

# IHHNV detection in England and Scotland

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## IHHNV - Infectious hypodermal and haematopoietic necrosis virus

- notifiable to OIE
- not listed disease under Directive 2006/88 or under national measures.
- susceptible species (OIE)
  yellowleg shrimp (Penaeus californiensis),
  giant tiger prawn (Penaeus monodon),
  northern white shrimp (Penaeus setiferus),
  blue shrimp (Penaeus stylirostris),
  whiteleg shrimp (Penaeus vannamei)
- wide distribution in wild and cultured penaeid shrimp (world-wide)
- not previously reported from Europe

#### Impact of infection varies by species

- P. stylirostris, usually very high mortalities
- *P. vannamei*, chronic disease, growth suppression, cuticular deformities; reduced hatch success





#### **IHHNV** in GB

#### affected sites

- Two proof of concept sites
- whiteleg shrimp (Penaeus vannamei, warm water shrimp) for human
- consumption for UK market
- small, inland aquaculture sites
- artificial heated seawater recirculation units
- closed containment units
- well away from coastal waters





#### affected population Scottish site:

- 350,000 post-hatch larval whiteleg shrimp (warm water shrimp)
- imported from USA April 2019
- increased morbidity / mortality
- culled on 16 July 2019, immediately after suspicion of IHHNV
- site has been disinfected.
- 300 broodstock (same US supplier; no clinical signs) also culled

#### affected population English site

- no clinical signs associated with IHHNV or increased mortality in stocks present on site
- five consignments imported from two suppliers in USA January to August 2019
- imported as specific pathogen-free (SPF) post larval shrimp
- site was investigated as one of the supplier sites (USA) had reported IHHNV, the same supplier as for the site in Scotland





#### Confirmation of disease (to OIE standard)

- on 13/08 (Scottish site) and 15/08 (English site).

#### **Containment measures**

#### Scottish site

- culled before confirmation of disease
- safe disposal of waste
- disinfection of site

#### English site:

- movement controls from point of suspicion of disease (8/8)
- risk assessment (risk of release of pathogen from infected site)
  - no susceptible species in UK
  - high biocontainment measures
  - negligible risk
- staged disinfection;





#### plan forwards

- high investment type aquaculture
- both sites intend to continue operation
- both sites aim to have IHHNV free stock
- limited IHHNV free suppliers
- aim to establish own disease free broodstock

#### disease monitoring

### England:

- post import testing of new imports by Competent authority
- supervision of staged disinfection



