Immediate notification

15/12/2020

The event is ongoing. Weekly follow-up reports will be submitted.

Sender	Country/territory	Report ID
Delegate of Greece	Greece	IN_37059
Report reference	Event status	Self-declaration
COVID-19_MINK	On-going	No

General information

Country or zone - Country	Disease - SARS-CoV-2 in animals (Inf. with)	Started on - 04/12/2020
Animal type - Terrestrial	Confirmed on - 08/12/2020	Causal agent - SARS-CoV-2
Disease category - Emerging	Reported on - 15/12/2020	Reason - Emerging disease

Disease impact

Outbreak morbidity - 2.0

Outbreak mortality - 1.0

Zoonotic potential - Yes

Zoonotic potential description - The Y453F mutation in the spike (S) protein of the virus, referred to as mink-related-variant, has been detected in 5 sequenced SARS-CoV-2 genomes from human cases directly related to mink (farm workers/owners). With regard to the sequenced mink samples, the latest results show the presence of the Y453F mutation in 1 of the farms tested so far. None of the other mutations described on the Rapid Risk Assessment of the 12th November 2020 from EU agencies (ECDC, EFSA, EMA) has been found up to now neither in humans nor animals. Sequencing of virus genomes from human and mink samples is ongoing

Epidemiology

Source of the event or origin of the infection
- Unknown or inconclusive
- Farm staff from all infected farms tested positive for COVID-19

Epidemiological commentsIn total, 15 out of 91 mink farms have been tested positive for SARS-CoV-2 since the first outbreak was confirmed on 13/11/2020. Stamping out and official disposal of carcasses were only applied to the first confirmed farm. At that point, it was decided to stop culling animals. The whole country is practically considered a single zone. Movement restrictions (complete standstill for live animals) and strict biosecurity measures, including the mandatory use of personal protective equipment (PPE), have been imposed not only to the infected mink farms, but also to all fur farms in Greece. Reporting of increased mink morbidity and mortality to the veterinary authorities is obligatory at national level. When human vaccines become available, everyone who comes in close contact with mink (farm workers, owners, veterinarians) shall be included in the highest priority group to receive vaccination. In the framework of the one-health approach, veterinary and health authorities have been closely collaborating both at local and central level. Active repeated weekly surveillance (rapid tests and RT-PCR) is conducted by health authorities in all mink farm workers/owners. Results are notified directly to veterinary authorities which investigate every farm that is epidemiologically linked to a confirmed human case. In addition, veterinary authorities investigate every notification for increased animal morbidity and mortality. Oropharyngeal swabs are collected from the animals and tested with RT-PCR. Sequencing of virus genomes from human and mink samples is conducted.

Control measures at event level

Domestic control measures

Applied
- Movement control inside the country

- Zoning
- Surveillance within containment and or the protection zone
- Surveillance outside containment and or the protection zone
- Traceability
- Quarantine

Wild control measures

Applied
- Movement control inside the country
- Traceability
- Surveillance outside containment and or the protection zone
- Quarantine
- Zoning
- Surveillance within containment and or the protection zone

Diagnostic

Clinical signs - No

Method of diagnostic - Diagnostic test

Test name	Category	Test type	Laboratory	Species sampled	Outbreaks	Tested from	Tested until	Result
Real-time polymerase chain reaction (real-time PCR)	Nucleic acid detection	Laboratory Test	Centre for Research and Technology Hellas (CERTH)	Mustelidae		08/12/2020		Positive

Quantitative data summary

Measuring unit - Animal

Species	Type	Susceptible	Cases	Deaths	Killed and disposed of	Slaughtered	Vaccinated	Outbreak morbidity	Outbreak mortality
Mustelidae	New	13800	963	203	0	0	-	-	-
Mustelidae	Total	13800	963	203	0	0	-	6.98	1.47
All species	New	13800	963	203	0	0	-	-	-
All species	Total	13800	963	203	0	0	-	6.98	1.47

Event morbidity - 2.0

Event mortality - 1.0

Outbreaks

1000141042-Regional Unit of Grevena

Outbreak reference - GREVENA_3

Started on - 04/12/2020

First administrative division - Epirus and Western Macedonia

Second administrative division - West Macedonia

Epidemiological unit - Farm

Geographic coordinates - 40.226447,21.440184

Third administrative division - Grevena

Location - Regional Unit of Grevena

Description of the affected populationThe animals are bred in a commercial farm for their fur. Suspicion was raised in the framework of surveillance activities following notification about a confirmed human case (farm worker) for COVID-19. Samples (oropharyngeal swabs) were collected from twenty animals and were tested positive with RT- PCR. Mink showed no clinical symptoms and feed intake was not reduced. Mortality did not increase. It was negligible and within the expected range based on the farm records, thus is considered unrelated to the outbreak.

Species	Type	Measuring unit	Susceptible	Cases	Deaths	Killed and disposed of	Slaughtered	Vaccinated
Mustelidae	New	Animal	4000	20	0	0	0	-

Mustelidae	Total	Animal	4000	20	0	0	0	-
All species	New	Animal	4000	20	0	0	0	-
All species	Total	Animal	4000	20	0	0	0	-

1000141001-Regional Unit of Kozani

Outbreak reference - KOZANI_7

Started on - 04/12/2020

First administrative division - Epirus and Western Macedonia

Second administrative division - West Macedonia

Epidemiological unit - Farm

Geographic coordinates - 40.2408,21.3978

Third administrative division - Voio

Location - Regional Unit of Kozani

Description of the affected populationThe animals are bred in a commercial farm for their fur. Suspicion was raised in the framework of surveillance activities following notification about a) increased mortality and b) a confirmed human case (farm owner) for COVID-19. Samples (oropharyngeal swabs) were collected from ten dead animals and all of them were tested positive with RT-PCR. Mink that died were relatively old and fat and showed mild respiratory symptoms and reduced feed intake. It is assumed that more animals were infected but their number cannot be calculated because of missing information.

Species	Type	Measuring unit	Susceptible	Cases	Deaths	Killed and disposed of	Slaughtered	Vaccinated
Mustelidae	New	Animal	2300	43	43	0	0	-
Mustelidae	Total	Animal	2300	43	43	0	0	-
All species	New	Animal	2300	43	43	0	0	-
All species	Total	Animal	2300	43	43	0	0	-

1000141038-Regional Unit of Kozani

Outbreak reference - KOZANI_8

Started on - 04/12/2020

First administrative division - Epirus and Western Macedonia

Second administrative division - West Macedonia

Epidemiological unit - Farm

Geographic coordinates - 40.28438,21.45

Third administrative division - Voio

Location - Regional Unit of Kozani

Description of the affected populationThe animals are bred in a commercial farm for their fur. Suspicion was raised in the framework of surveillance activities following notification about a) increased mortality and b) four confirmed human cases (farm owner and workers) for COVID-19. Samples (oropharyngeal swabs) were collected from ten dead animals and all of them were tested positive with RT- PCR. Infected mink showed respiratory symptoms and reduced feed intake.

Species	Type	Measuring unit	Susceptible	Cases	Deaths	Killed and disposed of	Slaughtered	Vaccinated
Mustelidae	New	Animal	7500	900	160	0	0	-
Mustelidae	Total	Animal	7500	900	160	0	0	-
All species	New	Animal	7500	900	160	0	0	-
All species	Total	Animal	7500	900	160	0	0	-

Map legend

OUTBREAKS REPRESENTATION ON MAP

OUTBREAKS NATURE

Single / Cluster

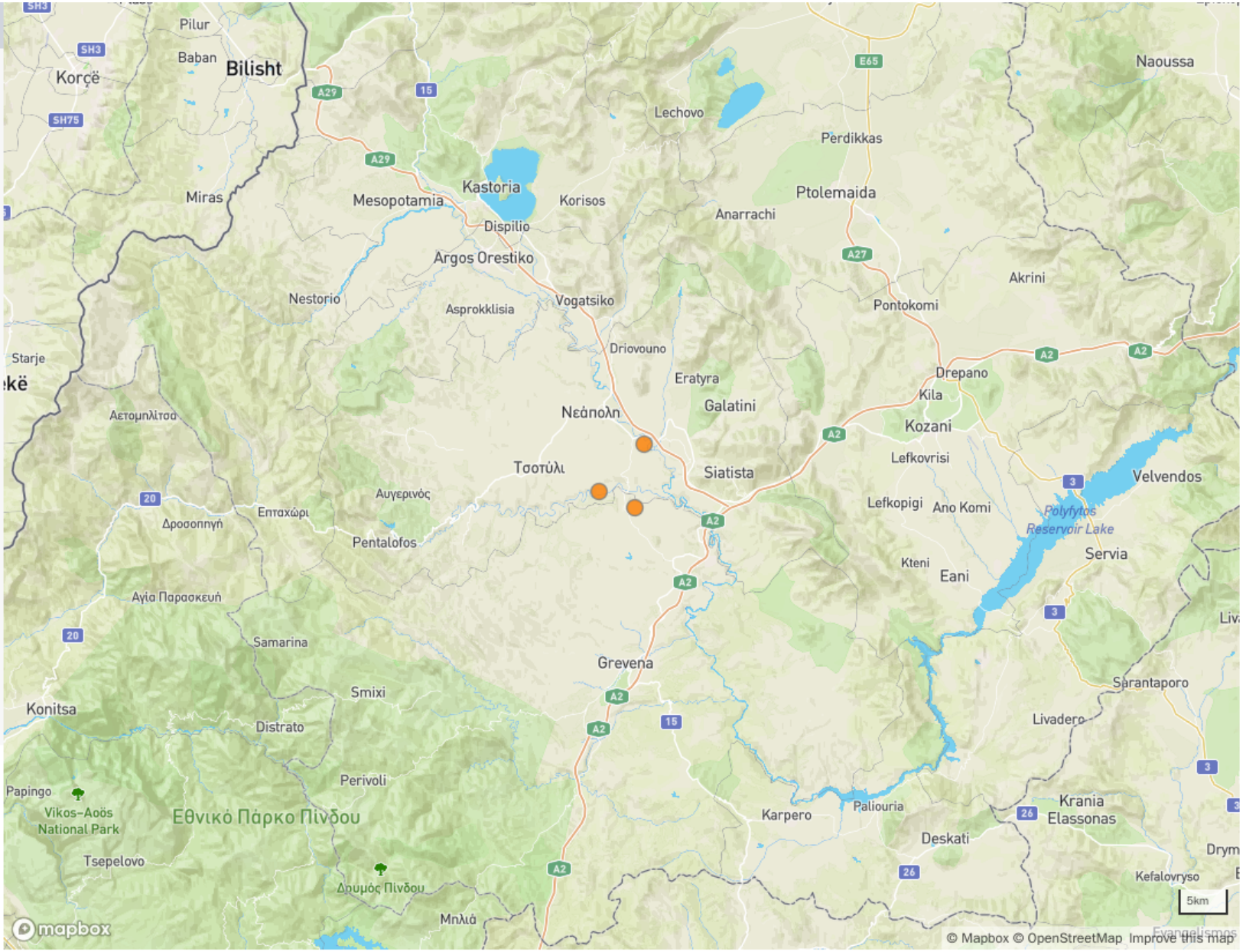
- Domestic species
- Wild species
- Domestic & Wild

OUTBREAKS STATUS

- Outbreak currently reported
- Ongoing outbreak
- Resolved outbreak

AGGREGATION REPRESENTATION

- < 20 outbreaks — 11
- 20 - 100 outbreaks — 50
- > 100 outbreaks — 120



Les localisations des foyers ont été renseignées par les Services vétérinaires compétents et peuvent ne pas représenter l'emplacement exact d'un foyer. L'OIE n'assume aucune responsabilité quant aux données affichées.