From:	Alexander, Paul (HHS/ASPA) (VOL) [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=BC4EDA8AD333439EB3D296AE0E0F9634-ALEXANDER,]
Sent:	6/30/2020 3:44:07 PM
To:	Wagner, John (FDA/OC)
Subject:	FW: WARNING on G4 virus coming out of Chinapandemic potential
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Tyrand now v	Alexander, Paul (HHS/ASPA) (VOL) [/O-EXCHANGELABS/OU-EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=BC4EDA8AD333439EB3D296AE0E0F9634-ALEXANDER,] 6/30/2020 3:44:07 PM Wagner, John (FDA/OC) FW: WARNING on G4 virus coming out of Chinapandemic potential will include you in all my communications sander, PhD to the Assistant Secretary Pandemic Policy Pandemic Policy Pandemic Policy Sistant Secretary of Public Affairs (ASPA) t of Health and Human Services (HHS) C der, Paul (HHS/ASPA) (VOL) June 30, 2020 11:29 AM Katherine (OS/ASPA) ASPA-Deputies Caputo,
Dr. Paul E. Alex	ander, PhD
	to the Assistant Secretary
	Pandemic Policy
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Washington, D	C
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Hi, I write ag	gain as a warning to consider, to take to the WH (at some level), and wanted to follow up again giving
the potential	nightmare if we kee to deal with another influenza pandemic on top of COVID etc. Quick
background:	
1) We k	now that swine/pigs are the vessel, the mixing equipment that re-assorts several viruses they are
	ted with; pips in China are the key source of our global pandemic influenza viruses; a fact due to the
	ive pig/wine populations and that these animals are infected with several viruses at once and at a
gener	eleventhe viral genome are remixed or re-assorted etc.
2) We f	ollow these pig/swine populations in China in various surveillance systems and use it as a flag as an
early warning for a potential influenza pandemic.	
~	

- 3) We are seeing a re-assorted virus G4 in China in pigs (an H1N1 strain) that seems similar to the 2009 pandemic.
- 4) Seems this virus has affinity to human receptors like the 2009 pandemic influenza virus and can multiply in human respiratory epithelial cells.
- 5) We are seeing it shows infectivity of transmission in ferrets.
- 6) Preliminary research also shows that existing human population immunity confers no protection against G4.
- 7) Evidence also exists that swine workers in China exposed, had about 10% had sero gical evidence of prior exposure to G4 H1N1 virus...and in the younger age group 18-35 years even greater expossitive rates of 20%.
- 8) This suggests that G4 H1N1 has gotten the capacity to spread from swine to humans.
- 9) This G4 H1N1 virus should be looked at and kept on our radar at CDC tc.
- 10) No doubt acute surveillance is needed to better characterize this emerging pathogen and understand its infectivity to humans; the key is to assess if it can infect and how efficiently.

Dr. Paul E. Alexander, PhD
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US Department of Health and Human Services (HHS)
Washington, DC

Email:

From: Alexander, Paul (HHS/ASPA) (VOL)
Sent: Monday, June 29, 2020 6:31 PM
To: McKeogh, Katherine (OS/ASPA)
Subject: RE: BBC: Phyrrus with 'pandemic potential' found in China

This can be potentially serious if this virus behaves like the H1N1 of 2009...that killed 20 K Americans, 200 K worldwide, and infected 20% of the population. That happened in the Obama era.

It is dealt with via vaccine...

Flu viruses come from the chicken/fowl and swine population in China. That's why we go there each year to find the predominant strain of flu (1 strain) and make (mass produce) the next years flu vaccine in the west guessing that strain in China the year before will be the predominant strain in the US etc. The virus mutates thousands of times by then. It is statistically impossible to ever get that right. I am just being open.

The reality is that the coronaviruses have found a way to invade human respiratory epithelial and cardiovascular endothelial type cells efficiently via the ACE 2 receptor, same one used by the ACE-inhibitor drugs as part of the renin-angiotensin-aldosterone (RAS) system (blood pressure control). SARS-CoV-1, MERS, and now SARS-CoV-2 are the 3 lethal forms of coronavirus and I fear there are many more to come and more lethal too and we really are in a race to find a way to stop them from infecting the human cell. It is a fact of life and was always so, and we say humans have waged a decent battle with pathogen across the last 100 years but they have been pressing and will continue to. It has always been a matter of survival of one living entity over another...pathogen is a living entity that wants to live and reproduce just like us. An influenza virus with pandemic potential with virulence on top of the COVID can be catastrophic.

Human beings must be educated now really that it has always been a battle against those microbes we cant see; always, and we must change the way we lived the last decades....they were always there, we are bumping up into them now and they are trying to live on by infecting us. We also create more problems when we try to evade them and not kill them...they respond to the pressure we put on them via selection forward and they get more efficient at spread...we drive resistance, making it much more complex to treat, highly expensive and difficult to manage. This is why the concept of herd immunity is so critical for the virus is boxed in if we get to that number of about 60% population immunity via our own infection or vaccine (or combination). Hiding form the virus allows it to lay in wait...its so complex what we face now and if for the life of god the left and media and detractors could stop their insanity and allow public health to respond and deal with these issues...and stop the politics...this can be disastrous if this political game continues and many people will die. The media and left have help COVID proliferate and the left scientists who work against the administration...they wont help and this saddens and horrifies me for 1 understand whats on tap now...this can be catastrophic. They want to destroy the nation and people's lives just to make the President look bad...saving lives is not their aim...winning at all costs....this is the real tragedy we face the Secretary today was so on point how he explained the window is closing...spoken so clearly....it is sobering.

Let us read this more and if this is a credible story and there are preliminary reports, then the leadership at CDC and NIH and FDA need to be out front and brief the President upgently and we at ASPA need to get messaging.

Katie, this is a very important article and thanks for sharing. Brilliant!

Dr. Paul E. Alexander, PhD
Senior Advisor to the Assistant Sectedary
For COVID-19 Pandemic Policy

Office of the Assistant Secretary of Public Affairs (ASPA)

US Department of Health and Human Services (HHS)

Washington, DC



From: McKeogh, Katherine (OS/ASPA)

Sent: Monday, June 29, 2020 5:55 PM

To: ASPA-Deputies ; Alexander, Paul (HHS/ASPA) (VOL)

Subject: BBC: Flu virus with 'pandemic potential' found in China

Flu virus with 'pandemic potential' found in China

BBC // Michelle Roberts

It emerged recently and is carried by pigs, but can infect humans, they say.

The researchers are concerned that it could mutate further so that it can speakeasily from person to person, and trigger a global outbreak.

They say it has "all the hallmarks" of being highly adapted to infect himago and needs close monitoring.

As it's new, people could have little or no immunity to the virus.

Pandemic threat

A bad new strain of influenza is among the top disease threats that experts are watching for, even as the world attempts to bring to an end the current coronal ruspandemic.

The last pandemic flu the world encountered - the swine flu outbreak of 2009 that began in Mexico - was less deadly than initially feared, largely because many older people had some immunity to it, probably because of its similarity to other flu viruses that had circulated years before.

That virus, called A/H1N1pdm09, is now overed by the annual flu vaccine to make sure people are protected.

The new flu strain that has been identified in China is similar to 2009 swine flu, but with some new changes.

So far, it hasn't posed a big threat, by Prof Kin-Chow Chang and colleagues who have been studying it, say it is one to keep an eye on.

The virus, which the researchers call G4 EA H1N1, can grow and multiply in the cells that line the human airways.

They found evidence of recent infection starting in people who worked in abattoirs and the swine industry in China.

Current flu vaccines do not appear to protect against it, although they could be adapted to do so if needed.

Prof Kin-Grow Chang, who works at Nottingham University in the UK, told the BBC: "Right now we are distracted with coronavirus and rightly so. But we must not lose sight of potentially dangerous new viruses."

While this new virus is not an immediate problem, he says: "We should not ignore it".

The scientists write in the journal <u>Proceedings of the National Academy of Sciences</u> that measures control the virus in pigs and closely monitor working populations should be swiftly implemented.

Prof James Wood, Head of the Department of Veterinary Medicine at the University of Cambridge, said the work "comes as a salutary reminder" that we are constantly at risk of new emergence of pathogens, and that farmed animals, with which humans have greater contact than with wildlife, may act as the source for important pandemic viruses.

Katie McKeogh

Press Secretary Office of the Assistant Secretary for Public Affairs (ASPA) U.S. Department of Health and Human Services