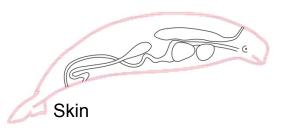
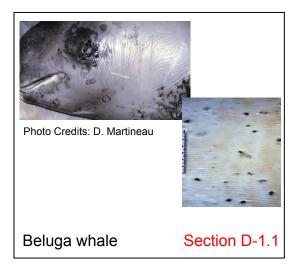


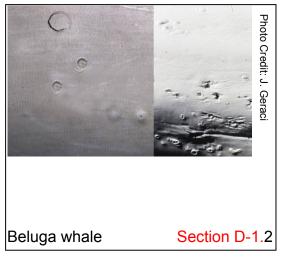
#### Diseases and Parasites of the Beluga



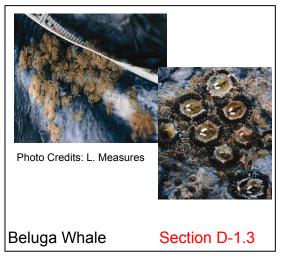
**Skin infections** 



#### Skin craters

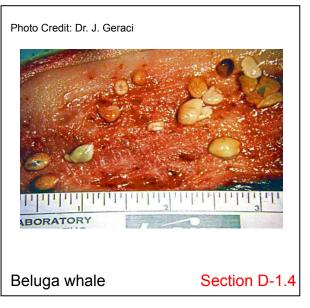


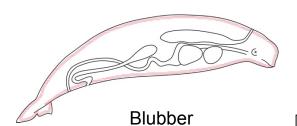
Whale lice



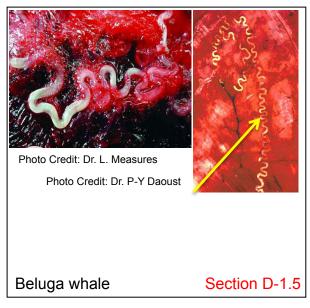
#### Diseases and Parasites of the Beluga

#### Blubber cysts

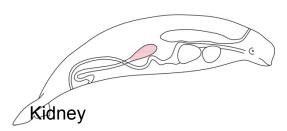




#### Worms between blubber and meat



#### Diseases and Parasites of the Beluga



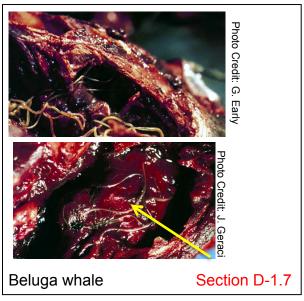
#### **Kidney worms**



Beluga whale

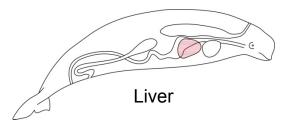
Section D-1.6

#### Worms in the blowhole

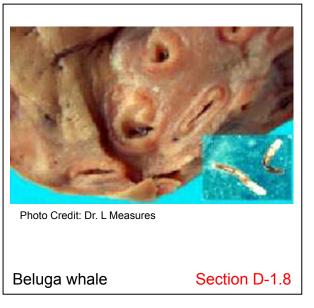


Biowhole

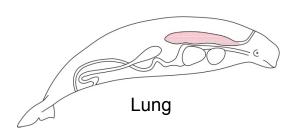
#### Diseases and Parasites of the Beluga

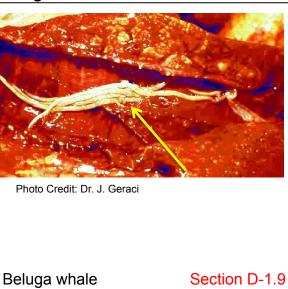


Liver Fluke



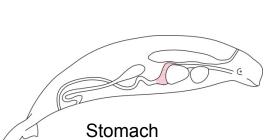
#### Lungworms



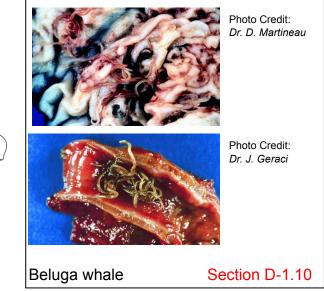


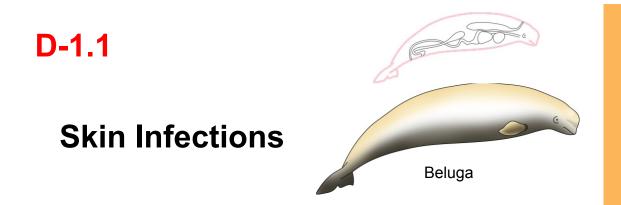
Section D-1.9

#### Diseases and Parasites of the Beluga

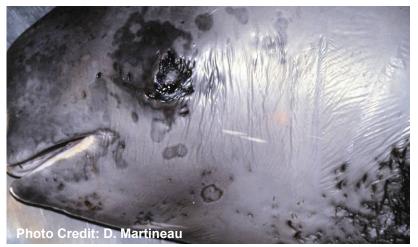


#### **Stomach worms**





1. Where is it found ?



- Sores can be found anywhere on the body.
- Skin may be dry and peeling.
  Large patches may be discoloured.
- The exact cause is unknown.
- Found only in St. Lawrence River population, not yet seen in Nunavut.

#### 2. What is it ?

- Skin infections cause severe skin disease.
- Sores can vary in size, colour, shape and location. They can rupture and be slow to heal.

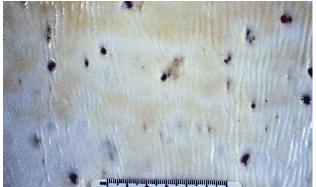


Photo Credit: D. Martineau



#### **Skin Infections**

## 3. Is it safe to butcher the beluga ?



Wear gloves or plastic bags over hands.

## 4. Is it safe to eat the beluga ?



It is not recommended that the muktuk of affected areas be eaten.

It is not recommended to eat any parts of the beluga if more than one third of the whale has this condition.

#### 5. Is it safe to feed to dogs ?

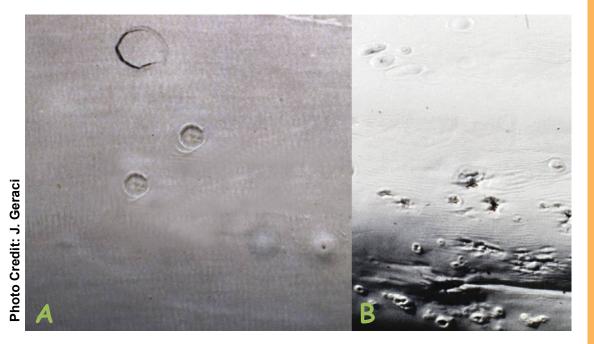
It is not recommended to feed dogs anything not safe for people to eat.





#### 1. Where are they found ?

• Skin craters can be found anywhere on the body.



#### 2. What are they ?

• Skin craters are circular depressions on the skin, often with a thin raised edge around the circle.

• Skin craters are variable in size and shape as seen in photos A and B.

• Their cause is unknown, but appearance suggests that they may be caused by a virus.



#### Skin "Craters"

## 3. Is it safe to butcher the beluga ?

## 4. Is it safe to eat the beluga ?

It is not recommended to eat skin and underlying blubber from areas with skin craters.

#### 5. Is it safe to feed to dogs ?

SAFE

CAUTION

It is not recommended to feed skin or underlying blubber to dogs from areas with skin craters.

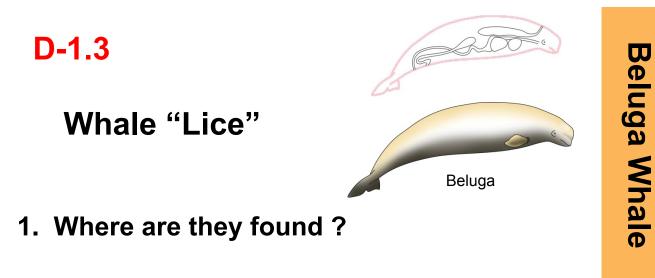


Photo Credit: L. Measures





• Whale "lice" live in cracks and on barnacles and bumps on the skin of whales.

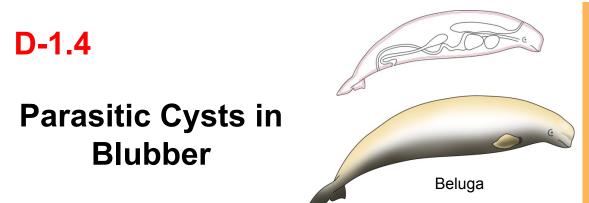
• Whale "lice" do not cause disease, but large numbers may indicate an unhealthy whale.

#### 2. What are they ?

• Whale "lice" are not really lice, but are small water-living animals.



3.	Is it safe to butcher the beluga ?	SAFE
4.	Is it safe to eat the beluga ?	SAFE
5.	Is it safe to feed to dogs	?



#### 1. Where are they found ?

• Sacs, or cysts, can occur anywhere in blubber but are most often found on the underside of the animal.



#### 2. What are they ?

• The fluid-filled cysts contain an immature tapeworm.

• The tapeworms will mature only in a different animal which is likely a shark.



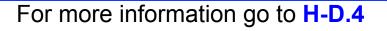
### **Parasitic Cysts in Blubber**

- 3. Is it safe to butcher the beluga ?
- 4. Is it safe to eat the beluga ?

It is recommended to cut away cysts before eating.

5. Is it safe to feed to dogs ?

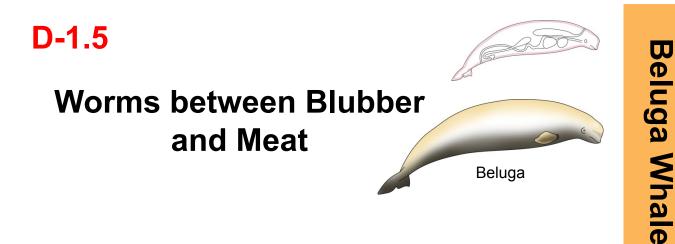
It is recommended to cut away cysts before feeding to dogs.





SAFE

CAUTION



#### 1. Where are they found ?

• Worms generally occur in the tissue where the blubber and meat connect such as seen in Photo A.



• Worms can also occur in other locations.

• Sometimes the worms can still be seen after they have died and become hardened as shown in Photo B.

#### 2. What are they ?

• They are parasitic worms called roundworms.



#### **Worms between Blubber and Meat**

3.	Is it safe to butcher the beluga ?	SAFE
4.	Is it safe to eat the beluga ?	SAFE
5.	Is it safe to feed to dogs ?	

# D-1.6 Worms in the Kidney

#### 1. Where are they found ?

• Worms are found in large numbers inside the kidney.

#### 2. What are they ?

• These are large parasitic roundworms.

#### Worms in the Kidney

3. Is it safe to butcher the beluga ?

c c

## 4. Is it safe to eat the beluga ?

It is recommended to either cut out and throw away any kidneys with worms, or cook any kidneys having worms before eating.



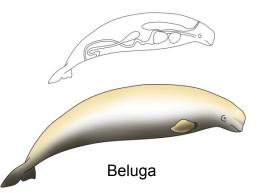


#### 5. Is it safe to feed to dogs ?

It is recommended to cook kidneys first before feeding to dogs.

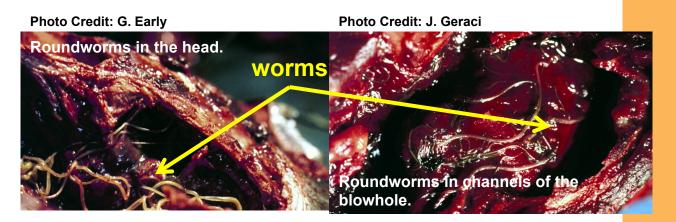


#### Worms in Blowhole and Head



#### 1. Where are they found ?

• These worms can be found anywhere in the head, including the ear and channels connected to the blowhole.



#### 2. What are they ?

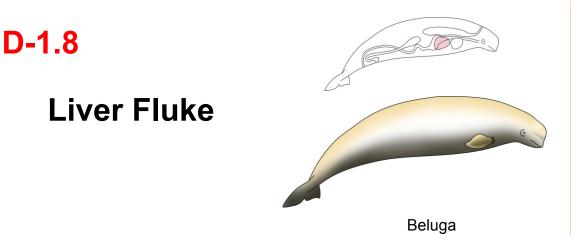
• Parasitic roundworms and or flukes.



#### **Worms in Blowhole and Head**

- 3. Is it safe to butcher the beluga ?
  4. Is it safe to eat the beluga ?
  - 5. Is it safe to feed to dogs ?





**Beluga Whale** 

1. Where are they found ?

• Flukes are

often found

in the tubes

of the liver

pancreas.

and



Photo Credit: Dr. L Measures

• Flukes in these tissues can often cause sores that can spread to neighboring tissues.

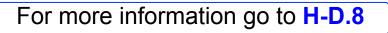
#### 2. What are they ?

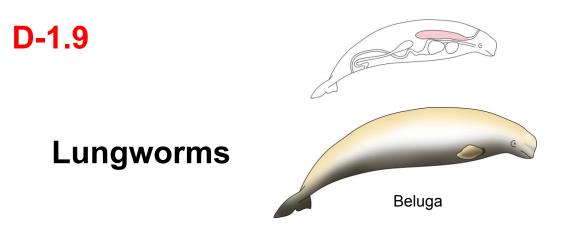
• Flukes are small, flat, worm-like parasites.



#### **Liver Fluke**

Is it safe to skin the whale ?
 Is it safe to eat the whale ?
 Is it safe to feed to dogs ?





#### 1. Where are they found ?

- Lungworms are found in the lungs of Belugas.
- Different species of lungworms are found in seals.

#### 2. What are they ?

 Lungworms are parasitic roundworms.

• Worms (< 7 cm) and/or small round grey lumps of dead tissue (<2 cm) may be found when butchering.

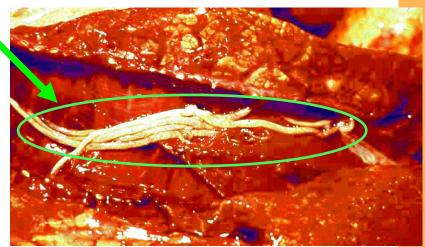
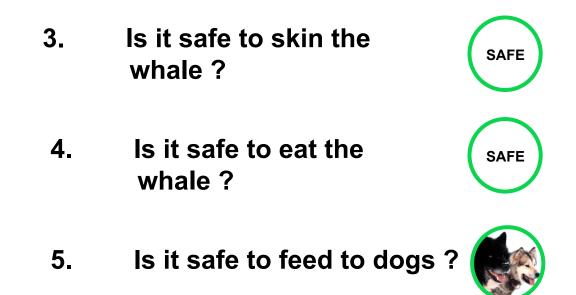


Photo Credit: Dr. J. Geraci

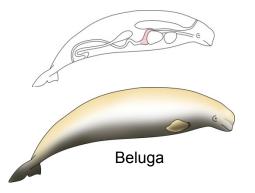


#### Lungworms



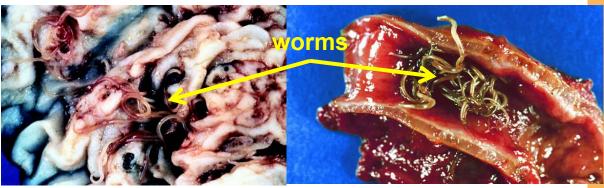
#### D-1.10

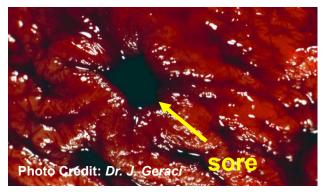
#### **Stomach Worms**



#### 1. Where are they found ?

Photo Credit: Dr. D. Martineau





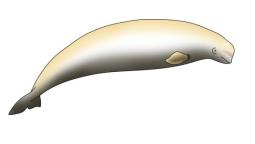
• Stomach worms can be found anywhere in the stomach and also in the intestines.

• Worms can burrow into tissues causing sores.

#### 2. What are they ?

• Stomach worms are parasitic roundworms.

• Beluga are infected by eating infected fish. The fish become infected from eating infected invertebrates such as krill.



#### **Stomach Worms**

5.

#### 3. Is it safe to skin the whale ?

4. Is it safe to eat the whale ?

It is not recommended to eat infected stomach or intestines raw.

SAFE

Is it safe to feed to dogs ? It is not recommended to feed

dogs infected stomach or intestines raw.