In the last issue of the Manitoba Animal Health Bulletin, I mentioned that VDS would be distributing a short electronic survey to our veterinary clients in February. Why did we do this? For the same reasons most businesses and researchers conduct surveys.

1. To uncover answers – it is important for VDS to understand your requirements and our hope is that an anonymous survey would allow our clients to be open and honest in their feedback.

2. To evoke discussion – surveys are an opportunity for respondents to discuss key areas of interest and provide VDS the information required to not only take action, but to delve further into specific topics utilizing ongoing communications.

3. To base decisions on objective information – conducting surveys is an unbiased approach to decision-making. The generated data enables us to develop sensible business decisions based on analyzed results rather than relying on a “gut feel”. It also allows us to immediately address topics our clients have identified as important rather than wasting resources and time on areas of little or no value.

4. To compare results – surveys provide a snapshot of the attitudes, thoughts, opinions and concerns of the target survey population. This creates a valuable baseline which will be used to measure and establish a benchmark from which to compare results over time.

A summary of the survey results can be found in this bulletin, but I wanted to use this opportunity to thank each of you that took the time to respond. We had a survey return rate of 30% which is tremendous and very much appreciated. In addition, I wanted to assure you that we have analyzed the results and read your comments and I pledge to you that we will be
acting on those areas that require improvement and reporting on our progress over the next few months.

A recent survey published by Survey Monkey indicated that 40% of survey respondents think that companies/organizations will only pay a moderate amount of attention to their feedback. I have stated on more than one occasion that we at VDS recognize that the field of animal health is constantly evolving and as such, we need to continually evaluate and improve our services to ensure your needs are met. This is our responsibility. However to meet this objective we definitely benefit from your assistance and the information you provide in these types of surveys does just that. We have paid attention to your feedback and will be acting on it. Thank you!

As always if you have any comments or would like to submit content for consideration for publication in this bulletin please feel free to contact me. Until next time …

Questions/Comments
204-945-8380
david.hunt@gov.mb.ca

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**PCR Testing for Swine Deltacoronavirus at Veterinary Diagnostic Services**

- Dr. Neil Pople

In February 2014, a new porcine coronavirus was discovered in Ohio swine. The virus is a *Deltacoronavirus* distinct from other coronaviruses affecting pigs. In March, this virus was detected in Ontario farms affected by diarrhea outbreaks. Clinical signs of swine deltacoronavirus infection are reported to be similar to those caused by transmissible gastroenteritis coronavirus (TGEV) and porcine epidemic diarrhea virus (PEDV) – diarrhea with or without vomiting in all age groups and mortality in nursing piglets.

A PCR assay for swine deltacoronavirus is now available at VDS. Until the submission forms are updated, clients requesting this test should write “deltacoronavirus” or “SDCV” on the submission form.

The assay was originally developed at the Animal Health Laboratory in Guelph, Ontario and the protocols were received by VDS through participation in the Canadian Animal Health Surveillance Network. The assay was prepared for use at VDS by Andre Hamel, PCR Scientist.

Sampling protocols are the same as those used for PEDV and TGEV. When investigating a diarrhea outbreak, rectal swabs from individual pigs should be collected. The same swabs can be tested for SDCV, PEDV, TGEV and the porcine rotaviruses.

For surveillance purposes, pooled rectal swabs or fecal samples can be submitted. Feces should be placed in rigid, sealable containers such as urine cups, not in bags or gloves. As with other enteric pathogens, testing of oral fluids is acceptable, but we strongly recommend that surveillance programs include fecal sampling. Fluid from environmental swabs submitted for PEDV testing can also be tested for SDCV.

Questions about testing for Swine Deltacoronavirus should be directed to Dr. Neil Pople at 204-945-7696 or neil.pople@gov.mb.ca
Anaplasma marginale (order Rickettsiales, family Anaplasmataceae) is a tick-borne bacterium that infects and replicates in bovine erythrocytes. Erythrocyte lysis caused by release of infectious organisms and removal of infected erythrocytes by the immune system result in hemolytic anemia.

Most disease is noted in cattle over one year of age. The incubation period varies from 2 to 5 weeks postinfection. Constant or intermittent fever may be seen in the first 2 weeks. Other nonspecific signs include depression, inappetance, weight loss and decreased milk production. Anemia and icterus without hemoglobinuria should raise suspicion of anaplasmosis. Yearlings generally recover from the infection, but the mortality is high (up to 50%) in cattle over three years of age. Disease is mild or subclinical in calves; clinical signs are typically absent in calves under 6 months of age. Young calves and adults that survive the acute stage develop persistent, lifelong infections with lower but fluctuating levels of organisms.

In this region, the main tick vector of Anaplasma marginale is the American dog tick, Dermacentor variabilis (commonly called “wood ticks” in Manitoba). The main mechanical vectors are biting flies such as horse flies, deer flies, stable flies and midges. Mechanical transmission via blood-contaminated needles or instruments also occurs. Cattle in the acute stage are more likely to be sources for mechanical transmission. Chronically infected cattle act as reservoirs for infection of tick populations.

Hematology findings may allow a presumptive diagnosis of anaplasmosis. In the acute stage, clusters of organisms may be visible as basophilic bodies at the periphery of erythrocytes. These can be numerous within 2 weeks of the onset of fever but are often undetectable a few weeks postinfection.

A real-time PCR assay for Anaplasma marginale is now available at VDS. The assay targets a segment of ribosomal RNA and uses reverse transcriptase to make a DNA copy for PCR amplification. A bacterial cell will contain numerous copies of rRNA but generally only one copy of the corresponding rDNA. Therefore, the test will more sensitive than a PCR assay that uses a DNA target. The appropriate sample for PCR testing is blood in EDTA. The same blood sample can be used for a complete blood count and PCR testing.

Serologic methods such as cELISA are more cost-effective for herd screening. For the immediate future, serologic testing will be done at a referral laboratory.

Bovine anaplasmosis is provincially reportable and, at the federal level, it is immediately notifiable. Veterinarians who suspect anaplasmosis in a herd should contact the Office of the Chief Veterinarian (CVO) before submitting samples to VDS.

To report suspected anaplasmosis or to get more information about Manitoba’s bovine anaplasmosis policies and procedures, contact Dr. Glen Duizer at 204-945-4174 or the Office of the Chief Veterinarian at 204-945-7663.
2014 Client Survey Results

An anonymous, electronic survey was distributed to our veterinary clients this past February. The purpose of the survey is to assist VDS with the ongoing efforts to continuously improve client services. I am happy to report that in addition to the information gained from your responses, there were a number of comments that will be explored in more detail and acted upon. These improvements will be communicated in future issues of the Manitoba Animal Health Bulletin. In the meantime, the responses to the survey questions are as follows:

Survey return rate = 30%

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Unsure*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you find laboratory submission forms easy to complete?</td>
<td>96.4%</td>
<td>3.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Are you satisfied with laboratory test turnaround times?</td>
<td>85.8%</td>
<td>7.1%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Are you satisfied with the laboratory report format?</td>
<td>67.9%</td>
<td>28.6%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Do you find VDS invoices easy to understand?</td>
<td>67.9%</td>
<td>10.7%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Are VDS laboratory staff courteous and professional?</td>
<td>82.1%</td>
<td>3.6%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Are you satisfied with responses to technical questions and concerns?</td>
<td>75.0%</td>
<td>7.1%</td>
<td>17.9%</td>
</tr>
<tr>
<td>Are there specific tests that you require, but VDS does not offer?</td>
<td>39.3%</td>
<td>39.3%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Do you find the Manitoba Animal Health Bulletin produced by VDS to be of value?</td>
<td>65.2%</td>
<td>17.4%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Overall are you satisfied with VDS service?</td>
<td>82.6%</td>
<td>13.1%</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

*Comments from respondents answering “Unsure” indicated that either the question was not applicable to their situation or that they could not provide a conclusive response.

Thank you to everyone that responded. We have gained a great deal of insight from this very short survey and will strive to ensure we are meeting your service expectations and requirements. As you know, your questions and comments are always welcome. Please contact me at david.hunt@gov.mb.ca or 204-945-8220.
Rabies Inquiry Information

As of April 1, 2014, the Canadian Food Inspection Agency (CFIA) will no longer be involved with rabies management. The Manitoba departments of Health, Healthy Living & Seniors (MHHLS), Agriculture, Food and Rural Development (MAFRD) and Conservation & Water Stewardship (CWS) will now collectively coordinate the provincial rabies program. The CFIA will continue to test animal specimens for rabies. However, sample collection, specimen shipping and dissemination of testing results to relevant officials in the affected region will be coordinated by provincial staff.

To:

- Report a case of human exposure to an animal suspected of having rabies whereas exposure is defined as transmission through open wounds such as a bite or scratch, or by contact with mucous membranes; or
- Find out general information about rabies

Contact Health Links – Info Santé
Phone: 204-788-8200 in Winnipeg or toll-free 1-888-315-9257

To:

- Report a case of domestic animal exposure to an animal suspected of having rabies (where no human exposure has occurred)

Contact Manitoba Agriculture, Food and Rural Development
Phone: 204-470-1108

To:

- Report any strange-acting or dead animals found on your property contact the local public health unit or animal control office.

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Staff News

Welcome back! You both were very much missed

Dr. Angelica Galezowski is back!
I am pleased to inform you that Dr. Angelica Galezowski has resumed her clinical pathology duties at Veterinary Diagnostic Services.
Thank you to both Dr. Norm Lowes and Prairie Diagnostic Services for their assistance during Angelica’s absence.

Sarah Douglas – Clinical Pathology
We are also happy to announce that Sarah Douglas has returned to her Medical Laboratory Technologist duties within the clinical pathology section at VDS as well.