Lists of possible susceptible and vector species

NB: References to European Union legislation within this document are references to retained EU law as defined in the European Union (Withdrawal) Act 2018.

Table A

List of possible vector species and the conditions under which those species are regarded as vectors of the diseases listed in Annex 1A of Commission Regulation (EC) No 1251/2008.

Aquaculture animals of species listed in this table shall only be regarded as vectors for the purposes of the Aquatic Animal Health Regulations where those animals fulfil the conditions set out in the table.

This table is published by the Secretary of State, with the consent of the Scottish Ministers and Welsh Ministers, in accordance with Article 3 of Commission Regulation (EC) No 1251/2008.

Diseases	**Vector species**		
	Species which shall be regarded as vectors where the additional conditions set out in Columns 3 and 4 of this table are fulfilled	Additional conditions related to the place of origin of the aquatic animals of the species listed in Column 2	Additional conditions related to the place of destination of the aquatic animals of the species listed in Column 2
Column 1	Column 2	Column 3	Column 4
Epizootic haematopoietic necrosis	Bighead carp (*Aristichthys nobilis*), goldfish (*Carassius auratus*), crucian carp (*C. carassius*), common carp and koi carp (*Cyprinus carpio*), silver carp (*Hypophtalmichthys molitrix*), Chub (*Leuciscus spp*), Roach (*Rutilus rutilus*), Rudd (*Scardinius erythrophthalmus*), tench (*Tinca tinca*)	No additional conditions	No additional conditions
Infection with Bonamia exitiosa	Portuguese oyster (*Crassostrea angulata*), Pacific cupped oyster (*Crassostrea gigas*), American cupped oyster (*Crassostrea virginica*)	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they originate from a farm or mollusc farming area where species	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they are intended for a farm or mollusc farming area keeping

		susceptible to that disease are present.	species susceptible to that disease.
Infection with Perkinsus marinus	European lobster (*Homarus gammarus*), Marine crabs (*Brachyura spp*.), Yabi crayfish (*Cherax destructor*), Giant river prawn (*Macrobrachium rosenbergii*), Spiny lobsters (*Palinurus spp*.), Swimming crab (*Portunus puber*), Indopacific swamp crab (*Scylla serrata*), Indian white prawn (*Penaeus indicus*), Kuruma prawn (*Penaeus japonicus*), Caramote prawn (*Penaeus kerathurus*), Blue shrimp (*Penaeus stylirostris*), Whiteleg shrimp (*Litopenaeus vannamei*)	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they originate from a farm or mollusc farming area where species susceptible to that disease are present.	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they are intended for a farm or mollusc farming area keeping species susceptible to that disease.
Infection with Microcytos mackini	None	Not applicable	Not applicable
Taura syndrome	Penshells (*Atrina spp*.), Common whelk (*Buccinum undatum*), Portuguese oyster (*Crassostrea angulata*), Common edible cockle (*Cerastoderma edule*), Pacific cupped oyster (*Crassostrea gigas*), American cupped oyster (*Crassostrea virginica*), Wedge shell (*Donax trunculus*), Ezo abalone (*Haliotis discus hannai*), Tuberculate abalone (*Haliotis tuberculata*), Periwinkles (*Littorina littorea*), Northern quahog (*Mercenaria mercenaria*), Japanese hard clam (*Meretrix lusoria*), Sand gaper (*Mya arenaria*), Blue mussel (*Mytilus edulis*), Mediterranean mussel (*Mytilus galloprovincialis*), Octopus (*Octopus vulgaris*), European flat oyster (*Ostrea edulis*), Great Atlantic scallop (*Pecten maximus*), Grooved carpet shell (*Ruditapes decussatus*),	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they originate from a farm where species susceptible to that disease are present.	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they are intended for a farm keeping species susceptible to that disease.

	Japanese carpet shell (*Ruditapes philippinarum*), Common cuttlefish (*Sepia officinalis*), Stromboid conchs (*Strombus spp*.), European aurora venus clam (*Venerupis aurea*), Pullet carpet shell (*Venerupis pullastra*), Warty venus (*Venus verrucosa*) European lobster (*Homarus gammarus*), Marine crabs (*Brachyura spp*.), Yabi crayfish (*Cherax destructor*), Giant river prawn (*Macrobrachium rosenbergii*), Spiny lobsters (*Palinurus spp*), Swimming crab (*Portunus puber*), Indopacific swamp crab (*Scylla serrata*), Indian white prawn (*Penaeus indicus*), Kuruma prawn (*Penaeus japonicus*), Caramote prawn (*Penaeus kerathurus*).		
Yellowhead disease	Penshells (*Atrina spp*.), Common whelk (*Buccinum undatum*), Portuguese oyster (*Crassostrea angulata*), Common edible cockle (*Cerastoderma edule*), Pacific cupped oyster (*Crassostrea gigas*), American cupped oyster (*Crassostrea virginica*), Wedge shell (*Donax trunculus*), Ezo abalone (*Haliotis discus hannai*), Tuberculate abalone (*Haliotis tuberculata*), Periwinkles (*Littorina littorea*), Northern quahog (*Mercenaria mercenaria*), Japanese hard clam (*Meretrix lusoria*), Sand gaper (*Mya arenaria*), Blue mussel (*Mytilus edulis*), Mediterranean mussel (*Mytilus galloprovincialis*), Octopus (*Octopus vulgaris*), European flat oyster (*Ostrea edulis*), Great Atlantic scallop (*Pecten maximus*), Grooved carpet shell (*Ruditapes decussatus*), Japanese carpet shell (*Ruditapes*	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they originate from a farm where species susceptible to that disease are present.	No additional conditions apply related to the place of destination.

	philippinarum), Common cuttlefish (*Sepia officinalis*), Stromboid conchs (*Strombus spp*.), European aurora venus clam (*Venerupis aurea*), Pullet carpet shell (*Venerupis pullastra*), Warty venus (*Venus verrucosa*)		
Viral haemorrhagic septicaemia (VHS)	Beluga (*Huso huso*), Danube sturgeon (*Acipenser gueldenstaedtii*), Sterlet sturgeon (*Acipenser ruthenus*), Starry sturgeon (*Acipenser stellatus*), Sturgeon (*Acipenser sturio*), Siberian Sturgeon (*Acipenser Baerii*)	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they originate from a farm or river catchment area where species susceptible to that disease are present.	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they are intended for a farm keeping species susceptible to that disease.
	Bighead carp (*Aristichthys nobilis*), goldfish (*Carassius auratus*), Crucian carp (*C. carassius*), common carp and koi carp (*Cyprinus carpio*), silver carp (*Hypophtalmichthys molitrix*), Chub (*Leuciscus spp*), Roach (*Rutilus rutilus*), Rudd (*Scardinius erythrophthalmus*), tench (*Tinca tinca*) North African catfish (*Clarias gariepinus*), Northern pike (*Esox lucius*) Catfish (*Ictalurus spp*.), Black bullhead (*Ameiurus melas*), Channel catfish (*Ictalurus punctatus*), Pangas catfish (*Pangasius pangasius*), Pike perch (*Sander lucioperca*), Wels catfish (*Silurus glanis*) European seabass (*Dicentrarchus labrax*), Striped bass (*Morone chrysops x M. saxatilis*), Flathead grey mullet (*Mugil cephalus*), Red drum (*Sciaenops ocellatus*), Meagre (*Argyrosomus regius*), Shi drum (*Umbrina cirrosa*), True tunas	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they originate from a farm where species susceptible to that disease are present.	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they are intended for a farm keeping species susceptible to that disease.

	(*Thunnus spp*.), Atlantic bluefin tuna (*Thunnus thynnus*), White Grouper (*Epinephelus aeneus*), Dusky grouper (*Epinephelus marginatus*), Senegalese solea (*Solea senegalensis*), Common sole (*Solea solea*), Common pandora (*Pagellus erythrinus*), Common dentex (*Dentex dentex*), Gilthead seabream (*Sparus aurata*), White seabream (*Diplodus sargus*), Black spot seabream (*Pagellus bogaraveo*), Red Sea Bream (*Pagrus major*), Diplodus vulgaris, Sharop snout seabream (*Diplodus puntazzo*), Common two banded seabream (*Diplodus vulgaris*), Red porgy (*Pagrus pagrus*) Tilapia spp (*Oreochromis*)		
Infectious haematopoietic necrosis (IHN)	Beluga (*Huso huso*), Danube sturgeon (*Acipenser gueldenstaedtii*), Sterlet sturgeon (*Acipenser ruthenus*), Starry sturgeon (*Acipenser stellatus*), Sturgeon (*Acipenser sturio*), Siberian Sturgeon (*Acipenser Baerii*) Bighead carp (*Aristichthys nobilis*), goldfish (*Carassius auratus*), crucian carp (*C. carassius*), common carp and koi carp (*Cyprinus carpio*), silver carp (*Hypophtalmichthys molitrix*), Chub (*Leuciscus spp*), Roach (*Rutilus rutilus*), Rudd (*Scardinius erythrophthalmus*) tench (*Tinca tinca*) North African catfish (*Clarias gariepinus*), Catfish (*Ictalurus spp*.), Black bullhead (*Ameiurus melas*), Channel catfish (*Ictalurus punctatus*), Pangas catfish (*Pangasius pangasius*), Pike perch (*Sander lucioperca*), Wels catfish (*Silurus glanis*)	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they originate from a farm where species susceptible to that disease are present.	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they are intended for a farm keeping species susceptible to that disease.

	Atlantic halibut (*Hippoglossus hippoglossus*), Flounder (*Platichthys flesus*), Atlantic cod (*Gadus morhua*), Haddock (*Melanogrammus aeglefinus*) Noble crayfish (*Astacus astacus*), Signal crayfish (*Pacifastacus leniusculus*), Redswamp crayfish (*Procambarus clarkii*)		
Koi herpes virus (KHV) disease	None	Not applicable	Not applicable
Infectious salmon anaemia (ISA)	None	Not applicable	Not applicable
Infection with Marteilia refringens	Common edible cockle (*Cerastoderma edule*), Wedge shell (*Donax trunculus*), Sand gaper (*Mya arenaria*), Northern quahog (*Mercenaria mercenaria*), Japanese hard clam (*Meretrix lusoria*), Grooved carpet shell (*Ruditapes decussatus*), Japanese carpet shell (*Ruditapes philippinarum*), European aurora venus clam (*Venerupis aurea*), Pullet carpet shell (*Venerupis pullastra*), Warty venus (*Venus verrucosa*)	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they originate from a farm or mollusc farming area where species susceptible to that disease are present.	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they are intended for a farm keeping species susceptible to that disease.
Infection with Bonamia ostreae	Common edible cockle (*Cerastoderma edule*), Wedge shell (*Donax trunculus*), Sand gaper (*Mya arenaria*), Northern quahog (*Mercenaria mercenaria*), Japanese hard clam (*Meretrix lusoria*), Grooved carpet shell (*Ruditapes decussatus*), Japanese carpet shell (*Ruditapes philippinarum*), European aurora venus clam (*Venerupis aurea*), Pullet carpet shell (*Venerupis pullastra*), Warty venus (*Venus verrucosa*)	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they originate from a farm or mollusc farming area where species susceptible to that disease are present.	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they are intended for a farm or mollusc farming area keeping species susceptible to that disease.

	Great Atlantic scallop (*Pecten maximus*)		
White spot disease	Penshells (*Atrina spp*.), Common whelk (*Buccinum undatum*), Portuguese oyster (*Crassostrea angulata*), Common edible cockle (*Cerastoderma edule*), Pacific cupped oyster (*Crassostrea gigas*), American cupped oyster (*Crassostrea virginica*), Wedge shell (Donax trunculus, Ezo abalone (*Haliotis discus hannai*), Tuberculate abalone (*Haliotis tuberculata*), Periwinkles (*Littorina littorea*), Northern quahog (*Mercenaria mercenaria*), Japanese hard clam (*Meretrix lusoria*), Sand gaper (*Mya arenaria*), Blue mussel (*Mytilus edulis*), Mediterranean mussel (*Mytilus galloprovincialis*), Octopus (*Octopus vulgaris*), European flat oyster (*Ostrea edulis*), Great Atlantic scallop (*Pecten maximus*), Grooved carpet shell (*Ruditapes decussatus*), Japanese carpet shell (*Ruditapes philippinarum*), Common cuttlefish (*Sepia officinalis*), Stromboid conchs (*Strombus spp*.), European aurora venus clam (*Venerupis aurea*), Pullet carpet shell (*Venerupis pullastra*), Warty venus (*Venus verrucosa*)	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they originate from a farm where species susceptible to that disease are present.	Aquatic animals of the species listed in Column 2 shall only be regarded as vectors for the disease listed in Column 1 where they are intended for a farm keeping species susceptible to that disease.

Table B

List of species susceptible to the diseases listed in Annex 1A of Commission Regulation (EC) No 1251/2008.

This table is published by the Secretary of State, with the consent of the Scottish Ministers and Welsh Ministers, in accordance with Article 3A of Commission Regulation (EC) No 1251/2008.

Exotic Diseases		
	Disease	Susceptible Species
Fish	Epizootic haematopoietic necrosis	Rainbow trout (*Oncorhynchus mykiss)* and redfin perch (*Percha fluviatilis)*
Molluscs	Infection with *Bonamia exitiosa*	Australian mud oyster (*Ostrea angasi*) and Chilean flat oyster (*Ostrea chilensis*)
	Infection with *Perkinsus marinus*	Pacific oyster (*Crassostrea gigas*) and Eastern oyster (*Crassostrea virginica*)
	Infection with *Microcytos mackini*	Pacific oyster (*Crassostrea gigas*), Eastern oyster (*Crassostrea virginica*), Olympia flat oyster (*Ostrea conchaphila*) and European flat oyster (*Ostrea edulis*)
Crustaceans	Taura syndrome	Gulf white shrimp (*Penaeus setiferus*), Pacific blue shrimp (*Penaeus styrlirostris*), and Pacific white shrimp (*Litopenaeus vannamei*)
	Yellowhead disease	Gulf brown shrimp (*Penaeus aztecus*), Gulf pink shrimp (*Penaeus duorarum*), Kuruma prawn (*Penaeus japonicas*), black tiger shrimp (*Penaeus monodon*), Gulf white shrimp (*Penaeus setiferus*), Pacific blue shrimp (*Penaeus styrlirostris*), and Pacific white shrimp (*Litopenaeus vannamei*)
Non-exotic diseases		
	Disease	Susceptible Species
Fish	Viral haemorrhagic septicaemia (VHS)	Herring (*Clupea spp*.), whitefish (*Coregonus sp*.), pike (*Esox lucius*), haddock (*Melanogrammus aeglefinus*), Pacific cod (*Gadus*

		macrocephalus), Atlantic cod (*Gadus morhua*), Pacific salmon (*Oncorhynchus spp*.) rainbow trout (*Oncorhynchus mykiss*), rockling (*Ciliata mustela*), brown trout (*Salmo trutta*), turbot (*Scophthalmus maximus*), sprat (*Sprattus sprattus*) and grayling (*Thymallus thymallus*) and olive flounder (*Paralichthys olivaceus*)
	Infectious haematopoietic necrosis (IHN)	Chum salmon (*Oncorhynchus keta*), coho salmon (*Oncorhynchus kisutch*), Masou salmon (*Oncorhynchus masou*), rainbow or steelhead trout (*Oncorhynchus mykiss*), sockeye salmon (*Oncorhynchus nerka*), amago (*Oncorhynchus rhodurs*) chinook salmon (*Oncorhynchus tshawytscha*), and Atlantic salmon (*Salmo salar)*
	Koi herpes virus (KHV) disease	Common carp and koi carp (*Cyprinus carpio*)
	Infectious salmon anaemia (ISA); infection with genotype HPR-deleted of the genus Isavirus (ISAV)	Rainbow trout (*Oncorhynchus mykiss*), Atlantic salmon (*Salmo salar*), and brown and sea trout (*Salmo trutta*)
Molluscs	Infection with Marteilia refringens	Australian mud oyster (*Ostrea angasi*), Chilean flat oyster (*Ostrea chilensis*), European flat oyster (*Ostrea edulis*), Argentinian oyster (*Ostrea puelchana*), blue mussel (*Mytilus edulis*) and Mediterranean mussel (*Mytilus galloprovincialis*)
	Infection with Bonamia ostreae	Australian mud oyster (*Ostrea angasi*), Chilean flat oyster (*Ostrea chilensis*), Olympia flat oyster (*Ostrea conchaphila*), Asiatic oyster (*Ostrea denselammellosa*), European flat oyster (*Ostrea edulis*), and Argentinian oyster (*Ostrea puelchana*)
Crustaceans	White spot disease	All decapod crustacean (order *Decapoda*)

Table C

List of species susceptible to any diseases listed in Schedule 1 of the Aquatic Animal Health (England and Wales) Regulations 2009 and Schedule 1 of the Aquatic Animal Health (Scotland) Regulations 2009.

This table is published by the Secretary of State, with the consent of the Scottish Ministers and Welsh Ministers, in accordance with regulation 3B of the Aquatic Animal Health (England and Wales) Regulations 2009, and by the Scottish Ministers in accordance with regulation 3B of the Aquatic Animal Health (Scotland) Regulations 2009.

The geographic areas declared free from the diseases listed below in England and Wales can be found here.

The geographic areas declared free from the diseases listed below in Scotland can be found here.

Disease	**Susceptible species**
Infection with Gyrodactylus salaris	Atlantic salmon (*Salmo salar*), rainbow trout (*Oncorhynchus mykiss*), Arctic char (*Salvelinus alpinus*), North American brook trout (*Salvelinus fontinalis*), grayling (*Thymallus thymallus*), North American lake trout (*Salvelinus namaycush*), and brown trout (*Salmo trutta*). Other species of fish on sites where any of the above species are present shall also be considered as susceptible species.
Bacterial kidney disease	Fish belonging to the family *Salmonidae*.
Spring viraemia of carp	Bighead carp (*Aristichthys nobilis*), goldfish (Carassius auratus), crucian carp (*Carassius carassius*), grass carp (*Ctenopharyngodon idellus*), common carp and koi carp (*Cyprinus carpio*), silver carp (*Hypophthalmichthys molitrix*), sheatfish (*Silurus glanis*) and tench (*Tinca tinca*).
Ostreid herpesvirus l µvar (OsHV-1 µvar)	Pacific oyster (*Crassostrea gigas*).