

case is under review, the country's Ministry of Health (MOH) said in a statement. The man is hospitalized in critical condition.

His illness is likely part of an ongoing hospital outbreak in Riyadh. It's not known how many cases are linked to the health setting, but 150 infections in the city have been reported since Jul 21. Also.



Tomasz Wyszołmirski / iStock

Full-genome sequencing found amino acid changes and clues of recent recombination.

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Aedes albopictus Female



World Distribution of the Aedes albopictus Mosquito



Charrel R et al. N Engl J Med 2007;356:769-771



The NEW ENGLAND JOURNAL of MEDICINE

Aedes aegypti



Aedes aegypti Distribution in the Americas





Data source: PAHOWHO: Number of reported cases of Chikungunya Fever in the American

http://www.paho.org/chikungunya

Map production: PAHO-WHO AD CHA IR ARO **Nate: Enforce contribute hower hower blacked on the insign Rough How is not audience of builty wilds intera presence © Pais Anexicen Hower Rough Degeneration (PAHO) - Mind Heeler Degeneration (MHO) (2015) All signation enserved. This reap is interched for general segmentation of geography and to be used as an exploration tool. Net for advances response and there all server and the enserved resolution and the memory for a resolution presence. This operations and tames where and the degenerations used on this may be not relay? The empression of the operations and tames where and the degradement used on the map to not reaply the empression of an advances, or concerning the definitions of its Notifier a boundaries. Detail and bashed lines as maps ememory advances, or concerning the definitions of the Notifier advances.

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TOP STORIES SPOTLIGHT SCIENCE TECHNOLOGY HEALTH NATURAL BUSINESS SPORTS WORLD

Deadly Legionnaires' Disease Outbreak in California, New York and Illinois



Editor : Sophia Clarke Category : HEALTH 05 September 2015 / Saturday 17:29:33 Following the recent outbreaks of Legionnaires' disease in California, Illinois, and New York, federal health officers have expressed doubts as to the cause of rising cases, and stated concern that figures for recent cases are much higher than in decades past.

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3 Chicago-area schools closed because of Legionnaires' disease threat



By Greg Botelho, CNN

Updated 9:10 AM ET, Thu September 24, 2015

(CNN)—While Legionnaires' disease may be known more for striking older people susceptible to such ailments, it's now causing a much younger crowd -- namely, students at three Chicago-area schools -- to miss school.

Three schools in Illinois' U-46 school district, which covers 11 communities in Cook, DuPage and Kane counties, shut down Wednesday after test results showed "higher than normal levels of Legionella bacteria," the district said.

Eastview Middle School, Larkin High School and Gifford Street High School will stay closed Thursday "as the district works to complete the screening process."

The high levels of the bacteria were detected on Wednesday morning in each of the three sites' cooling Byond that they were above the 1,000 colony-forming units Instituted Safety and Health Administration





Health Department Investigating New Cluster of Legionnaires' Disease Cases in the Bronx

Health officials say they are investigating a cluster of seven Legionnaires' disease cases in one Bronx neighborhood, but the cluster is not related to the outbreak that sickened more than 120 people, killing 12 of them, in the borough over the summer.

No one has died in the current outbreak, which is limited to Morris Park, health officials said. Patients in the current cluster live or work in the neighborhood and range in age from 45 to 75; all are currently hospitalized, authorities said.

High School QB Died of Massive Internal Bleeding: Autopsy

Health Commissioner Mary Bassett said the city was working to determine the source of the outbreak and taking immediate steps to protect the people who live and work in the area. Bassett urged anyone with flu-like symptoms, including fever, cough and headache, to seek care immediately.

She said the first case was reported Sept. 21 and the other six cases were reported over the next six days. Environmental scientists visited all cooling towers in the affected area over the weekend and took samples; results on the samples are pending.

Published at 2:05 PM EDT on Sep 28, 2015





News Scan for Sep 29, 2015

Seven new Legionnaire's cases confirmed in Bronx

New York City health officials are investigating 7 new cases of legionellosis in the Bronx that are not related to a 128-case outbreak in the borough over the summer that killed 12, the New York City Department of Health and Mental Hygiene (NYC Health) said in a news release yesterday.

"We are investigating a cluster of seven cases of Legionnaires' disease in Morris Park. I urge all New Yorkers to seek care immediately if they have flu-like symptoms, including fever, cough, headache, or difficulty breathing. The Department is taking immediate steps to determine the source and protect the people who live and work in Morris Park," said NYC Health Commissioner Mary T. Bassett, MD, MPH.

The earlier outbreak was pinpointed to a cooling tower contaminated with Legionella bacteria at the Opera House Hotel in South Bronx. The source of the current cluster, located farther northeast, near the Bronx Zoo, has not been identified, but scientists have sampled area cooling towers in hopes of identifying a cause.

The newly confirmed patients range in age from 45 to 75, and all are hospitalized. Their cases were reported to NYC Health from Sep 21 to Sep 27.

Sep 28 NYC Health news release

LEGIONELLOSIS



"... an endemic waterborne disease that requires a systematic effort to diagnose and prevent, rather than an episodic disease that occurs only as part of clusters or outbreaks."

"... The true incidence remains unknown ... However, the CDC estimates that between 8,000 and 18,000 cases are hospitalized each year in the US, with a case fatality rate of 5% to 30%."





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News Scan for Sep 22, 2015

Cucumber-linked Salmonella outbreak total climbs to 558

The US Centers for Disease Control and Prevention (CDC) said today that 140 more infections and one more death have been reported in a multistate outbreak linked to cucumbers tainted with strains of *Salmonella* Poona.

The national total now stands at 558, with fatalities rising to three. Two more states are affected, raising that total to 33 (see CDC map).

The most recent illness-onset date is Sep 11. Of 387 patients with available information, 112 (29%) were hospitalized. Arizona reported the most recent death, and the two newly affected states are Iowa and South Dakota.

Public health labs in Arizona, Montana, and San Diego have isolated the outbreak strains from the affected cucumbers, which were imported from Mexico and distributed by Andrew & Williamson Fresh Produce to several states. The outbreak investigation has prompted several recalls. **Sep 22 CDC update**

Peanut execs get stiff prison terms for Salmonella outbreak

Former CEO of the now-defunct Peanut Corporation of America (PCA) Stewart Parnell and his brother were given 20-plus-year prison terms for their part in a large 2009 *Salmonella* outbreak caused by their company's peanut butter, by far the stiffest US sentences ever handed down for a foodborne outbreak, *USA Today* reported today.

US District Judge W. Louis Sands in Georgia sentenced the 61-year-old Parnell to 28 years in prison and his 56-year-old brother Michael to 20 years. The younger Parnell served as a PCA broker. Judge Sands also sentenced Mary Wilkerson, 41, a former quality control manager, to 5 years' jail time.

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Typhoid outbreak grips Syria's Yarmouk

ALIAZEERA Al Jazeera – Wed, Sep 23, 2015



Al Jazeera - Typhoid outbreak grips Syria's Yarmouk

The United Nations has called for access to Yarmouk in the Syrian capital as its health teams find "increasing evidence" of a typhoid outbreak among residents.

The total number of typhoid cases in the camp reached 90 on Tuesday, according to Chris Gunness, spokesperson for UNRWA, the UN agency for Palestinian refugees. "That is 90 too many," he said.

Residents of Yarmouk include Palestinian refugees and, to a lesser extent, Syrians. They have struggled to deal with mounting humanitarian crises throughout the ongoing conflict in Syria, particularly since government forces imposed a blockade on the camp following clashes with rebel groups in December 2012.

The UN removed Yarmouk from its list of besieged areas in July. Yet residents are still enduring difficult conditions, including frequent violence between the Syrian military and opposition groups.

Typhoid was first reported in the embattled area last month when UNRWA gained access to residents in the neighbouring area of Yalda, a suburb of southern Damascus. It has since spread quickly.

"The vulnerability of civilians in Yarmouk remains of the highest severity," Gunness added. "UNRWA
By ASHLEY WELCH / CBS NEWS / September 25, 2015, 6:00 AM

Amid crisis, refugees face numerous health risks



Syrian refugees wait at the al-Roqban makeshift camp, on the border with Syria, before being driven by the Jordanian army to the eastern town of Ruwaished where they will be welcomed and checked by the Jordanian authorities on September 10, 2015. / KHALIL MAZRAAWI/AFP/GETTY IMAGES

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The current **refugee crisis** in the Middle East and Europe has seen millions of people flee their homes amid horrific violence. While escaping immediate threats is their first priority, experts say displaced people go on to face numerous health risks, from trauma injuries to disease-causing pathogens to mental illness.

More +

And a new report from Jane's Intelligence Review cautions of the danger of

REFUGEES



In Germany, disease prevention for refugees varies from state to state

The largest influx of refugees into Germany to date coincides with the onset of cold season. Their weakened immune systems need special care, something that each state must address of its own accord.

As Germany stocks up on tissues, vitamins and homeopathic teas this autumn in preparation for cold season, health officials across its 16 states are in close contact with federal health advisers over how to prevent a health crisis among their newest patients: around a million refugees.

Hundreds of thousands of people from Syria, Afghanistan, Iraq, Eritrea, Pakistan, Nigeria and several Balkan states bring with them medical histories strongly shaped by years of conflict and deprivation. Added to that is a perilous journey involving weeks or even months of poor hygiene, overcrowding and stress.

However, health experts warn that it's a misconception to fear the spread of disease with a high influx of refugees, even though limited vaccination coverage in their own countries of origin make them more likely to become infected.

"There is no systematic association between migration and the importation of infectious diseases," Dr. Guenael Rodier, a director at the World Health Organization's European branch, told DW. "Refugees and migrants are exposed mainly to the infectious diseases that are common in Europe, independently

Date 16.09.2015 Author Kathleen Schuster





Norwegians fear disease from refugees

Published: 24 Sep 2015 21:09 GMT+02:00



Norwegians are so fearful that incoming refugees will bring diseases that some people have even started wearing protective gloves, the Norwegian Institute of Public Health (NIPH) has warned.

Refugees raise far-right threat: Norway intel (24 Sep 15)

Trude Arnesen, chief physician at the NIPH's Department of Infectious Disease Epidemiology told Norway's public broadcaster NRK that his institute had received a surge in calls from members of the public

"Some have imaginative worries, for example that bus seats will be infected by contagious diseases," he said. Some people have started to use gloves."

Norway has seen a sharp increase in the number of refugees entering the country, with 2,800 asylum applications filed so far this month, and 20,000 people expected to arrive this year.



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WHO panel changes 2 strains in Southern Hemisphere flu vaccine

Filed Under: Avian Influenza (Bird Flu); Influenza Vaccines; Pandemic Influenza

Lisa Schnirring | News Editor | CIDRAP News | Sep 24, 2015

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A World Health Organization (WHO) expert committee today recommended changes for two of three strains in the trivalent versions of influenza vaccines for the Southern Hemisphere next year because of changes in circulating strains.

An expert committee meeting in Memphis, Tenn., this week recommended swapping out the A/H3N2 and B strains in trivalent influenza vaccines. For quadrivalent formulations, the group recommended adding the influenza B Yamagata lineage component that was included in its previous trivalent recommendation for both hemispheres. The A/H1N1 strain would remain the same.

in LinkedIn

Direct Relief, Mark Perlstein / Flickr cc

The WHO recommends the following for trivalent vaccines:

- For H1N1, a A/California/7/2009-like virus
- For H3N2, an A/Hong Hong/4801/2014-like virus
- For B, Brisbane/60/2008-like virus (belonging to the Victoria lineage)

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First Detection Reported

Last Detection Reported

Export from the U.S.

Import into the U.S.

Laboratory Information Services



Minnesota Highly Pathogenic Avian Influenza Response Zone



USDA issues plan for likely fall return of avian flu

Filed Under: Avian Influenza (Bird Flu); Business Preparedness Jim Wappes | Editorial Director | CIDRAP News | Sep 21, 2015

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The US Department of Agriculture (USDA) issued a report on it plans and preparedness steps for a likely return of highly pathogenic avian influenza (HPAI) in US poultry this fall as turkey growers followed suit.

The USDA's Animal and Plant Health Inspection Service (APHIS) also released guidance on euthanizing poultry on affected farms.

HPAI, primarily the H5N2 strain, affected more than 48.8 million poultry in 21 states earlier this year, hitting Iowa and Minnesota the hardest. APHIS officials have used the time since the last detection was reported on Jun 17 to prepare for a return of the disease, using a hypothetical worst-case scenario, the agency said in a Sep 18 press release.

Scenario: 500 affected farms

The USDA's worst-case scenario that it used for planning purposes involved 500 or more commercial farms of various sizes across a wide part of the country, according to the report, titled, "Fall 2015 HPAI Preparedness and Response Plan." The exercise



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Suspected monkeypox outbreak reported in DRC

Posted by Robert Herriman on September 11, 2015 // 2 Comments

Outbreak News Today

At least 20 suspected monkeypox cases have been reported since the beginning of the week in Tshuapa district, Democratic Republic of the Congo, according to a Radio Okapi report today (computer translated).

Sources say that 18 of the suspect cases are hospitalized at a hospital in the town of Ikela. Despite not being laboratory confirmed, the Chief Health officer in the Mbamba health area, Dr Jean-Pierre Inonga said they are calling the cases monkeypox based of several telltale symptoms presented—fever, scabs and generalized skin rash.

Confirmation testing is being performed at the National Institute of Biomedical Research (INRB) in Kinshasa as of this writing.

The resurgence of the viral disease is believed to be due to consumption of game animals found dead in the forest by the public.



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By David Stern BBC News, Kiev								
© 22 September 2015 Europe								
	trainian children are not vaccina							
after it was an	s in Ukraine are gripped nounced this month the south-western region	at the disease	e had para					
Concerns that	the virus could cut a dead	dly swathe thro	ough the co	ountry has				

mobilised officials to launch a national immunisation campaign that would embrace all children up to 10 years old.

The Journal of Infectious Diseases

Gain-of-Function Research and the Relevance to Clinical Practice

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Abstract

The ongoing moratorium on gain-of-function (GOF) research with highly pathogenic avian influenza and SARS and MERS coronaviruses has drawn attention to the current debate on these research practices and the potential benefits and risks they present. While much of the discussion has been steered by members of the microbiology and policy communities, additional input from medical practitioners will be highly valuable toward developing a broadly inclusive policy that considers the relative value and harm of GOF research. This review attempts to serve as a primer on the topic for the clinical community by providing a historical context for GOF research, summarizing concerns about its risks, and surveying the medical products which it has yielded.

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Questions, Comments and Discussion





Center for Infectious Disease Research and Policy University of Minnesota

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