# Emergency preparedness of aquatic animal diseases: Norwegian experiences

Tore Håstein and Roar Gudding

National Veterinary Institute
Oslo, Norway
tore.hastein@vetinst.no
roar.gudding@vetinst.no

Håstein, T. & Gudding, R. 2005. Emergency preparedness of aquatic animal diseases: Norwegian experiences. p. 79–85. In: Subasinghe, R.P.; Arthur, J.R. (eds.). Regional workshop on preparedness and response to aquatic animal health emergencies in Asia. Jakarta, Indonesia, 21–23 September 2004. *FAO Fisheries Proceedings*. No. 4. Rome, FAO. 2005. 178p.

#### **ABSTRACT**

Outbreaks of disease may have large consequences for aquaculture production and thus significant impact on the economy at the local, regional and national levels. This paper describes the key elements in emergency preparedness based on Norwegian experiences. Norway has had fish disease legislation since 1968. Management of disease emergencies is a core responsibility of governmental authorities based on appropriate legislation. Regulations on notification, diagnosis, epidemiology and restrictions on trade as well as fallowing and disinfection are important tools in disease management. An effective organization and adequate personnel resources, as well as competent diagnostic laboratories, are also key elements. Furthermore, emergency preparedness includes disease prevention and control through implementation of factors such as movement control, sanitary slaughter and zoning. With the tools described, it is possible to handle emergencies in aquaculture optimally.

#### **INTRODUCTION**

Over the last decades, emerging or serious diseases such as viral haemorrhagic septicaemia (VHS), infectious haematopoietic necrosis (IHN), infectious pancreatic necrosis (IPN), viral nervous necrosis (VNN), epizootic ulcerative syndrome (EUS) and many others have been diagnosed in feral and farmed fish populations in different parts of the world where they were previously unknown to occur.

Outbreaks of severe disease may have dramatic consequences for aquaculture production and thus have significant impact on the economy at the local, regional and national levels. The losses may be due to reduced production, increased labour costs and increased expenses due to medication. In addition, restrictions on trade are becoming increasingly important as an economic consequence. Furthermore, diseases in farmed aquatic animals may affect the environment in different ways, for instance by transmission of infectious disease to the wild fish population, which may have a negative impact on the wild stock, e.g. infection of *Gyrodactylus salaris* in Norwegian rivers.

## Regional Workshop on Preparedness and Response to Aquatic Animal Health Emergencies in Asia

21–23 September 2004 Jakarta, Indonesia

Rohana P. Subasinghe
Inland Water Resources and Aquaculture Service
FAO Fisheries Department
Rome, Italy

and

### J. Richard Arthur

Barriere British Colombia, Canada