ข้อมูลที่เก็บจากอาการป่วยของวัว เป้าหมายคือการจำแนกวัวที่ป่วยว่าจะรอดชีวิต เสียชีวิต หรือควรถูกฉีดยาให้ตาย

1: surgery? เคยผ่าตัดมาก่อนหรือไม่
1 = Yes, it had surgery   เคย
2 = It was treated without surgery ไม่เคย

2: Age   อายุ
1 = Adult   วัยรุ่น
2 = Young (< 6 months) วัยเยาว์

3: Hospital Number รหัสสัตว์ป่วย
- numeric id
- the case number assigned to the cow (may not be unique if the horse is treated > 1 time)

4: temperature   อุณหภูมิ (ค่าปกติคือ 37.8)
- linear
- in degrees celsius.
- An elevated temp may occur due to infection.
- temperature may be reduced when the animal is in late shock
- normal temp is 37.8
- this parameter will usually change as the problem progresses, eg. may start out normal, then become elevated because of the lesion, passing back through the normal range as the horse goes into shock

5: pulse อัตราการเต้นของหัวใจ ค่าปกติคือ 30 -40
- linear
- the heart rate in beats per minute
- is a reflection of the heart condition: 30 -40 is normal for adults
- rare to have a lower than normal rate although athletic cow may have a rate of 20-25
- animals with painful lesions or suffering from circulatory shock may have an elevated heart rate

6: respiratory rate อัตราการหายใจ ค่าปกติคือ 8-10
- linear

7: temperature of extremities
- a subjective indication of peripheral circulation
ค่าที่เป็นไปได้ มี 4 ค่า
1 = Normal
2 = Warm
3 = Cool
4 = Cold
- cool to cold extremities indicate possible shock
- hot extremities should correlate with an elevated rectal temp.

8: peripheral pulse ชีพจรวัดที่หลอดเลือดแดง
- subjective
- possible values are:
1 = normal
2 = increased
3 = reduced
4 = absent
- normal or increased p.p. are indicative of adequate circulation while reduced or absent indicate poor perfusion

9: mucous membranes สีของชิ้นเนื้อ
- a subjective measurement of colour
- ค่าที่เป็นไปได้ 6 ค่า
1 = normal pink
2 = bright pink
3 = pale pink
4 = pale cyanotic
5 = bright red / injected

6 = dark cyanotic
- 1 and 2 probably indicate a normal or slightly increased circulation
- 3 may occur in early shock
- 4 and 6 are indicative of serious circulatory compromise
- 5 is more indicative of a septicemia

10: capillary refill time
- a clinical judgement. The longer the refill, the poorer the circulation
- possible values
1 = < 3 seconds
2 = >= 3 seconds

11: pain – ระดับความเจ็บปวด
- possible values:
1 = alert, no pain
2 = depressed
3 = intermittent mild pain
4 = intermittent severe pain
5 = continuous severe pain
- should NOT be treated as a ordered or discrete variable!
- In general, the more painful, the more likely it is to require surgery
- prior treatment of pain may mask the pain level to some extent

12: peristalsis ลักษณะการบีบตัวของกล้ามเนื้อในลำไส้
- an indication of the activity in the cow's gut. As the gut becomes more distended or the cow becomes more toxic, the activity decreases
- ค่าที่เป็นไปได้
1 = hypermotile
2 = normal
3 = hypomotile
4 = absent

13: abdominal distension อาการท้องอืด
- ค่าที่เป็นไปได้

1 = none
2 = slight
3 = moderate
4 = severe
- an animal with abdominal distension is likely to be painful and have reduced gut motility.
- a cow with severe abdominal distension is likely to require surgery just to relieve the pressure

14: nasogastric tube มีก๊าซในกระเพาะ
- this refers to any gas coming out of the tube
- ค่าที่เป็นไปได้
1 = none
2 = slight
3 = significant
- a large gas cap in the stomach is likely to give the cow discomfort

15: nasogastric reflux
- ค่าที่เป็นไปได้

1 = none
2 = > 1 liter
3 = < 1 liter
- the greater amount of reflux, the more likelihood that there is some serious obstruction to the fluid passage from the rest of the intestine

16: nasogastric reflux PH
- linear

- scale is from 0 to 14 with 7 being neutral
- normal values are in the 3 to 4 range

17: rectal examination - feces ลักษณะของอุจจาระ
- ค่าที่เป็นไปได้

1 = normal
2 = increased
3 = decreased
4 = absent
- absent feces probably indicates an obstruction

18: abdomen ผลการตรวจท้อง
- ค่าที่เป็นไปได้

1 = normal
2 = other
3 = firm feces in the large intestine
4 = distended small intestine
5 = distended large intestine
- 3 is probably an obstruction caused by a mechanical impaction and is normally treated medically
- 4 and 5 indicate a surgical lesion

19: packed cell volume
- linear
- the # of red cells by volume in the blood
- normal range is 30 to 50. The level rises as the circulation becomes compromised or as the animal becomes dehydrated.

20: total protein
- linear
- normal values lie in the 6-7.5 (gms/dL) range
- the higher the value the greater the dehydration

21: abdominocentesis appearance
- a needle is put in the horse's abdomen and fluid is obtained from
the abdominal cavity
- possible values:
1 = clear
2 = cloudy
3 = serosanguinous
- normal fluid is clear while cloudy or serosanguinous indicates a compromised gut

22: abdomcentesis total protein
- linear
- the higher the level of protein the more likely it is to have a compromised gut. Values are in gms/dL

23: outcome class คลาส
- what eventually happened to the cow?
- ค่าที่เป็นไปได้
1 = lived มีชีวิตรอด
2 = died   เสียชีวิต
3 = was euthanized ถูกฉีดยาให้เสียชีวิต

24: surgical lesion?
- retrospectively, was the problem (lesion) surgical?
- all cases are either operated upon or autopsied so that this value and the lesion type are always known
- possible values:
1 = Yes
2 = No

25, 26, 27: type of lesion
- first number is site of lesion
1 = gastric
2 = sm intestine
3 = lg colon
4 = lg colon and cecum
5 = cecum
6 = transverse colon
7 = retum/descending colon
8 = uterus
9 = bladder
11 = all intestinal sites
00 = none
- second number is type
1 = simple
2 = strangulation
3 = inflammation
4 = other
- third number is subtype
1 = mechanical
2 = paralytic
0 = n/a
- fourth number is specific code
1 = obturation
2 = intrinsic
3 = extrinsic
4 = adynamic
5 = volvulus/torsion
6 = intussuption
7 = thromboembolic
8 = hernia
9 = lipoma/slenic incarceration
10 = displacement
0 = n/a