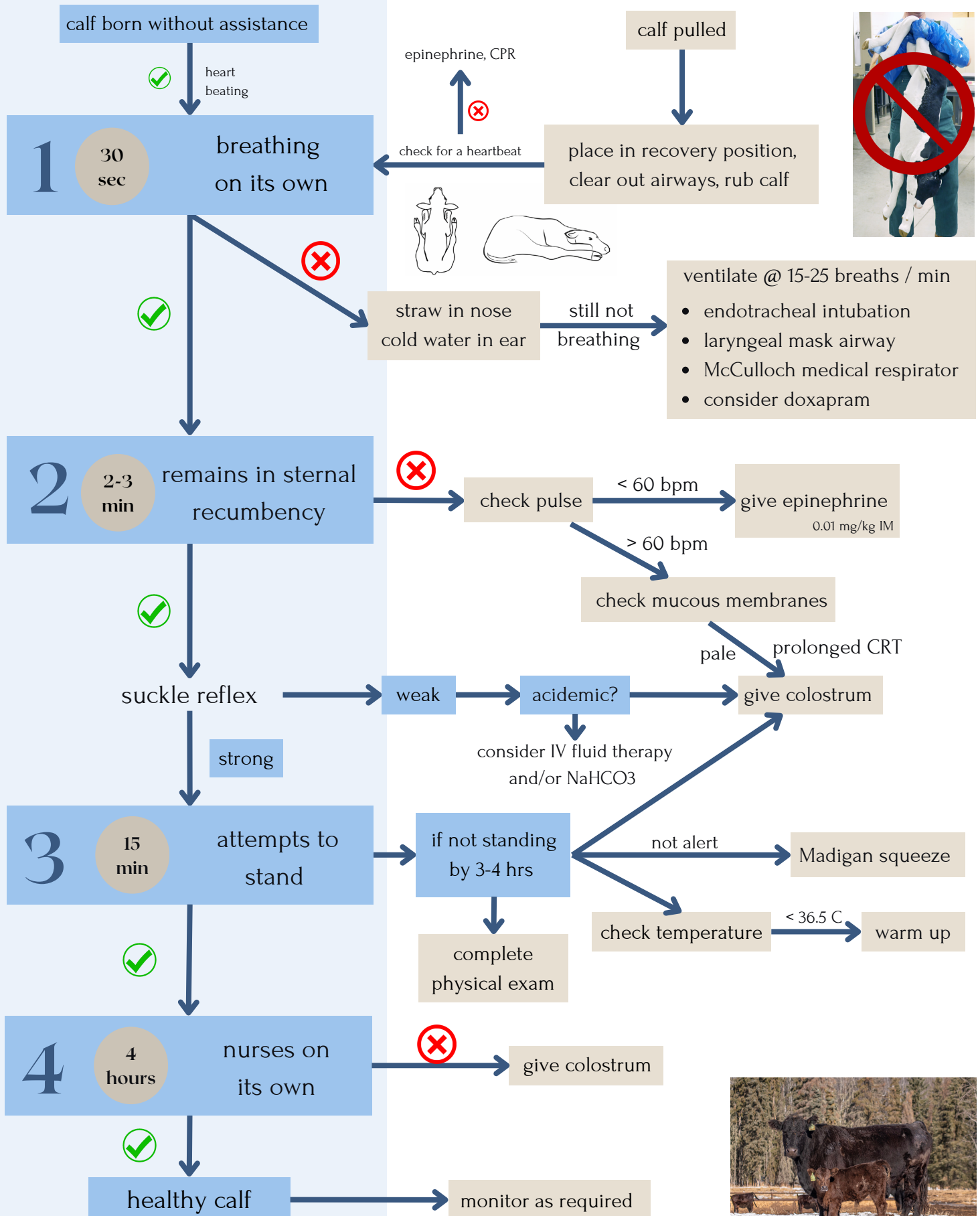




## Normal Calf Milestones

## Abnormal - Assisted Calving



## Drugs to consider

If an assisted calving requires the use of pharmaceuticals, there are a few options to consider:



### Doxapram

2 mg/kg IV

- fast acting, effective respiratory stimulant
- contraindicated in premies due to lung immaturity
- cerebral vasoconstriction causes cerebral hypoxia risk
- increases hypoxic pulmonary vasoconstriction
- consider if you can't intubate

### Caffeine

100 - 200 mg PO

- no clinical evidence of efficaciousness in calves



### Sodium bicarbonate

1.5 - 2.5 mL/kg IV

- recommend running a serum chemistry prior to characterize and blood gas to determine appropriate dose

### Intranasal oxygen

2 - 10 L/min IN

- blood gas or pulse oximetry for SaO<sub>2</sub> measurement
- consider in all assisted calves



### Meloxicam

0.5 mg/kg SQ

Beef calves

- increased average daily gain at 7-10 days of age
- no decrease in physiologic indicators of pain (e.g. heart rate, serum cortisol)
- no improvements in passive immunity or health

Dairy calves

- improvements in vigour, suckle reflex, and milk intake

## Remember

- most acidotic calves self-correct within 24 hours with supportive care, efficient respiration, and colostrum

See proceedings paper for references



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