

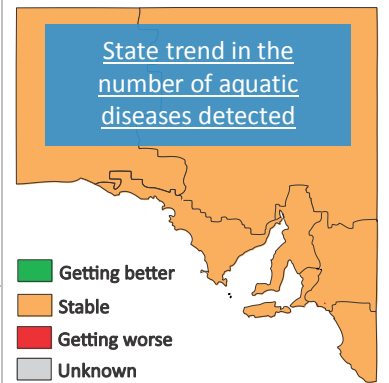
2016 State Report Card

Diseases affecting our aquatic species

Aquatic animal diseases can have devastating impacts on the marine and freshwater ecosystems that underpin our tourism (worth \$5.9 billion in 2016) and fisheries and aquaculture industries (farmgate value of \$433 million in 2015–16).

Disease outbreaks can result from poor environmental conditions and other stressors, which can increase susceptibility to existing diseases, or from the introduction of new diseases. Diseases can be introduced by the movement of contaminated boats and equipment or infected animals. The impact of exotic disease introductions can be devastating. For example, in both 1995 and 1998 an introduced virus killed about 70 per cent of the sardines in South Australia.

Preventing the introduction and establishment of new diseases is a high priority. The Department of Primary Industries and Regions South Australia (PIRSA) conducts surveillance for high priority diseases, investigates fish kills, regulates livestock translocations, regulates veterinary medicine use, enforces quarantine measures and develops response plans to mitigate the impacts of disease if one is detected (e.g. eradication or containment).



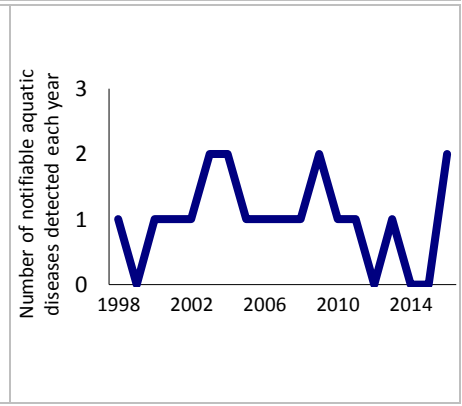
State target
Limit the establishment of pests and diseases and reduce the impact of existing pests

Trend (2012–2016) Stable Up to 2 endemic aquatic disease detections have been recorded each year

In South Australia, 60 diseases that affect fish and shellfish are regarded as [notifiable](#). The majority of these diseases are exotic and regarded as priorities to manage or keep out of our waters. Some diseases however, are endemic and naturally occur in our state; while not significant in SA they are notifiable under international trade agreements.

In the past six years there have been 64 investigations by PIRSA, which resulted in the detection of up to two diseases each year (graph on right). In 2016, two endemic diseases were detected, Bonamiasis, a parasite of oysters, and Perkinsus, a parasite of abalone.

Aquatic animal diseases are only investigated and recorded if they are reported to PIRSA. Most aquatic animal deaths are caused by natural events, while a small amount are caused by disease. It is possible that diseases are present which have not yet been identified.

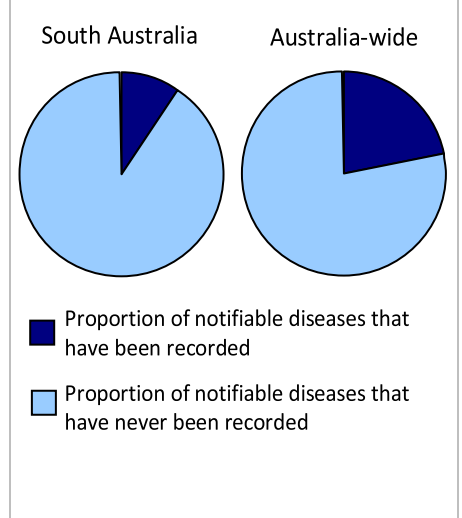


Where we are at (2016) Good South Australia is relatively free of aquatic diseases

Of the 60 notifiable fish and shellfish diseases, only six have been recorded in South Australia, compared to 19 for the whole of Australia (see graphs on right). These six diseases were only recorded in the marine environment.

In 2016, subclinical detections of *Bonamia exitiosa* were recorded in several oyster farms in South Australia. SARDI are undertaking research to better understand this pathogen. PIRSA successfully protected South Australia from an exotic notifiable disease, Pacific Oyster Mortality Syndrome (POMS), by restricting the movement of live oysters into the state from Tasmania where it was detected in February in 2016.

The South Australian Museum monitors disease outbreaks in marine mammals and, where possible, collects and carries out post-mortems on dolphins and whales washed up on the South Australian coastline. In 2013, an outbreak of a viral disease (Morbillivirus) contributed to the deaths of over 30 dolphins. Other diseases affecting marine mammals that have been identified include tuberculosis, which was found in one seal, and a naturally-occurring hookworm, which resulted in the deaths of some Australian sea lion pups.



Reliability of information ★★★★★ Good

Further information: [Technical information for this report card](#), [Aquatic Animal Health](#), [AQUAVETPLAN](#) disease strategy manuals.

