

Semen Collection from Dogs

Semen is collected from dogs for breeding soundness exams, as well as for artificial insemination. Semen collected for insemination can be used fresh, or can be cooled and shipped to another location. Canine semen can also be frozen, allowing long term storage. Another indication for collecting semen is to obtain prostatic fluid for culture or cytology in cases of suspected prostatic disease.

Semen Collection

Semen can be collected from most males without the need for a teaser bitch, particularly if the male has had semen collected previously. However, use of a bitch will almost certainly expedite the procedure and allow more sperm to be harvested. Ideally the teaser should be in estrus, but considering the length of the canine cycle, that is often difficult to arrange, and a friendly, non-estrus bitch will often serve the purpose. If a bitch is used, she should be controlled with her rear quarters facing the male.



An alternative means of stimulating the male is to present him with a [vaginal swab](#) from an estrous bitch - for convenience, a number of such swabs can be prepared from an estrous bitch and stored frozen until needed.

Canine semen is collected using digital pressure and massage. Most failures arise because the male is shy or otherwise intimidated. It helps to perform the collection on a non-slip surface such as a carpet. If the male appears nervous or this is his first time, a teaser bitch may help considerably.

Semen is collected without allowing the male to mount. A latex collection cone with an attached tube is commonly used. As an alternative, some people prefer to use a disposable baby bottle liner. Both collection tools are shown.

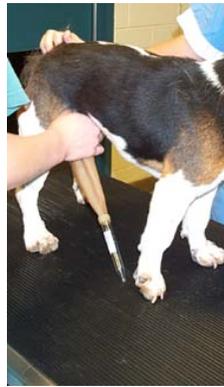
Collecting semen from dogs is not difficult, but like many things, is much easier after you've done it a time or two. The basic process is conducted in the following series of steps:

- Grasp the prepuce and pull/push it back to expose the tip of the penis.
- Slide the collection cone over the protruding penis and slide it over the penis, pushing the prepuce back over of the bulbis glandis (see images below).
- Lock your fingers in a ring around the penis, essentially holding the bulbis glandis inside your fist.
- Apply pressure with forward and backward movement; in most cases, the male will begin to thrust back and forth.
- Watch for semen to flow in the collection tube. Most dogs stop thrusting as they begin to ejaculate.
- Continue to apply pressure until you observe a crystal clear fluid (prostatic fluid)

begin to flow into the collection tube; at that time you can gently slide the collection cone off the penis.



Retraction of the prepuce



Collection cone on and pressure being applied



After collection. Note the engorged bulbous glandis

A rather common problem encountered in collecting canine semen is that the male develops an erection prior to being able to extend the penis and bulbous glandis out of the prepuce. Semen can be collected in this manner, but not as easily. If this happens, simply take the male a distance away to let him calm down, then try again.

Semen Evaluation

Dogs ejaculate semen as three distinctive fractions. By using a clear plastic collection tube, the delivery of these three fractions is easily monitored.

- *Pre-sperm fraction*: this is usually slightly cloudy in appearance and has a volume of roughly 0.5 to 2 ml.
- *Sperm-rich fraction*: in normal dogs, this fraction is distinctly milky in appearance.
- *Prostatic fraction*: this fraction is recognized as a crystal clear fluid flowing into the tube, and ejaculated slowing over a prolonged period of time. In most cases, collection is stopped as soon as this fraction is recognized.

Normal ranges for seminal characteristics in dogs are described in the following table:

Parameter	Normal Values
Ejaculate volume (without prostatic fraction)	1-6 ml
Sperm concentration	100-1000 million/ml
Total sperm per ejaculate	300-2000 million
Progressive motility	Greater than 70%
Morphology	Greater than 80% normal