**USA COMMENTS**

**THE USE OF ENVIRONMENTAL DNA METHODS FOR DETECTION OF
OIE LISTED AQUATIC ANIMAL DISEASES**

﻿A discussion paper developed by the OIE Aquatic Animal Health Standards Commission (Aquatic Animals Commission) for Member comments.

Version: 6 May 2021

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1. **Potential application of eDNA detection methods in the** **disease-specific chapters of the *Aquatic Manual***

The disease-specific chaptersof the *Aquatic Manual* recommend tests to identify suspect cases and to confirm suspicion for apparently healthy (or those of unknown health status) and clinically affected animals. Apparently healthy populations may fall under suspicion, and therefore be sampled, if there is an epidemiological link(s) to an infected population. Geographic proximity to, or movement of aquatic animals or aquatic animal products or equipment, etc., from a known infected population equate to an epidemiological link. Alternatively, healthy populations are sampled in surveys to demonstrate freedom.

The following points describe the suitability of evidence from eDNA detection methods for inclusion as case definition criteria in section 6 of the disease-specific chapters of the *Aquatic Manual.*

**a) Apparently healthy animals**

**i) Definition of suspect case in a population of apparently healthy animals**

*Suitable as a criterion*. A positive result obtained from an eDNA method recommended in the *Aquatic Manual* is considered to provide adequate evidence to be included as a criterion for a suspect case when known susceptible species exist in the same aquatic environment.

**Rationale:** Include “when known susceptible species exist in the same aquatic environment” to this definition. It is important that a case is only consider suspect if there are actually animals present to substantiate a positive finding. If not, suspect cases could be made based on a solely on an eDNA finding.