Incidental Gross Necropsy Findings in Subsistence-Harvested Ice seals and Walruses

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- Ice-associated seals (ringed, bearded, spotted seals) and Pacific walruses are important subsistence species for Arctic coastal communities.
- Under the “New Arctic Normal”, morbidity and mortality rates among Arctic marine mammals may change (Figure A.).
- Natural causes of morbidity and mortality are generally not well documented for Arctic marine mammals.
- Examination of subsistence-harvested marine mammals (healthy and hunter concern) is an important Arctic ONE health monitoring tool providing relevant food safety-food security information for subsistence users as well as important wildlife health management information (Figure B).

Incidental gross findings among following ice seals and walruses systems included:
- Reproductive system: adnexal cysts, uterine and penile melanosis, cliteromegaly, cryptorchism, and retained placenta
- Endocrine system: thyroid cysts, adrenal nodules
- Musculoskeletal system: synovial cyst
- Integumentary system: panniculitis, epidermal molt (aka dreadlocks), skin sloughing
- Respiratory system: lung tumor, parasitic granulomas
- Digestive system: microdontia, chronic interstitial pancreatitis, hepatic cyst, cholestatic jaundice, geophagia, and primary diffuse peritoneal tumor.
- Parasites: Helminths were commonly observed in the gastrointestinal system of ice seals (gallbladder flukes; tapeworms etc.), but not as commonly in the respiratory system. Ectoparasites were not observed i.e. lice.
- A variety of the observed disease conditions are reported for the first time in ice seals and/or walruses.
- The majority of observed conditions in our material is classified as benign and are mostly inconsequential to the health of the harvested animals.

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