Case Scenario Assignment (Weeks 7-10)

Started: Jan 3 at 12:51pm

Quiz Instructions

This assignment is to try and help you learn to apply the material to real life scenarios. Use your knowledge of the diseases to evaluate the scenario and draw conclusions. This assignment is intended to help you learn and improve your understanding with feedback from me (you can revise, based on feedback).

<table>
<thead>
<tr>
<th>Question 1</th>
<th>2 pts</th>
</tr>
</thead>
</table>

Scenario 1:

Read the following scenario and answer the questions.

You are a cow-calf producer. You recently gathered ~65 cow/calf pairs this fall and are preparing to sell and ship the calves to a feedlot. The calves were vaccinated once at branding for viral respiratory etiologic agents (typical 5-way modified live vaccine), clostridial etiologic agents (typical killed 8 way vaccine) and given Multi-min (injectable mineral supplement) this past April. At that time they were between 1-4 months of age. They were also branded and castrated. There are several “mutts” in your herd, that will need to be dehorned. The plan is to wean and ship the calves the same day. Cows and calves will be brought into the corral as pairs then sorted and immediately loaded on the truck to be shipped. The destination feedlot has also requested that their vaccines be boosterized prior to shipment.

What disease are the calves in this scenario at high risk for? Identify WHY the calves are at higher risk (specific risk factors in this scenario).
Question 2

Scenario 1:

Identify at least two ways that you could decrease their risk for this disease and improve this plan in the scenario.
### Question 3

**Scenario 1:**

When would be the ideal time to booster the vaccine in relation to shipping? Why?

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### Question 4

**Scenario 2:**

Read the following scenario and answer the questions.

You raise several Suffolk show lambs and your friend from college has recently decided to try raising lambs as well. They are not very familiar with sheep. They recently identified a sick lamb and called you for help. They found the lamb acting dull and painful. It's abdomen was distended. It is about 3 weeks old. Up until now it has been the happiest and fattest lamb.
What disease are you worried about? Why? What questions do you have about the history (for example: what about prevention strategies, risk factors)?

**Question 5**

**Scenario 2:**

Describe the pathogenesis of the disease you indicated.
Question 6

Scenario 2:

What prevention strategies will you recommend to your friend for the future?
Question 7

Scenario 3:

This data is actual data collected at a dairy. Please review it and using your knowledge and guidelines for colostrum and adequate passive transfer benchmarks answer the following questions.

Identify which calves had successful passive transfer and which calves had failure of passive transfer.

<table>
<thead>
<tr>
<th>Calf Number</th>
<th>Dam</th>
<th>Colostrum Cow #</th>
<th>Colostrometer (mg/mL)</th>
<th>Refractometer (%)Brix</th>
<th>TP Pre-C1 (g/dL)</th>
<th>TP Post-C1 g/dL</th>
<th>Amount C1 consumed (pts)</th>
<th>Time post C1 Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>J-562</td>
<td>26</td>
<td>26</td>
<td>N/A</td>
<td>21.5</td>
<td>4.8</td>
<td>6.1</td>
<td>4</td>
<td>10 hrs</td>
</tr>
<tr>
<td>J-563</td>
<td>523</td>
<td>523</td>
<td>60</td>
<td>27</td>
<td>4.8</td>
<td>6.1</td>
<td>3-T</td>
<td>12 hrs</td>
</tr>
<tr>
<td>J-564</td>
<td>511</td>
<td>523</td>
<td>60</td>
<td>27</td>
<td>4.7</td>
<td>5.7</td>
<td>2.5-T</td>
<td>12 hrs</td>
</tr>
<tr>
<td>J-565</td>
<td>503</td>
<td>515</td>
<td>N/A</td>
<td>28</td>
<td>5.1</td>
<td>5.9</td>
<td>4-T</td>
<td>12 hrs</td>
</tr>
<tr>
<td>J-566</td>
<td>515</td>
<td>515</td>
<td>40</td>
<td>18</td>
<td>4.5</td>
<td>5.2</td>
<td>3-T</td>
<td>11 hrs</td>
</tr>
<tr>
<td>J-567</td>
<td>518</td>
<td>515</td>
<td>30</td>
<td>17</td>
<td>5.4</td>
<td>5.4</td>
<td>3-T</td>
<td>11 hrs</td>
</tr>
<tr>
<td>J-568</td>
<td>533</td>
<td>523</td>
<td>60</td>
<td>26/27</td>
<td>4.9</td>
<td>5.4</td>
<td>2-T</td>
<td>10 hrs</td>
</tr>
<tr>
<td>J-570</td>
<td>512</td>
<td>518</td>
<td>N/A</td>
<td>30</td>
<td>4.9</td>
<td>7</td>
<td>3.5</td>
<td>10 hrs</td>
</tr>
<tr>
<td>J-571</td>
<td>528</td>
<td>512</td>
<td>N/A</td>
<td>26</td>
<td>4.6</td>
<td>6</td>
<td>4-T</td>
<td>12 hrs</td>
</tr>
<tr>
<td>2891</td>
<td>2576</td>
<td>2576</td>
<td>N/A</td>
<td>27</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>10 hrs</td>
</tr>
<tr>
<td>J-572</td>
<td>513</td>
<td>528</td>
<td>90 (cold)</td>
<td>26</td>
<td>5</td>
<td>7</td>
<td>4-T</td>
<td>12 hrs</td>
</tr>
<tr>
<td>J-Bull (6/11)</td>
<td>507</td>
<td>528</td>
<td>90 (cold)</td>
<td>26</td>
<td>4.7</td>
<td>6</td>
<td>4-T</td>
<td>12 hrs</td>
</tr>
<tr>
<td>2892</td>
<td>2669</td>
<td>2669</td>
<td>80</td>
<td>25</td>
<td>5</td>
<td>6.4</td>
<td>7</td>
<td>11 hrs</td>
</tr>
<tr>
<td>J-573</td>
<td>516</td>
<td>507</td>
<td>70</td>
<td>27</td>
<td>4.8</td>
<td>5.8</td>
<td>4-T</td>
<td>10 hrs</td>
</tr>
<tr>
<td>J-574</td>
<td>48</td>
<td>507</td>
<td>70</td>
<td>27</td>
<td>4.8</td>
<td>5.8</td>
<td>4-T</td>
<td>20 hrs</td>
</tr>
</tbody>
</table>

Colostrometer measurements were taken when colostrum had reached room temperature, unless otherwise noted. N/A indicates that whoever collected the colostrum did not take a measurement. TP=Total protein (g/dL). Pre-C1 indicating before colostrum was ingested; Post C1-indicating after colostrum was ingested.
Question 8

Scenario 3:
Identify which cow numbers provided high quality colostrum.

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Question 9

Scenario 3:
For the calves that had failure of passive transfer, use the other data to propose a logical reason for the failure. (Hint: Think about the goals for colostrum.)

HTML Editor
Question 10

Scenario 4:

You are a vet and you recently preg checked a herd of cattle for a cow-calf producer. This producer turns his cows out on a grazing permit during the summer breeding season with several other herds. At preg check, 20% of the herd was open (should be <5%) and 25% of the herd were only 1-3 months along in gestation. The rest of the herd was 5-6 months pregnant, according to the producer’s plan and what you would have expected for when the bulls were turned in. The cows and bulls show no outward signs of disease.

What disease are you concerned this herd might have been exposed to? Explain your reasoning.
Question 11

Scenario 4:

What treatment is available for the disease you indicated?
Question 12

Scenario 4:

What requirements are in place (especially in western states) to prevent transmission of this disease?