



**TITLE: NHP Extubation**

**PURPOSE:** To standardize the removal of the endotracheal tube after anesthesia

**REVIEW/REVISION:** Permanent amendment/revisions to this SSP must be presented to the IACUC for review before implementation and should be developed by UAC, the Surgical Attending Veterinarian and PI together.

**EFFECTIVE DATE:** 1/27/05; **Revised/Re-Approved:** 2/24/05, 8/25/05, 11/2/06, November 1, 2007

**POLICY:**

During the Pre-Surgery Conference (NHP-SSP #700-08-05), an individual will be identified as responsible for NHP Extubation. This individual must be one of the following: BSS Technician, Surgical Attending Veterinarian, PI or Research Personnel.

The Surgical Attending Veterinarian must be present during the extubation period.

**Frequency of Procedure:**

As needed

**Documentation of Procedure:**

Anesthesia Record  
NHP Pre-Surgery Conference Check List

**Materials Required:**

- |                              |                      |
|------------------------------|----------------------|
| Anesthesia Machine           | Endotracheal tube    |
| Blankets                     | Gauze Tie            |
| Breathing tubes              | Emergency crash cart |
| Vital sign monitor and leads | Laryngoscope         |
| Syringe                      | Resuscitation bag    |
| Exam gloves                  | Warming lamps        |

**Procedures:**

1. The Surgical Attending Veterinarian must be present during the extubation period. Contact vet per SOP# in time to allow vet to reach area before extubation is needed.
- 2.. Vet and/or others not in Personnel Protection Equipment, don PPE per NHP-SSP #700-08-05.
3. Turn off the gas anesthesia after the surgical procedure.
4. Leave the oxygen on for 3-5 minutes after the discontinuation of the anesthetic agent depending on the depth of anesthesia and animals condition.
5. Turn off Oxygen and disconnect the breathing tubes from endotracheal tube. Observe animal for several minutes.
6. Place heating blanket on transport table, cover heating blanket with towels, disconnect monitoring leads, place animal on table and cover with towels.



7. Move NHP to recovery room on transport table, with crash cart and anesthesia machine brought with the animal.
8. Place NHP back on monitors and plug in warming blankets.
9. Untie endotracheal tube, leave tube in place.
10. Monitor per NHP-SSP #707-08-05
11. When NHP shows signs of swallowing, spastic movements of the tongue or the animal attempts to chew the endotracheal tube, deflate cuff and remove endotracheal tube. Monitoring for recovery from anesthesia and extubation is to be performed by the duty designee.
12. Record the time the NHP was extubated under the Notes section of the Anesthesia Record.
13. Continue monitoring NHP visually until animal is fully recovered.

**JUSTIFICATION:**

The Institutional Animal Care and Use Committee (IACUC) determined that comprehensive individual Non-Human Primate Standard Surgical Practices (NHP-SSP) should be written for: Surgical Prep - This includes not only the actual pre-operative preparation of the animal, but also required prep for participants; Anesthesia Induction - Standard induction procedures should be described; Post-Operative Recovery - this should specify criteria for extubation as well as post-operative monitoring, placement of the animal, and provision for emergency care.

Authority line - During pre-op procedures and immediate post-operatively, until animal is able to sit upright, the Surgical Attending Veterinarian will be present and have decision making authority. The Surgical Attending Veterinarian may not be physically present in the room during surgery, but is on call. During surgery, the Surgeon is responsible for procedures going on in the surgical theater. Specific allocation of duties for each NHP-SSP will be determined at the pre-surgery conference and will be designated to the Surgical Attending Veterinarian, PI, BSS Clinical Staff, or Research staff.