IMMUNISATION FOR CATTLE

Animals that have not been immunized before

Initial vaccination can best be done according the management systems and breeding program of a specific farm. The following schedule can be changed to fit the specific farming conditions.

| Time of Administration | Essential Vaccines | Additional Vaccines | Dose and Route |
|---|---|----------------------------------|--|
| 6 - 8 weeks before the breeding season | Rift Valley fever (inactivated) | - | 2ml subcutaneously |
| 6 - 8 weeks before the breeding season | RVF (live vaccine) OR Clone 13 | - | 1ml subcutaneously |
| 6 - 8 weeks before the breeding season | Vibriosis (1st inject.) | - | 2ml subcutaneously (heifers) |
| 6 - 8 weeks before the breeding season | Vibriosis (1st inject.) | - | 5ml subcutaneously (bulls) |
| 3 - 4 weeks before the breeding season | - | Vibriosis (2nd inject) | 2ml subcutaneously (heifers) |
| 3 - 4 weeks before the breeding season | - | Vibriosis (2nd inject) | 5ml subcutaneously (bulls) |
| 8 weeks before calving (heifer) | - | Escherichia coli (1st inject) | 2ml subcutaneously (heifers) |
| 2 - 4 weeks before calving | - | Escherichia coli (2nd inject) | 2ml subcutaneously (heifers) |
| 7 - 14 days of age | Paratyphoid (1st inj) (live or inactivated vaccine) | - | 5 ml subcutaneously (live or inact) |
| 7 - 14 days of age | Paratyphoid (1st inj) (live or inactivated vaccine) | - | 10 ml subcutaneously (inact for cows) |
| 7 - 14 days of age | Heartwater blood, endemic areas 0-21 days age | - | 3 ml intravenously |
| 7 - 14 days of age | - | Pasteurella (1st inject) | 5 ml subcutaneously |

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| 7 - 14 days of age | - | C. pyogenes (1st inject) | 5 ml subcutaneously (< 6 months) |
| 7 - 14 days of age | - | C. pyogenes (1st inject) | 10 ml subcutaneously (> 6 months) |
| 3 - 8 weeks of age | Paratyphoid, 2nd inj - Inactivated vacc @ 3 wks | - | 5 ml subcutaneously (live or inact) |
| 3 - 8 weeks of age | Paratyphoid, 2nd inj - Inactivated vacc @ 3 wks | - | 10 ml subcutaneously (inact for cows) |
| 3 - 8 weeks of age | - | Pasteurella (2nd innoc.) | 5 ml subcutaneously |
| 3 - 8 weeks of age | - | C. pyogenes (2nd + 3rd inject) | 5 ml subcutaneously (< 6 months) |
| 3 - 8 weeks of age | - | C. pyogenes (2nd + 3rd inject) | 10 ml subcutaneously (> 6 months) |
| 4 months of age | Contagious abortion S19 (heifers 4-8 months) | - | 2 ml subcutaneously |
| 4 months of age | Gall sickness (3-9 months) endemic areas | - | 1 ml subcutaneously |
| 5 - 6 months of age or at weaning | Anthrax | - | 1 ml subcutaneously |
| 5 - 6 months of age or at weaning | - | Redwater (3-9 months) (endemic areas) | 1 ml subcutaneously |

^{*} Gall sickness + Redwater vaccine can be administered together.

Sustained immunization programme for adult cattle

Yearly or six-monthly booster injections can be given. The following table is a practical example that can be changed to fit the local farming conditions.

| Time of Administration | Essential Vaccines | Additional Vaccines | Dose & Route |
|---|-----------------------------|---------------------|--------------------|
| Late winter, Early spring (Aug - Sept) | Three-day stiff sickness | - | 2ml |
| Late winter, Early spring (Aug - Sept) | Lumpy skin disease | - | 2ml subcutaneously |

| Late winter, Early spring (Aug - Sept) | Rift Valley fever: Inactivated (Clone 13 Live) | - | 2 ml subcutaneously, 1 ml, 1 ml |
|---|--|------------------|--------------------------------------|
| Late winter, Early spring (Aug - Sept) | - | C. pyogenes | 10 ml subcutaneously (< 6 months) |
| Late winter, Early spring (Aug - Sept) | - | C. pyogenes | 5 ml subcutaneously (> 6 months) |
| Late winter, Early spring (Aug - Sept) | - | Pasteurella | 5ml subcutaneously |
| Autumn or early winter (April - June) | Black Quarter/Botulism OR Gasgangrene | - | 5ml subcutaneously |
| Autumn or early winter (April - June) | Anthrax | - | 2 ml subcutaneously |
| Autumn or early winter (April - June) | Botulism - (if combinations were not used) | - | 2ml subcutaneously |
| Autumn or early winter (April - June) | - | C. pyogenes | 10 ml subcutaneously (> 6 months) |
| Autumn or early winter (April - June) | - | Pasteurella | 5 ml subcutaneously |
| Autumn or early winter (April - June) | - | Vibriosis | 2 ml subcutaneously (heifers) |
| Autumn or early winter (April - June) | - | Vibriosis | 5 ml subcutaneously (bulls) |
| 2 - 4 weeks before calving | - | Escherichia coli | 2 ml subcutaneously |