

To: [REDACTED] [REDACTED]@rivm.nl; [REDACTED] [REDACTED]@rivm.nl]
From: [REDACTED]
Sent: Tue 1/26/2021 1:52:17 PM
Subject: RE: ProMED Digest, Vol 103, Issue 64
Received: Tue 1/26/2021 1:52:18 PM

Hi,

Dank voor het doorsturen [REDACTED]
 Symptomatisch opvallend, het report benadrukt dit ook wel, dat de overleden Zweedse tijger ook severe neurological symptoms had, vooralsnog zonder duidelijk substraat bij autopsie.
 Van humane autopsiestudies weten we er in sommige casus ook sprake kan zijn van CZS-betrokkenheid:
<https://www.nature.com/articles/s41582-020-00453-w>
 Dat zou voor deze tijger toch ook in die richting kunnen wijzen.
 [REDACTED] weet jij of eerdere pathologie bij geïnfecteerde dieren, afgezien van proefdierstudies, vooral respiratoir was?

Groet, [REDACTED]

-----Original Message-----

From: [REDACTED]@promedmail.org <[REDACTED]@promedmail.org> On Behalf Of [REDACTED]@promedmail.org
Sent: dinsdag 26 januari 2021 13:00
To: [REDACTED]@promedmail.org
Subject: ProMED Digest, Vol 103, Issue 64

Today's Topics:

1. PRO/AH/EDR> COVID-19 update (33): Sweden, zoo, tiger, lion
 ([REDACTED]@promedmail.org)
2. PRO/EDR> Influenza (03): WHO global update, Europe (Ukraine)
 ([REDACTED]@promedmail.org)

 Message: 1

Date: Mon, 25 Jan 2021 15:00:34 +0000
From: [REDACTED]@promedmail.org
Subject: PRO/AH/EDR> COVID-19 update (33): Sweden, zoo, tiger, lion
To: [REDACTED]@promedmail.org, [REDACTED]@promedmail.org,
 [REDACTED]@promedmail.org
Message-ID:
 <[REDACTED]@email.amazonses.com>

Content-Type: text/plain; charset=UTF-8

CORONAVIRUS DISEASE 2019 UPDATE (33): SWEDEN, ZOO, TIGER, LION

A ProMED-mail post
 <<http://www.promedmail.org>>
 ProMED-mail is a program of the
 International Society for Infectious Diseases <<http://www.isid.org>>

Date: Sun 24 Jan 2021
From: [REDACTED] <[REDACTED]@sva.se> [edited]

Please find below information on SARS-CoV-2 confirmed in a tiger and 2 lions at a Zoo in Sweden.

On [13 Jan 2021], The National Veterinary Institute (SVA) confirmed SARS-CoV-2 in a tiger held in a Zoo in Sweden. Samples from the same animal were simultaneously sent to IDEXX laboratories, Germany, where SARS-CoV-2 also was confirmed [14 Jan 2021].

Whole-genome sequencing at the SVA showed that the virus belongs to the global lineage B.1.177.21.

Necropsy was performed at the SVA on [16 Jan 2021]. Macroscopical lesions of the respiratory tract were mild and unspecific. Convincing signs of pneumonia were not seen. Some blood-tinged mucus was present in the lower part of the trachea and bronchi. Findings in other organs were preliminary considered to be age related and thus probably not related to SARS-CoV-2. Results from histological examinations are pending.

The tiger was a 17-year-old female, which was euthanised [11 Jan 2021] for animal welfare reasons due to severe respiratory and neurological symptoms, high age, and low possibilities for recovery. The symptoms started with loss of appetite [9 Jan 2021], but rapidly worsened [11 Jan 2021] in the morning and the animal was euthanised and sampled the same morning. A male tiger kept in the same enclosure as the female has shown moderate respiratory symptoms, but no neurological symptoms.

A group of lions, consisting of 2 adults and 2 subadults, kept in the same house, have also shown mild respiratory symptoms but no neurological symptoms and are otherwise clinically unaffected with normal appetite. Fecal samples from the lions, received at a later date, were also confirmed positive for SARS-CoV-2.

Staff taking care of these groups of animals also had symptoms: one of the sick persons tested positive for SARS-CoV-2/Covid-19, while 3 more are awaiting their results.

The Zoo is closed for the season, and further internal biosafety measures have been taken by the responsible veterinarian on site.

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Department of Disease Control and Epidemiology Acting State Epizootiologist Swedish National Veterinary Institute (SVA)
< 5.1.2e @sva.se >

[Infection by SARS-CoV-2 has been confirmed so far in carnivores (Order Carnivora) of 3 families, canids (dogs and raccoon dogs), felids (cats, tigers, lions, puma/cougar, and snow leopard), and mustelids (ferrets and minks). Lions and tigers experienced respiratory disease due to COVID-19 in USA at the Bronx Zoo (New York) in April 2020 and tigers with mild respiratory signs tested positive at Zoo Knoxville (Tennessee) in October 2020. Lions were infected at the Barcelona Zoo (Spain) in December 2020. All infections detected in carnivores were from animals held captive, except for the recent record of a wild mink captured and sampled in Utah (USA). The susceptibility of carnivores warrants surveillance and research in wild populations, as introduction and possible establishment of SARS-CoV-2 in those populations might result in conservation problems and/or compartments in which the virus might evolve and remain with potential for future human exposures. - Mod.PMB

HealthMap/ProMED map:
Sweden: <<http://healthmap.org/promed/p/108>>

[See Also:
COVID-19 update (13): animal, USA, zoo, gorilla
<http://promedmail.org/post/20210112.8095510>
2020

COVID-19 update (538): USA, animal, zoo, snow leopard
<http://promedmail.org/post/20201214.8017000>
COVID-19 update (525): Spain, animal, zoo, lion, human
<http://promedmail.org/post/20201208.8002466>
COVID-19 update (469): USA (TN) zoo, tiger
<http://promedmail.org/post/20201104.7915683>
COVID-19 update (356): South Africa (GT) animal, puma, zoo, OIE
<http://promedmail.org/post/20200813.7673666>
COVID-19 update (143): USA (NY) animal, zoo, tiger, lion, tests
<http://promedmail.org/post/20200430.7284183>
COVID-19 update (141): India, animal, wild tiger, susp, clarification, RFI <http://promedmail.org/post/20200430.7281768>
COVID-19 update (138): India, animal, wild tiger, fatal
<http://promedmail.org/post/20200428.7275765>
COVID-19 update (135): Netherlands (NB) animal, farmed mink
<http://promedmail.org/post/20200427.7272289>
COVID-19 update (130): USA (NY) zoo, tiger, lion, new cases
<http://promedmail.org/post/20200425.7266556>
COVID-19 update (85): USA (NY) tiger, OIE
<http://promedmail.org/post/20200406.7191480>
COVID-19 update (84): USA, tigers
<http://promedmail.org/post/20200406.7191352>
COVID-19 update (76): China (HU) animal, cat, owned, stray, seropositive <http://promedmail.org/post/20200403.7179946>
COVID-19 update (75): China (Hong Kong) cat, OIE
<http://promedmail.org/post/20200403.7179945>
COVID-19 update (70): China (Hong Kong) cat, pets & stock
<http://promedmail.org/post/20200402.7173286>
COVID-19 update (58): Belgium, cat, clinical case, RFI
<http://promedmail.org/post/20200327.7151215>

COVID-19 update (57): global, re-using PPE, DR Congo, more countries, WHO <http://promedmail.org/post/20200327.7149046>
 COVID-19 update (56): China (Hong Kong) animal, dog, final serology positive <http://promedmail.org/post/20200326.7146438>
 COVID-19 update (45): China (Hong Kong) animal, dog, 2nd case PCR positive <http://promedmail.org/post/20200319.7112693>
 COVID-19 update (37): China (Hong Kong) animal, dog, prelim. serology negative <http://promedmail.org/post/20200312.7081842>
 COVID-19 update (30): China (Hong Kong) dog, susp, serology pending
<http://promedmail.org/post/20200306.7057595>
 COVID-19 update (25): China (Hong Kong) dog, susp, OIE
<http://promedmail.org/post/20200302.7040373>
 COVID-19 update (22): companion animals, dog susp, RFI
<http://promedmail.org/post/20200229.7036661>
 COVID-19 update (17): China, animal reservoir, wildlife trade & consumption <http://promedmail.org/post/20200225.7024245>
 COVID-19 update (11): animal reservoir, intermediate hosts, pangolin susp <http://promedmail.org/post/20200220.7009213>
 COVID-19 update (08): companion animals, RFI
<http://promedmail.org/post/20200218.7002276>
 COVID-19 update (06): animal reservoir, intermediate hosts
<http://promedmail.org/post/20200217.6997782>
 Novel coronavirus (42): China, global, COVID-19, SARS-CoV-2, WHO
<http://promedmail.org/post/20200211.6979942>
 Novel coronavirus (40): animal reservoir, pangolin poss intermediate host, RFI <http://promedmail.org/post/20200210.6972104>
 Novel coronavirus (28): China (HU) animal reservoir
<http://promedmail.org/post/20200201.6943858>
 Novel coronavirus (22): reservoir suggested, bats
<http://promedmail.org/post/20200129.6930718>
 Novel coronavirus (20): China, wildlife trade ban
<http://promedmail.org/post/20200127.6922060>
 Novel coronavirus (18): China (HU) animal reservoir
<http://promedmail.org/post/20200125.6915411>
 Novel coronavirus (15): China (HU) wild animal sources
<http://promedmail.org/post/20200123.6909913>
 Novel coronavirus (03): China (HU) animal reservoir suggested, RFI
<http://promedmail.org/post/20200114.6887480>
 Novel coronavirus (01): China (HU) WHO, phylogenetic tree
<http://promedmail.org/post/20200112.6885385>
 Undiagnosed pneumonia - China (HU) (07): official confirmation of novel coronavirus <http://promedmail.org/post/20200108.6878869>
pmb/mj/lxl

 Message: 2

Date: Mon, 25 Jan 2021 15:14:00 +0000

From: 5.1.2e @promedmail.org

Subject: PRO/EDR> Influenza (03): WHO global update, Europe (Ukraine)

To: 5.1.2e @promedmail.org, 5.1.2e @promedmail.org

Message-ID:

<5.1.2e @email.amazonses.com>

Content-Type: text/plain; charset=UTF-8

INFLUENZA (03): WHO GLOBAL UPDATE, EUROPE (UKRAINE)

 A ProMED-mail post

<<http://www.promedmail.org>>

ProMED-mail is a program of the

International Society for Infectious Diseases <<http://www.isid.org>>

In this update:

[1] WHO global update

[2] Europe (Ukraine)

[1] WHO global update

Date: Mon 18 Jan 2021

Source: WHO, Surveillance and monitoring, influenza updates [edited]

<https://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/>

Influenza update -- 385 (based on data up to 3 Jan 2020)

Information in this report is categorized by influenza transmission zones, which are geographical groups of countries, areas, or territories with similar influenza transmission patterns

Summary

- The current influenza surveillance data should be interpreted with caution as the ongoing COVID-19 pandemic has influenced to varying extents health seeking behaviours, staffing/routines in sentinel sites, as well as testing priorities and capacities in Member States. The various hygiene and physical distancing measures implemented by Member States to reduce SARS-CoV-2 virus transmission have likely played a role in reducing influenza virus transmission.
- Globally, despite continued or even increased testing for influenza in some countries, influenza activity remained at lower levels than expected for this time of the year.
- In the temperate zone of the northern hemisphere, influenza activity remained below inter-seasonal levels, though sporadic detections of influenza A and B viruses were reported in some countries.
- In the temperate zone of the southern hemisphere, influenza activity was reported at inter-seasonal level.
- In the Caribbean and Central American countries, increased influenza detections were reported in Haiti in recent weeks. Severe acute respiratory infection (SARI) activity, decreased in most reporting countries.
- In tropical South America, there were no influenza detections in this reporting period.
- In tropical Africa, influenza activity continued to be reported in Western Africa.
- In Southern Asia, sporadic influenza detections were reported across reporting countries.
- In South East Asia, there were no influenza detections reported in this reporting period.
- Worldwide, influenza B detections accounted for the majority of the very low numbers of detections reported.

National Influenza Centres (NICs) and other national influenza laboratories from 82 countries, areas, or territories reported data to FluNet for the time period from [21 Dec 2020] to [3 Jan 2021] (data as of 15 Jan 2021 4:26:22 UTC). The WHO GISRS [Global Influenza Surveillance and Response System] laboratories tested more than 200

863 specimens during that time period. A total of 409 specimens were positive for influenza viruses, of which 121 (29.6 percent) were typed as influenza A and 288 (70.4 percent) as influenza B. Of the sub-typed influenza A viruses, 19 (54.3 percent) were influenza A(H1N1)pdm09 and 16 (45.7 percent) were influenza A(H3N2). All the characterized B viruses (129) belonged to the B-Victoria lineage.

During the COVID-19 pandemic, WHO encourages countries to continue routine influenza surveillance, test samples from influenza surveillance sites for influenza and SARS-CoV-2 viruses where resources are available, and report epidemiological and laboratory information in a timely manner to established regional and global platforms. Updated considerations for addressing disruptions in the influenza sentinel surveillance and extending to include COVID-19 wherever possible are available in the interim guidance, Maintaining surveillance of influenza and monitoring SARS-CoV-2 -- adapting Global Influenza Surveillance and Response System (GISRS) and sentinel systems during the COVID-19 pandemic [[https://www.who.int/publications/i/item/maintaining-surveillance-of-influenza-and-monitoring-sars-cov-2-adapting-global-influenza-surveillance-and-response-system-\(gisrs\)-and-sentinel-systems-during-the-covid-19-pandemic](https://www.who.int/publications/i/item/maintaining-surveillance-of-influenza-and-monitoring-sars-cov-2-adapting-global-influenza-surveillance-and-response-system-(gisrs)-and-sentinel-systems-during-the-covid-19-pandemic)].

Updated algorithms for testing of both influenza and SARS-CoV-2 for surveillance are also included.

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< 5.1.2e @promedmail.org>

[2] Ukraine
Date: Sun 16 Jan 2021 12:53:31 AM
Source: MENAFN, UkrinForm (National News Agency of Ukraine) report [edited] <<https://menafn.com/1101440569/Almost-90000-ARVI-flu-cases-recorded-in-Ukraine-over-last-week&source=30>>

Almost 90 000 cases of influenza and acute respiratory viral infection (ARVI) have been recorded in Ukraine over the past week, according to data provided by the Health Ministry.

"Over the past week, 89 133 people fell ill with ARVI, 35.5 percent of whom were children under the age of 17. The incidence rate is 234.6 per 100 000 population, which is 51.4 percent less than the epidemic threshold calculated for Ukraine," the report reads.

The Health Ministry notes that no lethal cases related to influenza have been reported.

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[HealthMap/ProMED map of Ukraine: <<http://healthmap.org/promed/p/123>>

Despite the great challenges it poses, the COVID-19 pandemic provides an opportunity to strengthen core surveillance capacities that can deliver public health benefits during and well beyond this emergency.

It is important to understand that the key measures recommended for the prevention of influenza include cough etiquette, hand washing, and annual vaccination, particularly in the high-risk groups. The 1st 2 are the same non-pharmaceutical measures (NPIs) as those recommended for COVID-19 protection, and efficacious vaccines are now available for COVID-19 as well as for influenza.

It is clear both influenza and COVID-19 can be prevented by mask-wearing, frequent and thorough hand washing, coughing into the crook of your elbow, staying home when sick, and limiting contact with people who are infected. Another strategy to reduce the likelihood of a double epidemic would be to strengthen existing influenza vaccination programs.

In addition to continuing adherence to non-pharmaceutical interventions (NPIs), one way to prepare for a possible double epidemic is to ramp up the testing capacity for both COVID-19 and seasonal infections. Combination testing for both COVID-19 and influenza could also be beneficial, as a single sample could be used to distinguish the 2 infections in patients presenting with similar symptoms. Another reason it is important to determine whether respiratory symptoms are due to influenza or to COVID-19 (or both) is that mitigation efforts for the former aren't as strict as for the latter. - Mod.UBA]

[See Also:
2020

Influenza (14): South Korea, vaccine
<http://promedmail.org/post/20201113.7935700>
 Influenza (12): WHO global update, Europe (Ukraine), USA
<http://promedmail.org/post/20201104.7895442>
 Influenza (11): South Korea, Taiwan
<http://promedmail.org/post/20201028.7898480>
 Influenza (10): South Korea
<http://promedmail.org/post/20201025.7888308>
 Influenza (09): WHO global update
<http://promedmail.org/post/20201018.7860441>
 Influenza (05): WHO global update
<http://promedmail.org/post/20200606.7410880>
 Influenza (04): WHO global update, Americas, Asia
<http://promedmail.org/post/20200223.7016972>
 Influenza (03): WHO global update, Asia, Americas, Europe
<http://promedmail.org/post/20200209.6951059>
 Influenza (02): WHO global update, Asia, Americas
<http://promedmail.org/post/20200119.6881669>
 Influenza (01): Asia, Americas, Europe, research
<http://promedmail.org/post/20200108.6871893>

2019

Influenza (32): WHO global update
<http://promedmail.org/post/20191229.6855678>
 Influenza (31): WHO global update, Asia, Americas, Caribbean
<http://promedmail.org/post/20191213.6806605>
 Influenza (30): WHO global update, Americas, Caribbean, drugs
<http://promedmail.org/post/20191127.6798010>
 Influenza (29): WHO global update, Asia, America, Europe
<http://promedmail.org/post/20191102.67488220>
 Influenza (28): Asia, PAHO update, USA, treatment
<http://promedmail.org/post/20191020.6731512>
 Influenza (27): WHO global update, vaccine
<http://promedmail.org/post/20191016.672726604>
 Influenza (26): WHO global update, vaccine
<http://promedmail.org/post/20191004.6702930>
 Influenza (25): WHO global update, Australia
<http://promedmail.org/post/20190908.6656310>
 Influenza (24): WHO global update, Asia, Australia
<http://promedmail.org/post/20190829.6631162>
 Influenza (21): WHO global update
<http://promedmail.org/post/20190726.6582424>
 Influenza (20): Asia, Africa, Australia, vaccine, WHO
<http://promedmail.org/post/20190719.6554487>
 Influenza (19): Australia, Asia, Americas
<http://promedmail.org/post/20190702.6547597>
 Influenza (18): WHO global update, Americas, Asia
<http://promedmail.org/post/20190622.6522954>
 Influenza (17): WHO global update, Asia, North America, Pacific, vaccine <http://promedmail.org/post/20190609.6502103>
 Influenza (16): India, Australia, seasonal activity
<http://promedmail.org/post/20190526.6482726>
 Influenza (15): WHO global update, Australia, seasonal activity

<http://promedmail.org/post/20190520.6468392>
 Influenza (14): Australia, seasonal activity
<http://promedmail.org/post/20190512.6457546>
 Influenza (13): WHO global update, North America, Asia
<http://promedmail.org/post/20190502.6450034>
 Influenza (12): WHO global update, Asia
<http://promedmail.org/post/20190424.6432363>
 Influenza (11): Asia, Australia
<http://promedmail.org/post/20190413.6418287>
 Influenza (10): WHO global update
<http://promedmail.org/post/20190407.6401577>
 Influenza (09): WHO global update, N. America, antiviral resistance
<http://promedmail.org/post/20190331.6390424>
 Influenza (08): WHO global update, seasonal activity, Asia
<http://promedmail.org/post/20190307.6351658>
 Influenza (07): WHO global update, seasonal, Asia, Europe, vaccine
<http://promedmail.org/post/20190225.6326092>
 Influenza (06): Europe, Asia, N. America, Australia, Japan research
<http://promedmail.org/post/20190212.6302099>
 Influenza (05): vaccine effectiveness, comment
<http://promedmail.org/post/20190204.6293577>
 Influenza (04): seasonal activity, Europe, Asia, Africa, N. America, vaccine <http://promedmail.org/post/20190203.6292286>
 Influenza (03): seasonal activity, multiple locations
<http://promedmail.org/post/20190129.6275544>
 Influenza (02): seasonal activity, multiple locations, antiviral resistance <http://promedmail.org/post/20190122.6268175>
 Influenza (01): WHO global update, H3N2, oncology ward, 2017
<http://promedmail.org/post/20190110.6247465>
 2018

Influenza (33): WHO global update, Georgia, India
<http://promedmail.org/post/20181228.6223446>
 Influenza (32): seasonal, USA, Italy
<http://promedmail.org/post/20181223.6219731>
 Influenza (31): Canada (AB) India (MH,TN) seasonal
<http://promedmail.org/post/20181204.6176611>
 Influenza (30): WHO global update
<http://promedmail.org/post/20181130.6169214>
 Influenza (25): WHO global update, ECDC, 2017-18 review
<http://promedmail.org/post/20180827.5979056>
 Influenza (20): USA (IN) swine origin H3N2v, new human case
<http://promedmail.org/post/20180701.5884141>
 Influenza (15): WHO global update, Brazil
<http://promedmail.org/post/20180517.5798872>
 Influenza (10): WHO global update, Kenya
<http://promedmail.org/post/20180310.5672765>
 Influenza (05): seasonal, multiple locations
<http://promedmail.org/post/20180121.5570116>
 Influenza (04): WHO global update, multiple locations, preparedness
<http://promedmail.org/post/20180113.5557168>
 Influenza (03): Asia (Pakistan, Nepal)
<http://promedmail.org/post/20180111.5551430>
 Influenza (02): increased seasonal activity, USA, Europe, Asia
<http://promedmail.org/post/20180104.5534440>
 Influenza (01): Pakistan (PB) H1N1
<http://promedmail.org/post/20180101.5531217>

.....sb/uba/mj/kl

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End of ProMED Digest, Vol 103, Issue 64
