AQUATIC ANIMAL DISEASE REPORT - 2023

Country/territory: Bangladesh														
Item					Ι	Disease status/oc	currence code a	/c/						Epidemiolog
DISEASES PREVALENT IN THE REGION						Mo	onth						Level of	cal commer
FINFISH DISEASES	January	February	March	April	May	June	July	August	September	October	November	December	diagnosis	numbers
WOAH-listed diseases	,				,		,	3	1					-
Infection with epizootic haematopoietic necrosis virus	0000	0000	0000	0000	0000	0000								
2. Infection with infectious haematopoietic necrosis virus	0000	0000	0000	0000	0000	0000								
3. Infection with spring viremia of carp virus	0000	0000	0000	0000	0000	0000								
4. Infection with viral haemorrhagic septicaemia virus	0000	0000	0000	0000	0000	0000								
5. Infection with Aphanomyces invadans (EUS)	_	+()	+()	+()	+()	+()							PCR	1
6. Infection with red sea bream iridovirus	0000	0000	0000	0000	0000	0000							1011	1
7. Infection with koi herpesvirus	0000	0000	0000	0000	0000	0000								_
8. Infection with tilapia lake virus	0000	0000	0000	0000	0000	0000								+
Non WOAH-listed diseases	0000	0000	0000	0000	0000	0000								+
9. Grouper iridoviral disease	0000	0000	0000	0000	0000	0000								
10. Viral encephalopathy and retinopathy	0000	0000	0000	0000	0000	0000								+
11. Enteric septicaemia of catfish	0000	0000	0000	0000	0000	0000								+
12. Carp Edema Virus Disease	0000	0000	0000	0000	0000	0000								_
MOLLUSC DISEASES	0000	0000	0000	0000	0000	0000								4
WOAH-listed diseases														
1. Infection with Bonamia exitiosa	0000	0000	0000	0000	0000	0000								+
Infection with Bonamia exitiosa Infection with Perkinsus olseni														4
	0000	0000	0000	0000	0000	0000								4
3. Infection with abalone herpesvirus	0000					0000								
4. Infection with Xenohaliotis californiensis	0000	0000	0000	0000	0000	0000								4
5. Infection with Bonamia ostreae	0000	0000	0000	0000	0000	0000								
Non WOAH-listed diseases														
6. Infection with Marteilioides chungmuensis	0000	0000	0000	0000	0000	0000								4
7. Acute viral necrosis (in scallops)	0000	0000	0000	0000	0000	0000								
CRUSTACEAN DISEASES														
WOAH-listed diseases														
Infection with Taura syndrome virus	0000	0000	0000	0000	0000	0000								
2. Infection with white spot syndrome virus	+()	+()	+()	+()	-	-							PCR	2
Infection with yellow head virus genotype 1	0000	0000	0000	0000	0000	0000								A
4. Infection with infectious hypodermal and haematopoietic necrosis virus	0000	0000	0000	0000	0000	0000								A
5. Infection with infectious myonecrosis virus	0000	0000	0000	0000	0000	0000								
6. Infection with Macrobrachium rosenbergii nodavirus (White Tail	0000	0000	0000	0000	0000	0000								A
disease)		1111		1111	1111	1111								
7. Infection with <i>Hepatobacter penaei</i> (Necrotising hepatopancreatitis)	0000	0000	0000	0000	0000	0000								4
8. Acute hepatopancreatic necrosis disease (AHPND)	-	-	-	-	+()	-								
9. Infection with Aphanomyces astaci (Crayfish plague)	0000	0000	0000	0000	0000	0000							PCR	3
10. Infection with decapod iridescent virus 1 (DIV1)	0000	0000	0000	0000	0000	0000								
Non WOAH-listed diseases														
11. Hepatopnacreatic Microsporidiosis caused by Enterocytozoon	0000	0000	0000	0000	0000	0000								A
hepatopenaei (HPM-EHP)	0000	0000	0000	0000	0000	0000								4
12. Viral covert mortality disease (VCMD) of shrimps 13. Spiroplasma eriocheiris infection	0000	0000	0000	0000	0000	0000				-				+
AMPHIBIAN DISEASES	0000	0000	0000	0000	0000	0000								+
WOAH-listed diseases	-			-		-		-	+					+
1. Infection with Ranavirus species	0000	0000	0000	0000	0000	0000								_
Infection with Ranavirus species Infection with Batrachochytrium dendrobatidis	0000	0000	0000	0000	0000	0000								+
2. Infection with Batrachochytrium aenarobatiais 3. Infection with Batrachochytrium salamandrivorans														4
3. Infection With Batrachochytrium salamandrivorans	0000	0000	0000	0000	0000	0000								

Prepared by:

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Position: Assistant Director

Date 19.06.2023

ANY OTHER DISEASES OF IMPORTANCE											ĺ
1 Infection with Streptococcous of Tilapia (Oreochromis sp)	-	-	+()	+()	+()	-				PCR	4
2 Infection with Aeromonas of Shing (Heteropneustes fossilis), Gulsha	40	+0		+()	+()	+()				DCD	5
(Mystus cavasius) and Pangus (P. hypophthalmus)	.0	.0	-	10	10	10				PCR	3

DISEASES PRESUMED EXOTIC TO THE REGION^b

LISTED BY THE WOAH

Finfish: Infection with HPR-deleted or HPR0 salmon anaemia virus; Infection with salmon pancreas disease virus;

Infection with Gyrodactylus salaris.

Molluscs: Infection with Marteilia refringens; Perkinsus marinus.

NOT LISTED BY THE WOAH

Finfish: Channel catfish virus disease

a/ Please use the following occurrence code:

Occurrence code and	<u>Definition</u>	Occurrence code and symbol	<u>Definition</u>
Disease present	The disease is present with clinical signs in the whole country (in domestic species or wildlife) The disease is present with clinical signs, and limited to one	Disease absent	The disease was absent in the country during the reporting period (in domestic species or wildlife).
or more zones +() Infection/infestation	or more zones/compartments (in domestic species or wildlife) Confirmed infestation or infection using diagnostic tests, but	Never reported 0000	The disease has "never been reported" (historically absent) for the whole country in domestic species and wildlife.
+?	no clinical signs observed (in domestic species or wildlife)	No information	No information is available regarding the presence or the absence of this disease during the reporting period
Infection/infestation limited to one or more zones +?()	Confirmed infestation or infection using diagnostic tests, but no clinical signs observed and limited to one or more zones/compartments (in domestic species or wildlife)	***	(in domestic species or wildlife).
Disease suspected ? Disease suspected but	The presence of the disease was suspected but not confirmed (in domestic species or wildlife)		
not confirmed and limited to one or more zones ?()	The presence of the disease was suspected but not confirmed and limited to one or more zones/compartments (in domestic species or wildlife)		
V	ges on historical data, please highlight in RED		

1. Epidemiological comments:

Comment No.

(Comments should include: 1) Origin of the disease or pathogen (history of the disease); 2) Species affected; 3) Disease characteristics (unusual clinical signs or lesions); 4) Pathogen (isolated/sero-typed); 5) Mortality rate (high/low; decreasing/increasing); 6) Death toll (economic loss, etc); 7) Size of infected areas or names of infected areas; 8) Preventive/control measures taken; 9) Samples sent to national or international laboratories for confirmation (indicate the names of laboratories); 10) Published paper (articles in journals/website, etc). and 11) Unknown diseases: describe details as much as possible.)

Comment 140.	
1	Infected species are Catla (<i>Catla catla</i>), Mrigal (<i>Cirrhinus cirrhosis</i>) with 0-15% mortality in February and March 2023 and 5-20% for the same species in April, May, June 2023 and Infection with EUS occurs in Mymensingh, Jamalpur, Netrokona districts. <i>Aphanomyces invadans</i> wth symptoms of red spots or small to large ulcerative lesions on the fish body and detected through PCR in BFRI Labratory from February to June 2023. Conrol measures are taken. Surveillence activities strengthened.
2	Live Crab (Scylla serrata) in 3 Crab Farms (Reg N0-144-Bagerhat, 232-Khulna and 352-Satkhira) are tested WSSV positive in Quality Control Labratory, Khulna in January, February and March 2023. White Spot Syndrome Virus (WSSV) having No clearly visible white spot signs with 0% mortally. Preventive/control measures taken as i) infected crabs destroyed for disposed of ii) awareness training has been given iii) Surveillance activities enhanced. On the other hand, in April 2023, Black tiger shrimp (<i>Penaeus monodon</i>) in 3 ponds of shrimp farms covering area with 2.60 acre get infected with WSSV in April 2023 occurring mortality 20-30% decreasing having symptoms white spot signs with a diameter 0.5-2.0 mm in carapace. Lethargy and decreased appetite, loose cuticle, reddish coloration for shrimp. PCR test shows WSSV infection in FIQC labratory, Khulna. Infected shrimp destroyed / disposed of and pond is properly disinfected and dried ii) awareness training has been given iii) Surveillance activities enhanced. Iv) farm is fallowed.
3	Black tiger shrimp (<i>Penaeus monodon</i>) in 1 ponds of shrimp farms covering area with 1.25 acre gets infected with AHPND occurring mortality 20% decreasing. PCR test shows AHPND infection by <i>V. parahaemolyticus</i> in May 2023 in FIQC labratory, Khulna. Infected shrimp destroyed / disposed of and pond is properly disinfected and dried ii) awareness training has been given iii) Surveillance activities enhanced. Iv) farm is fallowed.

	Infection of Tilapia (<i>Oreochromis sp.</i>) with <i>Streptococcus agalactiae</i> having symptoms of loss of balance, pop eye, enlargement of liver, kidney and spleen occurred in some aquaculture establisments in Mymensingh and Dhaka Division with 5-20% mortality. Control measures are taken. Pathogen is detected in March, April, May 2023 in BFRI labratory Mymensingh.
	Infection of Stinging catfish (<i>Heteropneustes fossilis</i>), Pangus (Pangasianodon hypophthalmus) and Gulsha (Mystus caavsius) with Aeromonas sp. having symptoms of Red pop eye, red spot and lesion on body occurred in some ponds of Dhaka and Mymensingh Division with 10-25% mortality. Control measures are taken. Pathogen is detected in January, February 2023 for catfish and April, May, June 2023 for (Mystus cavasius) in BFRI labratory.
6	
2. New aquatic anim	al health regulations introduced within past six months (with effective date):