General

Injectable vaccines used for fish contain formalin-inactivated bacterial- and/or viral antigens, as well as oil adjuvants.

The normal dose is 0.05-0.1 ml and in some cases 0.2 ml. The dose is injected into the abdominal cavity of the fish, manually or automatically by machines. Close to 450 million doses were injected in 2011, half of them manually and the other half automatically. If the entire dose of a vaccine is accidentally injected into a digit the damage to the finger can be severe if not prompt medical treatment is administered.

The patient must be brought to a hospital for surgical attention within few hours of the incident

It has previously been recommended to have adrenalin available for treatment of anaphylactic shock. The risk of anaphylactic shock is assumed to be minuscular, during the last 20 years no cases involving anaphylactic shock after a self-injection of a fish vaccine have been reported. Any emergency situations should be handled by the local health service.

It is recommended that the local health service is alerted about upcoming vaccinations so they are informed about the potentially occurring health risks.

This procedural information should be enclosed. The personnel performing the vaccination must be given proper training prior to vaccination. The safety and emergency precautions in case of accidental self-injection should be well known to all personnel involved in vaccination. The owner of the farm, represented by the manager in charge is responsible for making sure that all safety and emergency measures and routines are in place prior to vaccination; hereby also alerting the local health service prior to vaccinations.

Automatic injection by machine

After an accidental self-injection the whole dose or the most of the dose may end up in the finger. The finger must be examined by a surgeon within few hours of injection! In addition to a local reaction in the finger (pain, swelling, discoloration) swelling in the arm, fatigue, nausea and fever can develop. With the right treatment, the finger will heal by itself. Antibiotics (penicillin etc.), anti-inflammatory drugs or painkillers are not sufficient treatments. If the finger is not given surgical attention the result could be loss of affected finger.

NOTE: Never use your fingers to remove fish from the automatic vaccination machine, use a sausage tong or similar!

Information to the vaccinator

After self-injection there is a theoretical possibility for anaphylactic shock. In this case, the symptoms will develop within a few minutes after self-injection.

In addition to the local reactions at the injection site the person will feel nauseous, and may also feel itching on the skin or around eyes and mouth. A feeling of heat and a red flaming rash may occur in some cases. This is commonly followed by palpitation, anxiety and fatigue.

The gastro-intestinal tract can become irritated and give abdominal pain, nausea and vomiting.

In severe cases the patient may develop shortness of breath, lethargy and loss of consciousness. Involuntary urination and bowel movements may also occur.

If the patient shows signs of anaphylactic shock, arrange to transport the person to closest ER or hospital immediately!

Call 113 – and report a possible anaphylactic reaction after self-injection of vaccine!

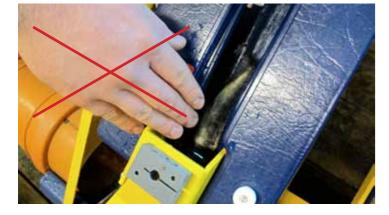
Every minute counts!

Manual vaccination

If the tip of the needle scratches the skin only a local inflammation will develop and no particular treatments are needed except from painkillers when needed.

If additional fatigue, nausea or fever develops it is possible that a larger part of the dose has been injected, if the pain lasts for more than 6 hours the vaccinator should seek immediate medical attention.

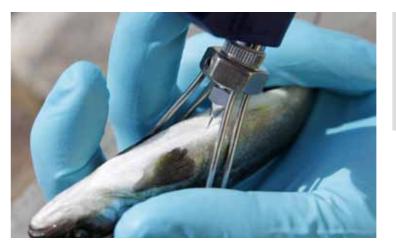
If the whole dose has been injected the finger must be examined by a surgeon according to procedures described under "Automatic injection by machines"



Never use your hands to remove fish from the automatic injector



Use a sausage tong or similar



Manual vaccination with a protective guard

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