

Equine Herpes Virus capabilities & summary *Clinvet South Africa*

1.1 Clinvet SA housing capabilities for horses or foals:

1. Semi indoor stables with individual outdoor paddocks plus exercise ring: Maximum 24 adult horses (individual housing) or 24 mares with foals (mare + foal per stable). Horses have visual and physical contact between stables. Two groups of 12 stables separated by a \pm 1.5 m corridor
2. Indoor BSL2+ stables: Maximum 20 horses single housed. Horses have visual contact and physical contact in 4 groups of 5 adjacent stables.
3. Pasture camps: Eight camps of different sizes are available for complete outdoor housing with a small handling camp/ring in each camp

1.2 Assessments/study activities available conducted by experienced staff members:

1. Clinical examinations (including rectal temperature, heart rate and respiratory rate);
2. Body weight (preferably commercially available measuring tape in pasture camps, scales or measuring tape in stable unit);
3. Vaccination administration;
4. Vaccination site examinations for local reactions;
5. Blood sampling;
6. Nasal swab collections;
7. PCR analysis for EHV from nasal swabs, blood, isolated white blood cells (on site - Clinomics);
8. Daily general health observations;
9. EHV symptom specific observations/assessments (eye and nasal discharge, rectal temperature).

1.3 Suggested study design:

Adult horses:

14-day acclimatisation either in pasture camps or semi indoor stables with 2 clinical exams and blood sampling and/or nasal swabs for EHV detection. Sero-negative/low positive horses can be included for vaccination;

Vaccination phase either in pasture camps or semi indoor stables (same as acclimatisation) with vaccinations on the desired time schedule with clinical exams prior to each vaccination, vaccination site observations 7 to 14 days post each vaccination and nasal swabs/blood collection prior to each vaccination;

Challenge phase in BSL2+ stables with challenge material administration on the desired day/time after the last vaccination with clinical examination, nasal and blood sample collection prior to challenge as well as daily for 14 days post challenge;

Foals:

- Identify breeder partners with the desired number of pregnant mares;
- Conduct pregnancy confirmation examination as well as clinical examinations on mares at the breeding site and estimate pregnancy trimester/approximate foaling date, collect blood samples for EHV PCR if required;
- Vaccinate selected mares against EHV with commercially available vaccine at the breeding site 7 to 10 days prior to transport to Clinvet South Africa;
- Transport pregnant mares to Clinvet South Africa;
- Repeat pregnancy examination, clinical examination and PCR confirmation if required;
- House mares in pasture camps at Clinvet South Africa in groups per breeder/arrival date, if moved from more than one breeding site on more than one day;
- Keep mares in pasture until foaling while administering booster EHV vaccines per vaccine recommendation;

Vaccination phase of foals can be conducted in pasture camps or semi indoor stables as per the above-mentioned schedule (acclimatisation phase to be debated pending on chosen location for vaccination phase)

Challenge phase in BSL2+ stables as per the above-mentioned schedule

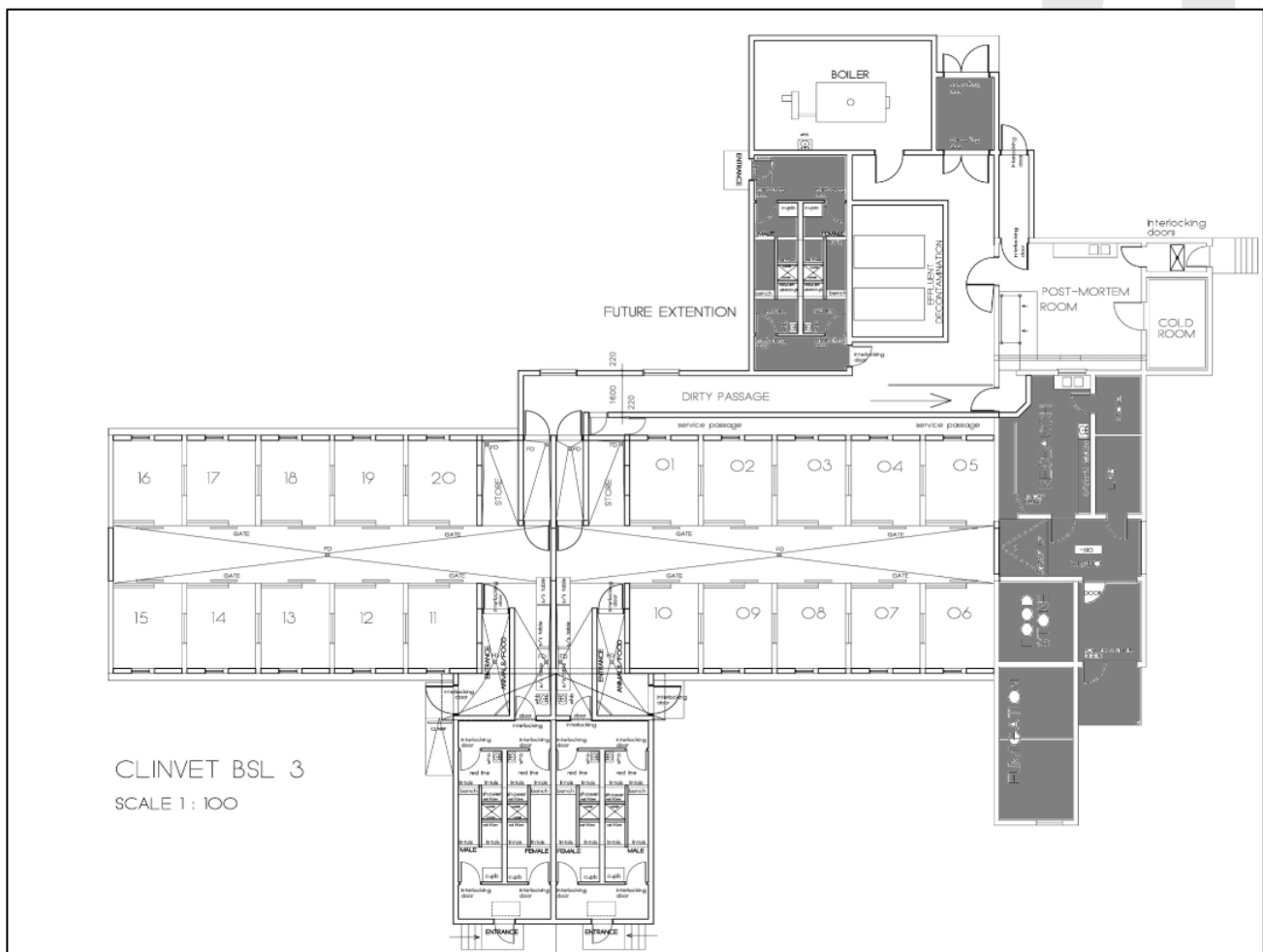
Foals weaned between 4 and 6 months of age and mares returned to the owners. Detail of weaning to be discussed pending birthdate range of foals

The vaccination can be conducted in phases depending on the birth dates, but challenge must be conducted in one phase. All horses must move into BSL2+ stables on the same day

NOTE: challenge material to be supplied by sponsor

1.4 BSL2+ facility overview & description

- Strict access control to the facility and specific BSL2+ unit;
- Entrance to the facility is through a double door clothes change room and a shower in/out system is in place;
- Doors to animal rooms open inward and are kept closed when experimental animals are present;
- The animal room is separated from access corridors or other activities by a double door system.
- Negative pressure environment within the BSL2+ unit (sustained directional flow by drawing air into the facility from “clean” areas towards “potentially contaminated” areas, audible alarm and electronic notification in case of failure, inflowing and exhaust air can be HEPA filtered);
- Design that allows easy cleaning and decontamination (i.e. no carpets, slip resistant floors impervious to liquids, walls and ceilings with a smooth finish, double glazed windows sealed with spaces around doors and ventilation openings sealed to facilitate space decontamination);
- Floor drains are protected with liquid or P-traps that can be filled with a disinfectant and wastewater flows in a double containment pipe system to a sealed reservoir;
- A “dirty” corridor link the necropsy area (“dirty area”) and the animal study area (“clean area”).



Please note: Areas in grey to be completed/in progress

