

Veterinary Diagnostic Services Lab Notes

October 2024

Volume 2, Issue 3



Dr. Glen Duizer Appointed as New Chief Veterinary Officer

This fall, the Manitoba government named Dr. Glen Duizer as the province's Chief Veterinary Officer (CVO), a role responsible for leading provincial work on issues concerning animal health. Responsibilities of the CVO encompass animal health, the interconnectedness of animal and human health (One Health) and supporting resiliency in the livestock and poultry sectors.

Following graduation from the Atlantic Veterinary College in 1995, Dr. Duizer spent several years in mixed animal and food animal practice in the Maritimes and southeastern Manitoba. He joined Manitoba Agriculture in 2005, taking on roles in veterinary extension, as well as animal health surveillance. Dr. Duizer's expertise in epidemiology, emergency preparedness, and disease surveillance and response will continue to contribute to the health and well-being of animals within the province.

With the creation of the new Provincial Veterinarian – Animal Welfare role to lead the Animal Welfare Program, the Animal Health and Welfare branch has moved to a collaborative two Director model. This position complements the work of the existing Chief Veterinary Officer who leads all files related to animal health.

Dr. Lisa Joachim fills new position as Acting Provincial Veterinarian – Animal Welfare

Dr. Lisa Joachim has been appointed Acting Provincial Veterinarian – Animal Welfare (PV-AW). This senior management position was created in March 2024 to strengthen focus and leadership on companion and commercial animal welfare. The PV-AW leads all aspects of the Animal Welfare Program for Manitoba. Lisa graduated with a Doctor of Veterinary Medicine degree in 2015 from the Western College of Veterinary Medicine in Saskatoon. She has been with the department for five years and previously worked in both industry and private practice, with a focus on dairy and small ruminants, and a special interest in calf immunity. Outside of work, her time is devoted to an ever-growing diverse farm of unique characters with big personalities.

Welcome Dr. Paula Conrad to the Branch

In August of 2024, Dr. Paula Conrad joined Manitoba Agriculture as an Animal Welfare Veterinarian. Growing up in Winnipeg, Dr. Conrad attended the Faculty of Agriculture at the University of Manitoba followed by her Doctor of Veterinary Medicine at the University of Minnesota. She spent many years in mixed-animal practice, supporting the communities of Brandon, Glenboro, Notre Dame, Carman, Pilot Mound and Killarney, and later joined the Canadian Food Inspection Agency (CFIA).

Dr. Conrad lives on a farm at St. Alphonse where her family raises registered Percheron horses and spends her free time hiking with her German Wirehaired Pointer who is described as "the bestest boy ever". Her many years of varied clinical experience bring much expertise to the province's animal welfare program and the branch looks forward to her contributions to the well-being and health of animals in Manitoba.

Holiday Closures

VDS will be closed on Remembrance Day – November 11, 2024

VDS Team

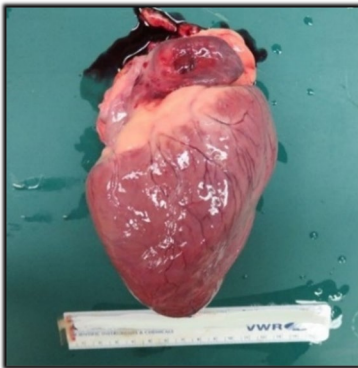
Dr. Glen Duizer – Chief Veterinary Officer
Dr. Lisa Joachim – Acting Provincial Veterinarian – Animal Welfare
Dr. Md Niaz Rahim – Chief Scientific Officer
Dr. Neil Pople – Anatomic Pathologist/ Veterinary Microbiologist
Dr. Marek Tomczyk – Anatomic Pathologist
Dr. Brenda Bryan – Anatomic Pathologist
Dr. Vasyil Shpyrka – Diagnostic Pathologist
Dr. Karlyn Bland – Clinical Pathologist
Shannon Korosec – Supervisor, Microbiology
Cheryl Friday – Supervisor, Microbiology
Tracy Scammell-LaFleur – Supervisor, Virology
Rhonda Gregoire – Supervisor, Clinical Pathology
Agnieszka Gigiel – Supervisor, Accessioning
Genedine Quisumbing – Quality Assurance Officer
Sharon Niebel – SAP/Revenue Clerk
Lindsay McDonald Dickson – SAP Clerk
Barb Bednarski – Client Services Coordinator/Reception

Canine Cardiac Splenic Hepatic Hemangiosarcoma

Dr. Brenda Bryan, DVM, MVetSc, VDS

A dog was submitted to VDS for postmortem examination after experiencing a short duration of illness. It had been feeling unwell, characterized by vomiting and labored breathing, and died during the night.

On necropsy, the right auricle of the heart had a two cm focus, slightly raised, soft red plaque surrounded by tan to white to red multifocal to coalescing nodules. In the abdomen, there was 3.6 to 4.0 litres of dark red blood. The edge of the spleen had a 13cm x 10cm blood filled mass with a ragged rupture. A second smaller, three cm, splenic mass with a ragged ulcerated surface was also noted.



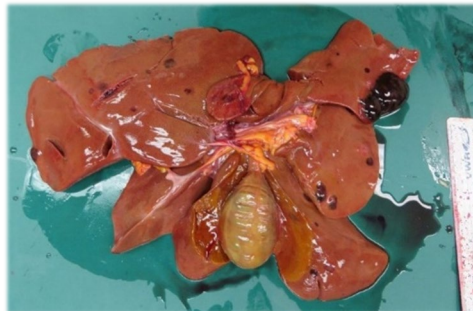
Hemangiosarcoma nodule on right auricle of the heart.



Hemorrhage from a ruptured hemangiosarcoma mass on the spleen.

The liver had multifocal, round, dark red, solid to blood filled nodules, exophytic to flat, measuring between five mm to three cm in diameter on the surface and in the parenchyma. The cause of death was exsanguination secondary to the large splenic mass that ruptured and bleeding out into the abdominal cavity.

Hemangiosarcoma is a mesenchymal tumour composed of neoplastic endothelial cells that form soft, friable blood-filled channels and caverns which easily rupture. Because of this neoplastic tissue fragility, hemangiosarcoma may be subclinical for some time, with sudden rupture and haemorrhage or exsanguination into body cavities leading to death.



Multifocal hemangiosarcoma metastasis on the liver.

Hemangiosarcoma most commonly presents as a multicentric disease involving spleen, liver and right heart auricle. Spleen and right heart auricle are considered primary sites. The tumour may also metastasize to the lung, and implant in the abdomen. Liver is the most common site of metastasis. Hemangiosarcoma is one of the most aggressive cancers in dogs and as it is highly metastatic, it carries a poor prognosis. Histological grading systems with clear prognostic impact are lacking. There is a breed disposition for golden retrievers, labrador retrievers, German shepherds, boxers, cocker spaniels and mixed breeds.

Continued on next page

Pet Spotlight: Tucker and Pearl



At 16 and 14 years old, Tucker and Pearl are still posing for their awkward back-to-school photos – owned and tended to by Dr. Samyra Stuart-Altman

We love sharing photos!

We encourage VDS clients and Animal Health & Welfare staff to send any great animal photos or Manitoba moments our way to share with the veterinary community.

Photos can be sent to chiefveterinaryoffice@gov.mb.ca with the subject "VDS Lab Notes Pet Photos".

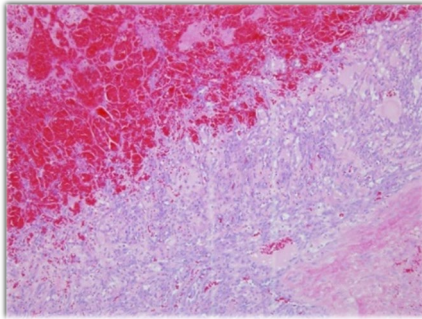
Did You Know?

In Manitoba, over 97 per cent of chicken farms are family owned and operated.

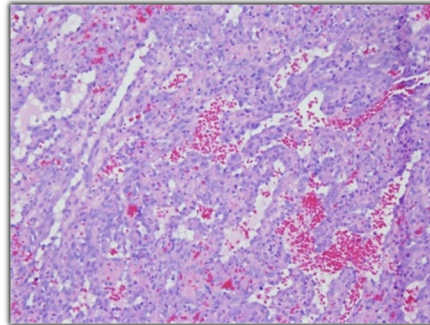
We hope everyone has enjoyed a lovely Manitoba autumn!



Canine Hemangiosarcoma continued



Histologic section of the spleen. The splenic capsule is pink tissue at the bottom right, hemorrhage is in the upper left and hemangiosarcoma is sandwiched between these. Hemangiosarcoma neoplastic cells are fragile and easily loosen, releasing blood from channels and caverns, forming large splenic blood clots.



Histologic section of the hemangiosarcoma mass in the spleen. Vacant and blood-filled channels and caverns form in the mass, lined by the neoplastic endothelial cells that are supported by collagen.

Update on Highly Pathogenic Avian Influenza in Dairy Cattle

Since the March 2024 confirmation of Highly Pathogenic Avian Influenza (HPAI) in American dairy cattle, much effort has been dedicated to protecting Manitoba producers and animals, with stakeholders across the province working together to develop provincial preparedness plans.

As of October, HPAI has not been identified in Canadian dairy cattle. The United States (US) continues to deal with an increasing case count, especially in California dairy herds. It is believed that HPAI has been transmitted between herds through animal movements, but human and mechanical transmission may also be contributing.

A few important reminders about HPAI in dairy cattle include:

- Milk from affected cattle contains high numbers of HPAI virus
- Clinical signs in cattle may vary, but it often presents as a sudden decrease in milk production along with a change in the milk consistency (thicker, colostrum-like milk)
- Strict biosecurity is extremely important to prevent viral transmission – limiting traffic on a dairy operation is essential, especially in areas where direct contact with livestock occurs
- If HPAI is identified in Canada:
 - o Sharing labourers and equipment between different livestock premises is highly discouraged
 - o Replacement animals should be sourced from herds with a high health status – limiting animal movements onto the farm will be critical

Vaccination of farm owners and employees with the human influenza vaccine is also highly recommended. When a human or animal is infected with more than one type of influenza virus, there is risk that the different influenza strains can exchange genetic material. The seasonal flu vaccine can decrease the chance of infection with human influenza, therefore decreasing the risk that humans are the “mixing vessel” for influenza viruses.

Further questions on HPAI in dairy cattle can be directed to a herd veterinarian, the CVO or VDS.

VDS Dashboard

Visit here for the latest information on cases counts, tests conducted, and pathology diagnoses.

Veterinary Diagnostic Services Contact Information

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