AQUATIC ANIMAL DISEASE REPORT - 2023

Country/territory: **PHILIPPINES**

Item	Disease status/occurrence code a/b/												Level of diagnosis	Epidemiological comment numbers
DISEASES PREVALENT IN THE REGION	Month													
FINFISH DISEASES	January	February	March	April	May	June	July	August	September	October	November	December		
OIE-listed diseases											**SEAFDEC**			
1. Infection with epizootic haematopoietic necrosis virus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
2. Infection with infectious haematopoietic necrosis virus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
3. Infection with spring viremia of carp virus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
4. Infection with viral haemorrhagic septicaemia virus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
5. Infection with *Aphanomyces invadans* (EUS)	-	-	-	-	-	-	-	-	-	-	-	-	I	1
6. Infection with red sea bream iridovirus	-	-	-	-	-	-	-	-	-	-	-	-	I, III	2
7. Infection with koi herpesvirus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
Non OIE-listed diseases														
8. Grouper iridoviral disease	-	-	-	-	-	-	-	-	-	-	-	-		
9. Viral encephalopathy and retinopathy	-	-	-	-	-	-	-	-	-	-	-	-	I, III	3
10.Enteric septicaemia of catfish	***	***	***	***	***	***	***	***	***	***	***	***		
11. Carp Edema Virus Disease	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
12. Tilapia lake virus (TiLV)	-	-	-	+	-	-	-	-	+	+	+	-	I, III	4
MOLLUSC DISEASES														
OIE-listed diseases														
1. Infection with *Bonamia exitiosa*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
2. Infection with *Perkinsus olseni*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
3. Infection with abalone herpesvirus	***	***	***	***	***	***	***	***	***	***	***	***		
4. Infection with *Xenohaliotis californiensis*	***	***	***	***	***	***	***	***	***	***	***	***		
5. Infection with *Bonamia ostreae*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
Non OIE-listed diseases														
6. Infection with *Marteilioides chungmuensis*	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
7. Acute viral necrosis (in scallops)	***	***	***	***	***	***	***	***	***	***	***	***		
CRUSTACEAN DISEASES														
OIE-listed diseases														
1. Infection with Taura syndrome virus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	I, III	5
2. Infection with white spot syndrome virus	+	+	+	+	+	+	+	+	+	+	+	+	I, III	6
3. Infection with yellow head virus genotype 1	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	I, III	7
4. Infection with infectious hypodermal and haematopoietic necrosis virus	-	-	+	-	+	+	-	+	+	+	-	-	I, III	8
5. Infection with infectious myonecrosis virus	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	I, III	9
6. Infection with *Macrobrachium rosenbergii* nodavirus (White Tail disease)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
7. Infection with *Hepatobacter penaei* (Necrotising hepatopancreatitis)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	I, III	10
8. Acute hepatopancreatic necrosis disease (AHPND)	+	+	+	+	+	+	+	+	-	+	+	+	I, III	11
9. Infection with *Aphanomyces astaci* (Crayfish plague)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
Non OIE-listed diseases														
10.Hepatopnacreatic Microsporidiosis caused by *Enterocytozoon hepatopenaei* (HP	+	+	+	+	+	-	+	+	+	+	+	-	I, III	12
11. Viral covert mortality disease (VCMD) of shrimps	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	I, III	13
12. *Spiroplasma eriocheiris* infection	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
13. Decapod iridescent virus 1 (DIV-1)	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000		
AMPHIBIAN DISEASES														

OIE-listed diseases															
1. Infection with *Ranavirus* species	***	***	***	***	***	***	***	***	***	***	***	***	***		
2. Infection with *Batrachochytrium dendrobatidis*	***	***	***	***	***	***	***	***	***	***	***	***	***		
3. Infection with *Batrachochytrium salamandrivorans*	***	***	***	***	***	***	***	***	***	***	***	***	***		
Prepared by:															
Name: **JOSELITO R. SOMGA, DVM**															
Position: **Chief Fishing Regulations Officer**															
Date: **March 15, 2024**															
ANY OTHER DISEASES OF IMPORTANCE															
1															
2															
DISEASES PRESUMED EXOTIC TO THE REGION[b]															
LISTED BY THE OIE															
Finfish: Infection with HPR-deleted or HPR0 salmon anaemia virus; Infection with salmon pancreas disease virus;															
Infection with *Gyrodactylus salaris* .															
Molluses: Infection with *Marteilia refringens* ; *Perkinsus marinus* .															
NOT LISTED BY THE OIE															
Finfish: Channel catfish virus disease															

a/ Please use the following occurrence code:

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

b/ If there is any changes on historical data, please highlight in RED

1. Epidemiological comments:

(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 No.	

1	**Infection with *Aphanomyces invadans* (EUS)** *First Quarter* EUS was not detected by gross morphological examination in Tilapia (fingerlings) from Nueva Ecija, Black eel (juvenile) from Zambales, *Anguilla mormorata* (juvenile) and Eel (fingerlings) from Rizal, and *Anguilla bicolo* r (juvenile) from General Santos City . Examination was conducted by BFAR Central Fish Health Laboratory. *Second Quarter* *Third Quarter* EUS was not detected by gross morphological examination in Eel from Nueva Ecija and Isabela, and in *Anguilla bicolor* from South Cotabato. The examination was conducted by BFAR Central Fish Health Laboratory. *Fourth Quarter* EUS was not detected by gross morphological examination in Eel (adult and juvenile) from Nueva Ecija, and Isabela and *Anguilla marmorata* and *Anguilla bicolor* (adult) from Zambales. The examination was conducted by BFAR Central Fish Health Laboratory.
2	***Red Seabream Iridoviral Disease (RSID)*** *First Quarter* Tilapia (fingerlings) and Milkfish (fingerlings) were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for Iridoviral disease. Samples were collected from Nueva Ecija, Agusan Del Sur, Surigao Del Sur, and Davao del Norte. Examination was conducted by BFAR Central and Southeast Asian Fisheries Development Center (SEAFDEC) Fish Health Laboratories. *Second Quarter* Milkfish (adult, grow-out) Tilapia, Siganid, *Epinephelus coioides* , Shortfin scad, and *Lates calcarifer* were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for Iridoviral disease. Samples were collected from Davao del Norte, Zambales, Bislig, Dagupan, Agusan del Norte, Sarangani, and Iloilo. Examination was conducted by BFAR Central and Southeast Asian Fisheries Development Center (SEAFDEC) Fish Health Laboratories. *Third Quarter* Tilapia (fingerlings), Milkfish (fingerlings), Hito, *Trachinotus blochii,* Shortfin scad, Glass eel, and Pompano were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for Iridoviral disease. Samples were collected from Davao Occidental, Abra, Agusan Del Norte, Davao Del Sur, Surigao Del Sur, Occidental Mindoro, Oriental Mindoro, Palawan, Davao Del Norte, Davao De Oro, Iloilo, Guimaras, and South Cotabato. Examination was conducted by BFAR Central and Southeast Asian Fisheries Development Center (SEAFDEC) Fish Health Laboratories. *Fourth Quarter* Tilapia (grow-out, fingerlings, and juvenile), *Chanos chanos* (fingerlings), Grouper (fingerlings), *Siganus guttatus* (Larvae), *Trachinotus blochii,* and *Epinephelus fuscoguttatus* were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for Iridoviral disease. Samples were collected from Oriental Mindoro, Sorsogon, Camarines Sur, Camarines Norte, Davao Occidental, Davao De Oro, Agusan del Norte, Cebu, Bohol, Nueva Ecija, and Iloilo. Examination was conducted by BFAR Central and Southeast Asian Fisheries Development Center (SEAFDEC) Fish Health Laboratories.
3	**Viral Encephalopathy and Retinopathy (VER)** *First Quarter* Milkfish (fingerlings and grow-out), Siganid, Tilapia (fingerlings), and Koi (breeder) were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for VER. Samples were collected from Agusan Del Sur, Agusan Del Norte, Surigao Del Sur, Laguna, Davao del Norte, Nueva Ecija, and Iloilo. Examination was conducted by BFAR Central and Southeast Asian Fisheries Development Center (SEAFDEC) Fish Health Laboratories. *Second Quarter* Milkfish (fingerlings and grow-out), Tilapia (fingerlings), Siganid (adult), *Epinephelus coioides* , Shortfin scad, and *Lates calcarifer* were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for VER. Samples were collected from Davao del Norte, Zambales, Bislig, Dagupan, Agusan del Norte, Sarangani, and Iloilo. Examination was conducted by BFAR Central and Southeast Asian Fisheries Development Center (SEAFDEC) Fish Health Laboratories. *Third Quarter* Milkfish (fingerlings), Tilapia (fingerlings), Hito, *Trachinotus blochii,* Shortfin scad, Glass eel, and Pompano were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for VER. Samples were collected from Davao Occidental, Abra, Agusan Del Norte, Davao Del Sur, Occidental Mindoro, Oriental Mindoro, Palawan, Davao Del Norte, Davao De Oro, Iloilo, Guimaras, and South Cotabato. Examination was conducted by BFAR Central and Southeast Asian Fisheries Development Center (SEAFDEC) Fish Health Laboratories. *Fourth Quarter* Tilapia (grow-out, fingerlings, and juvenile), *Chanos chanos* (fingerlings), Grouper (fingerlings), *Siganus guttatus* (larvae), *Trachinotus blochii,* and *Epinephelus fuscoguttatus* were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for VER. Samples were collected from Oriental Mindoro, Sorsogon, Camarines Sur, Camarines Norte, Davao Occidental, Davao de Oro, Agusan del Norte, Cebu, Bohol, Nueva Ecija, and Iloilo. Examination was conducted by BFAR Central and Southeast Asian Fisheries Development Center (SEAFDEC) Fish Health Laboratories.
4	**Tilapia Lake Virus (TiLV)** *First Quarter* Tilapia (fry, fingerlings, juvenile, grow-out, broodstock, and adult), and Gourami (fingerlings) were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for TiLV. Samples were collected from Nueva Ecija, Agusan Del Sur, Agusan Del Norte, Leyte, Butuan, Pangasinan, Batangas, Cagayan, Pampanga, Bataan, Zambales, Bulacan, Laguna, Camarines Sur, Albay, Iloilo, Cebu, Lanao Del Norte, Bukidnon, Misamis Oriental, Davao de Oro, Davao del Sur, Davao del Norte, Koronadal City, and Surigao del Sur. Examination was conducted by BFAR Central and Regional Fisheries Laboratory. *Second Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 1 farm **Species Affected:** *Oreochromis* spp. (fry) **Pathogen:** Tilapia Lake Virus **Size of infected areas or names of infected areas:** Laguna **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were analyzed in BFAR regional laboratory using insulated isothermal Polymerase Chain Reaction method. *Third Quarter*

	Origin of the disease or pathogen (history of the disease) - detected in 1 farm **Species Affected:** Tilapia (adult) **Pathogen:** Tilapia Lake Virus **Size of infected areas or names of infected areas:** Agusan Del Norte **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were analyzed in BFAR regional laboratory using insulated isothermal Polymerase Chain Reaction method. *Fourth Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 2 farms **Species Affected:** Tilapia (fingerlings, grow-out, and adult) **Pathogen:** Tilapia Lake Virus **Size of infected areas or names of infected areas:** Davao de Oro and Agusan Del Norte **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were analyzed in BFAR Central and Regional laboratory using Polymerase Chain Reaction (PCR) technique.
5	**Taura Syndrome (TS)** *First Quarter* *P. vannamei* (post-larvae, juvenile, and grow-out) and *P. monodon* were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for Taura Syndrome. Samples were collected from Oriental Mindoro, Pangasinan, Leyte, Bohol, and Iloilo. Examinations were conducted by BFAR Central and Regional Fish Health Laboratories, and Southeast Asian Fisheries Development Center (SEAFDEC). *Second Quarter* *P. vannamei* (grow-out, post-larvae, and adult), *P. indicus* (grow-out), *M. dacqueti* (post-larvae), and Giant tiger prawn (post-larvae and market size) were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for Taura Syndrome. Samples were collected from Bohol, Occidental Mindoro, and Pangasinan. Examinations were conducted by BFAR Central and Regional Fish Health Laboratories. *Third Quarter* *P. vannamei* (broodstock, grow-out, post-larvae, juvenile, breeder, and adult), *P. indicus* (grow-out), *P. monodon* (post-larvae and grow-out), Shrimp (grow-out), *M. rosenbergii* (post-larvae), and *Scylla serrata* were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for Taura Syndrome. Samples were collected from Batangas, Agusan Del Norte, Davao Del Sur, Zamboanga Del Sur, Leyte, Oriental Mindoro, Occidental Mindoro, Davao, Pangasinan, Ilocos Sur, Cebu, and Iloilo. Examinations were conducted by BFAR Central and Regional Fish Health Laboratories, and Southeast Asian Fisheries Development Center (SEAFDEC). *Fourth Quarter* Black tiger prawn (adult), *P. vannamei* (grow-out, broodstock, and post-larvae), *P. monodon* (grow-out), and Spiny lobster were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for Taura Syndrome. Samples were collected from Bohol, Oriental Mindoro, Cebu, Negros Oriental, Davao del Sur, Agusan del Norte, Pangasinan, Leyte, and Iloilo. Examinations were conducted by BFAR Central and Regional Fish Health Laboratories, and Southeast Asian Fisheries Development Center (SEAFDEC).
6	**White Spot Disease (WSD)** *First Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 17 farms **Species Affected:** *P. vannamei* (nauplii, post-larvae, juvenile, grow-out, and adult), *P. indicus* (grow-out), *Scylla serrata* (grow-out), and *P. monodon* **Pathogen:** White Spot Syndrome Virus **Size of infected areas or names of infected areas:** Surigao del Norte, Quezon, Pangasinan, Zambales, Oriental Mindoro, Cebu, Surigao del Sur, Agusan Del Norte, Iloilo, Negros Occidental, Masbate, and Sorsogon **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were analyzed using PCR technique in BFAR Central Office and Regional Laboratories, and SEAFDEC. *Second Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 27 farms **Species Affected**: *P. vannamei* (juvenile, post-larvae, and grow-out), *M. rosenbergii* (breeder), *L. vanname* i (juvenile and adult), *P. monodon* (post-larvae, grow-out, and spawner), and Crab (adult) **Pathogen:** White Spot Syndrome Virus **Size of infected areas or names of infected areas:** Pangasinan, Isabela, Cagayan, Zambales, Oriental Mindoro, South Cotabato, Sarangani Province, Agusan Del Norte, Ilo ilo, Negros Occidental, Aklan, Zamboanga, and Batangas **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were sent to BFAR Central and Regional Laboratories, and SEAFDEC Fish Health Laboratory *Third Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 14 farms **Species Affected**: *P. vannamei* (post-larvae, grow-out, and adult), Shrimp (grow-out), *P. indicus* (grow-out), *L. vannamei* (adult), *P. monodon* (post-larvae), and *Scylla serrata* (broodstock) **Pathogen:** White Spot Syndrome Virus **Size of infected areas or names of infected areas:** Batangas, Pangasinan, Cagayan, Oriental Mindoro, Sarangani Province, South Cotabato, Agusan Del Norte, Iloilo, Sorsogon, and Negros Occidental **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were sent to BFAR Central and Regional Laboratories, and SEAFDEC Fish Health Laboratory *Fourth Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 20 farms **Species Affected**: *P. vannamei* (grow-out, fry, and post-larvae), *L. vannamei* (adult), Wild crabs, Crabs, *P. monodon* (adult, broodstock, and spawner), *Scylla serrata,* and Spiny lobster **Pathogen:** White Spot Syndrome Virus **Size of infected areas or names of infected areas:** Cagayan, Laguna, Leyte, South Cotabato, Saranggani Province, Agusan del Norte, Capiz, Iloilo, Negros Occidental, and Batangas **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were sent to BFAR Central and Regional Laboratories, and SEAFDEC Fish Health Laboratory
	Infection with Yellow Head Virus Genotype 1 (YHV) *First Quarter* Black Tiger Shrimp (grow-out) and *P. vannamei* (post-larvae, grow-out, and broodstock) were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative result for Yellow Head Virus. Samples were collected from Bulacan, Davao del Sur, Cebu, Negros Oriental, Leyte, Oriental Mindoro, and Iloilo. Examination was conducted by BFAR Central Fish health laboratory and Southeast Asian Fisheries Development Center (SEAFDEC).

7	*Second Quarter* *P. monodon* (grow-out), *P. indicus* (grow-out), and *P. vannamei* (grow-out and breeders) were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for Yellow Head Virus. Samples were collected from Agusan Del Norte, Oriental Mindoro, Occidental Mindoro, Cebu, Bohol, Palawan, and Pangasinan. Examination was conducted by BFAR Central Fish health laboratory. *Third Quarter* *P. monodon* (post-larvae and grow-out), *P. indicus* (grow-out), and *P. vannamei* (grow-out and broodstock), Shrimp (grow-out), and *Scylla serrata* were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for Yellow Head Virus. Samples were collected from Pangasinan, Agusan Del Norte, Davao Del Sur, Zamboanga Del Sur, Leyte, Oriental Mindoro, Occidental Mindoro, Davao, and Ilo Ilo. Examination was conducted by BFAR Central Fish health laboratory and Southeast Asian Fisheries Development Center (SEAFDEC). *Fourth Quarter* *P. monodon* (grow-out), *P. vannamei* (grow-out and broodstock), Shrimp, and Spiny lobster were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for Yellow Head Virus. Samples were collected from Iloilo, Negros Occidental, Oriental Mindoro, Cebu, Negros Oriental, Davao del Sur, Agusan del Norte, and Pangasinan. Examinations were conducted by BFAR Central Fish health laboratory and Southeast Asian Fisheries Development Center (SEAFDEC).
8	**Infection with Infectious Hypodermal and Haematopoietic Necrosis Virus (IHHNV)** *First Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 2 farms **Species Affected:** *P. vannamei* (grow-out) **Pathogen:** Infectious Hypodermal and Hematopoietic Necrosis Virus **Size of infected areas or names of infected areas:** Palawan **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were sent to BFAR Central and Regional Laboratories, and SEAFDEC and analyzed using PCR technique. *Second Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 3 farms **Species Affected:** *P. vannamei* (grow-out and post-larvae) and *P. monodon* (grow-out) **Pathogen:** Infectious Hypodermal and Hematopoietic Necrosis Virus **Size of infected areas or names of infected areas:** Occidental Mindoro, Palawan, and Zambales **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were sent to BFAR Central and Regional Laboratories, and analyzed using PCR technique. *Third Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 6 farms **Species Affected:** *P. vannamei* (grow-out) and *P. monodon* (post-larvae) **Pathogen:** Infectious Hypodermal and Hematopoietic Necrosis Virus **Size of infected areas or names of infected areas:** Agusan Del Norte, Occidental Mindoro, and Oriental Mindoro **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were sent to BFAR Central Laboratories, and analyzed using PCR technique. *Fourth Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 1 farm **Species Affected:** *P. vannamei* (post-larvae) **Pathogen:** Infectious Hypodermal and Hematopoietic Necrosis Virus **Size of infected areas or names of infected areas:** Albay **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were sent to BFAR Regional laboratory, and analyzed using PCR technique.
9	**Infectious Myonecrosis (IMN)** *First Quarter* *P. vannamei, and P. monodon* (grow-out and adult) were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative for Infectious Myonecrosis. Samples were collected from Bohol and Surigao Del Norte, . Examinations were conducted by BFAR Central Fisheries Laboratory, and Southeast Asian Fisheries Development Center (SEAFDEC). *Second Quarter* *P. indicus* (grow-out) was subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative for Infectious Myonecrosis. Samples were collected from Occidental Mindoro. Examinations were conducted by BFAR Central Fish Health Laboratories. *Third Quarter* *P. indicus* (grow-out), *P. monodon* (post-larvae and grow-out), *P. vannamei* (grow-out, broodstock, and breeder), Shrimp (grow-out), anf Black tiger shrimp (adult) were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative for Infectious Myonecrosis. Samples were collected from Agusan Del Norte, Zamboanga Del Sur, Leyte, Oriental Mindoro, Occidental Mindoro, Davao, Bulacan, and Cebu. Examinations were conducted by BFAR Central and Regional Fish Health Laboratories. *Fourth Quarter* Black tiger prawn (adult), *P. vannamei* (grow-out and broodstock), and *P. monodon* (grow-out) were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for Infectious Myonecrosis. Samples were collected from Bohol, Oriental Mindoro, Cebu, Negros Oriental, Davao del Sur, Agusan del Norte, and Pangasinan. Examinations were conducted by BFAR Central and Regional Fish Health Laboratories.
	Necrotising Hepatopancreatitis (NHP) *First Quarter* *P. vannamei* (broodstock, grow-out), and *P. monodon* (grow-out and adult) were subjected to gross morphological examination and PCR analysis and showed negative for Necrotising Hepatopancreatitis. Samples were collected from Bulacan, Bohol, Davao del Sur, Cebu, and Negros Oriental. Examinations were conducted by BFAR Central laboratory. *Second Quarter*

10	*Third Quarter* *P. vannamei* (broodstock and grow-out), *P. monodon* (post-larvae and grow-out), Black tiger shrimp (adult), *P. indicus* (grow-out), and Shrimp (growout) were subjected to gross morphological examination and PCR analysis and showed negative for Necrotising Hepatopancreatitis. Samples were collected from Agusan Del Norte, Davao Del Sur, Zamboanga Del Sur, Leyte, Oriental Mindoro, Occidental Mindoro, Davao, Bulacan, and Cebu. Examinations were conducted by BFAR Central and Regional laboratory. *Fourth Quarter* Black tiger prawn (adult), *P. vannamei* (grow-out and broodstock), and *P. monodon* (grow-out) were subjected to gross morphological examination and PCR analysis and showed negative results for Necrotising Hepatopancreatitis. Samples were collected from Bohol, Oriental Mindoro, Cebu, Negros Oriental, Davao del Sur, Agusan del Norte, Pangasinan, and Negros. Examinations were conducted by BFAR Central and Regional laboratory.
11	**Acute Hepatopancreatic Necrosis Disease (AHPND)** *First Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 6 farms **Species Affected:** *P. vannamei* (grow-out and post-larvae), *P. monodon* (broodstock) **Pathogen:** *V. parahemolyticus* (AHPND) **Size of infected areas or names of infected areas:** Zambales, Bataan, Oriental Mindoro, Cebu, and Negros Occidental **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were sent to BFAR Regional Fisheries Laboratory and SEAFDEC Fish Health Laboratory and analyzed using PCR technique. *Second Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 8 farms **Species Affected:** *P. vannamei* (adult and grow-out), Giant tiger prawn (juvenile) *P. monodon* (post-larvae and eggs), and *P. indicus* (grow-out) **Pathogen:** *V. parahemolyticus* (AHPND) **Size of infected areas or names of infected areas:** Pangasinan, Zambales, Oriental Mindoro, Agusan Del Norte, and Iloilo **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were sent to BFAR Regional Fisheries Laboratory and SEAFDEC Fish Health Laboratory and analyzed using PCR technique. *Third Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 5 farms **Species Affected:** *P. vannamei* (post-larvae and grow-out), *P. monodon* (grow-out), Shrimp (grow-out), and *Scylla serrata* **Pathogen:** *V. parahemolyticus* (AHPND) **Size of infected areas or names of infected areas:** Eastern Samar, Batangas, Oriental Mindoro, and Iloilo **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were sent to BFAR Central and Regional Fisheries Laboratory and SEAFDEC Fish Health Laboratory and analyzed using PCR technique. *Fourth Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 1 farm **Species Affected:** *P. vannamei* (post-larvae) **Pathogen:** *V. parahemolyticus* (AHPND) **Size of infected areas or names of infected areas:** Leyte **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were sent to BFAR Regional Fisheries Laboratory and analyzed using PCR technique.
12	**Hepatopancreatic Microsporidiosis caused by *Enterocytozoon hepatopanaei* (HPM-EHP)** *First Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 6 farms **Species Affected:** *P. vannamei* (grow-out, post larvae) and *P. monodon* **Pathogen:** *Enterocytozoon hepatopenaei* **Size of infected areas or names of infected areas:** Agusan del Norte, Zambales, Palawan, and Iloilo **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were analyzed using PCR technique in BFAR Central and Regional Fisheries laboratory and SEAFDEC Fish Health Laboratory. *Second Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 11 farms **Species Affected:** *P. vannamei* (grow-out and post larvae) and *P. monodon* (post-larvae) **Pathogen:** *Enterocytozoon hepatopenaei* **Size of infected areas or names of infected areas:** Batangas, Zambales, Quezon, Oriental Mindoro, Misamis Occidental, and Bataan **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were analyzed using PCR technique in BFAR Central and Regional Fisheries laboratory and SEAFDEC Fish Health Laboratory. *Third Quarter* **Origin of the disease or pathogen (history of the disease) -** detected in 8 farms **Species Affected:** *P. vannamei* (grow-out and post larvae) and *P. indicus* (grow-out) **Pathogen:** *Enterocytozoon hepatopenaei* **Size of infected areas or names of infected areas:** Pangasinan, Zambales, Bulacan, Bataan, and Oriental Mindoro **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were analyzed using PCR technique in BFAR Regional Fisheries laboratory. *Fourth Quarter*

	Origin of the disease or pathogen (history of the disease) - detected in 5 farms **Species Affected:** *P. vannamei* (grow-out, post-larvae) and *P. monodon* (post-larvae) **Pathogen:** *Enterocytozoon hepatopenaei* **Size of infected areas or names of infected areas:** Oriental Mindoro, Pangasinan, Quezon, and Iloilo **Samples sent to national or international laboratories for confirmation (indicate the name of laboratories):** Samples were analyzed using PCR technique in BFAR Central and Regional Fisheries laboratory and SEAFDEC.
13	**Viral Covert Mortality Disease in Shrimp** *First Quarter* *P. vannamei* (post-larvae, grow-out, and broodstock) were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for VCMD. Samples were collected from Surigao Del Norte, Davao del Sur, Cebu, Negros Oriental, Leyte, Palawan, and Oriental Mindoro. Examinations were conducted by BFAR Central Fish Health Laboratory. *Second Quarter* *P. monodon* (grow-out), *P. indicus* (grow-out), and *P. vannamei* (grow-out) were subjected to gross morphological examonation and Polymerase Chain Reaction (PCR) analysis and showed negative results for VCMD. Samples were collected from Agusan Del Norte, Oriental Mindoro, and Occidental Mindoro. Examinations were conducted by BFAR Central Fish Health Laboratory. *Third Quarter* *Fourth Quarter* *P. vannamei* (grow-out and broodstock) and *P. monodon* (post-larvae) were subjected to gross morphological examination and Polymerase Chain Reaction (PCR) analysis and showed negative results for VCMD. Samples were collected from Oriental Mindoro, Cebu, Negros Oriental, Davao del Sur, Agusan del Norte, and Pangasinan. Examinations were conducted by BFAR Central Fisheries Laboratory.
2. New aquatic animal health regulations introduced within past six months (with effective date):	