

## Standard Operating Procedure

SOP Number: **02-18-5611**

Service: **Research**

Operating Section: **Diagnostic Laboratory**

Unit: **CMF**

Title: **Colony Health Management Sentinel Testing Program**

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### **Purpose:**

To describe the Colony Health Management Sentinel Testing Program used to identify adventitial agents in clean animal colonies.

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### **Procedure:**

- 1) Outbred animals of approximately 30-60 days of age for rats and mice, 4-6 weeks of age for guinea pigs, and 7-8 weeks of age for rabbits, will be used in the program. These animals will be housed on the same rack as colony animals for at least 30 days, and preferably 90 days. Using animals over 6 months of age will be avoided to decrease the likelihood of false serological reactivity. All sentinel animals sampled quarterly will be euthanized prior to sampling. For species-specific housing and sampling information, see the following instructions.
- 2) The housing, testing, and change-out pattern for rats and mice is as follows:
  - a) Sentinel animals are housed in filter-topped cages, two (2) per cage, placed on the occupied side of the rack.
  - b) During scheduled cage changes, a pinch of soiled bedding from each of the occupied cages on the rack is placed in a clean cage for the housing of sentinel animals. The sentinel animals are placed in these cages at the end of the change-out cycle.
  - c) Sentinel cage cards will be pink or otherwise conspicuously labeled.
  - d) Blood samples retrieved from sentinel animals will not be pooled. Swabs and fecal samples for PCR may be pooled. Fecal samples for parasitology will not be pooled unless insufficient sample exists for evaluation.
  - e) At least once each quarter, from one sentinel per cage, blood samples will be taken for serology; feces, anal tape test, and cecum will be taken for endoparasitic evaluation.
  - f) At least annually, a gross necropsy and exoparasitic examination will be performed on one sentinel per cage.
- 3) The housing, testing, and change-out pattern for guinea pigs is as follows:
  - a) Sentinel animals are housed in bucket-style caging, two (2) per cage, placed on an occupied side of the rack.
  - b) During scheduled cage changes, a pinch of soiled bedding from each of the occupied cages on the rack is placed in a clean cage for the housing of sentinel animals. The sentinel animals are placed in these cages at the end of the change-out cycle.
  - c) Sentinel cage cards will be pink or otherwise conspicuously labeled.
  - d) Blood samples retrieved from sentinel animals will not be pooled. Swabs and fecal samples for PCR may be pooled. Fecal samples for parasitology will not be pooled.
  - e) At least once each quarter, from one sentinel per cage, blood samples will be taken for serology; feces, anal tape test, and cecum will be taken for endoparasitic evaluation.

- f) At least annually, a gross necropsy and exoparasitic examination will be performed on one sentinel per cage.
- 4) The housing, testing, and change-out pattern for rabbits is as follows:
    - a) Sentinel animals are housed in bucket-style caging with raised flooring, one (1) per cage, placed on the occupied side of the rack.
    - b) Sentinel cage cards will be pink or otherwise conspicuously labeled.
    - c) Blood samples retrieved from sentinel animals will not be pooled. Swabs and fecal samples for PCR may be pooled. Fecal samples for parasitology will not be pooled.
    - d) At least once each quarter, from one sentinel per cage, blood samples will be taken for serology; feces, anal tape test, and cecum will be taken for endoparasitic evaluation.
    - e) At least annually, a gross necropsy and exoparasitic examination will be performed on one sentinel per cage.
    - f) Fecal samples will be taken for endoparasitic exam from every animal in the room at least quarterly.
  - 5) Upon sentinel testing completion the remaining sentinel, if one exists, will be transferred to the training protocol. New sentinels will be ordered for the next quarterly cycle so that no sentinel animals are too old to provide reliable results.
  - 6) Colony health management for quarantine will include the following:
    - a) Shipping containers will be swabbed for PCR upon arrival.
    - b) After 45 days, from one sentinel per cage, blood samples will be taken for serology; feces, anal tape test, and cecum will be taken for endoparasitic evaluation.
    - c) Also after 45 days, feces will be taken from up to ten (10) investigator cages for PCR.
    - d) The animals will be released from quarantine if all results are negative. If not, quarantine will be extended and further testing may be required.
  - 7) Regardless of species, the interior of at least ten investigator cages per room will be swabbed for PCR each quarter. If there are less than ten cages in a room, each existing cage will be swabbed. The cages swabbed will be from the same investigator and may be pooled.
  - 8) In times of increased risk of colony health problems, this program may be altered in terms of frequency of testing and screened agents at the discretion of the Director, CMF. Information regarding specific tests performed is available upon request, or can be found in the colony health report summary.

**Comments:**

None.

**APPROVALS**

<b>Responsible Official Signature</b> <i>[Signature]</i>		<b>Date</b> 2/06/2020
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