

- Oral gavage (dosing): used when a specific amount of agent needs to be administered orally.
- Alternative methods:
 - Via feed: custom-made chow containing the experimental agent.
 - Dosing via a water bottle: adding the treatment agent to drinking water.

Recommended gavage size and dosing volumes (Reference)

Types of oral cannula [Feeding tube]		<ul style="list-style-type: none"> • round or ball tip • straight or curved
	Mouse	Rat
Oral cannula size	<ul style="list-style-type: none"> • small/young mice = 22 gauge • adult mice = 20 gauge 	18 gauge
Gavage (Dosing) volume	0.1 mL / 10 g Kg BW	0.1 – 0.2 mL / 10 g

Basic dosing procedure

1. Scruff mouse grasping skin over shoulders with thumb and middle fingers.
2. Grasp skin over shoulders so the forelegs are extended out to the side.
 - This prevents the front feet from pushing the gavage tube away.
3. Gently extend head back with index finger placed on top of head.
 - This aligns the neck and oesophagus.
 - Monitor for difficult breathing;
 - If the animal is turning blue and chest movements are not visible, release the animal and allow recovering before attempting again.
4. Check the length of the gavage tube by measuring from the tip of the animal's head to the last rib.
 - Inspect the gavage needle to ensure there are no burrs or points that could damage the oesophagus.
5. Mark the tube at the nose with a permanent marker.
 - Do not pass the tube into the animal past that point to avoid perforation into the stomach
6. Hold animal vertical to work surface while placing gavage tube in corner of mouth.

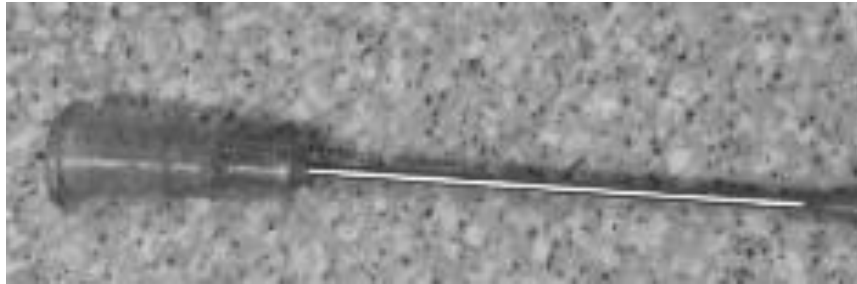
7. Advance tube through pharynx, gently pressing tube to roof of mouth to elevate head and straighten the oesophagus.
 - The animal will naturally gag and have a swallow reflex.
8. Pass tube smoothly in one motion.
 - Gravity alone should be used to move the needle down the oesophagus.
 - Do not attempt to force the needle down.
 - If there is resistance, pull tube out and try again.
9. After dosing, remove the tube gently following the same angle as insertion.
10. Return animal to its cage.
11. Monitor for 5-10 minutes for potential complications.
 - Labored breathing or other signs of distress indicate a problem. If this happens, call a veterinarian or euthanize the animal.
12. Recheck animals a few hours after dosing.

Note: Tips / Troubleshooting

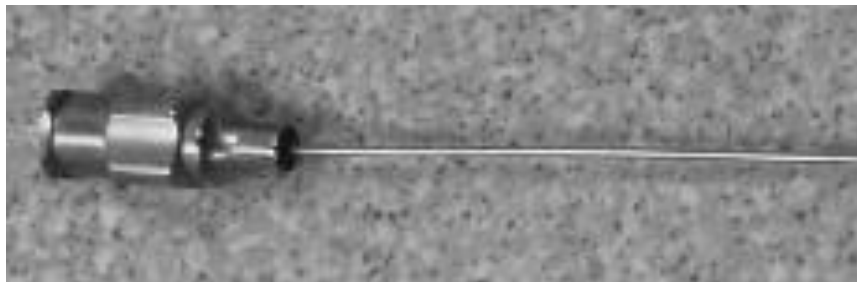
- ✓ Never force gavage needle
- ✓ If you are having difficulty advancing the gavage tube:
 - Try a thinner gavage tube
 - Verify head and neck are extended to create a straight line through the neck and oesophagus
- ✓ If rodent is pushing gavage tube away with forelimbs, scruff more skin over shoulder area to extend forelimbs out to the side
- ✓ Dipping tip of gavage needle in water can help stimulate the swallow reflex

Types of Oral cannula / feeding tube

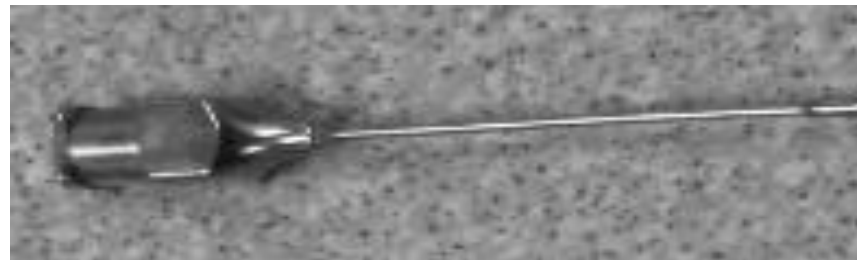
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Disposable straight round-tip cannula.

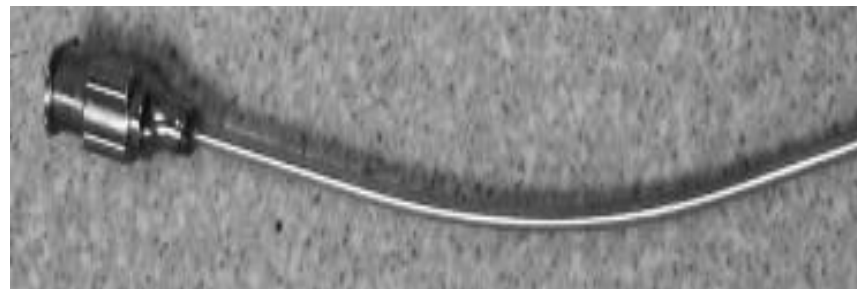


Autoclavable straight ball-tip cannula.



Autoclavable straight round-tip cannula.

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Autoclavable curved ball-tip cannula

Steps in gavage administration -

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