

ESTROUS CYCLE (ESTRUS)

The **estrous cycle** or **oestrus cycle** (derived from Latin oestrus 'frenzy',) is the recurring physiological changes that are induced by reproductive hormones in most mammalian therian females. Estrous cycles start after sexual maturity in females and are interrupted by anestrous phases or by pregnancies. Typically, estrous cycles continue until death.

The majority of mammals become sexually-receptive (express estrus) and ovulates spontaneously at defined intervals. The female will only allow the male to mate during a restricted time coinciding with ovulation.

Stages- The estrous cycle can be divided into four stages: 1)**Proestrus**, 2)**Estrus**, 3)**Metestrus**, and 4)**Diestrus** based on behaviour changes or structural changes in internal and external genitalia.

ESTRUS

- allows male to mount
- estrogen decreases
- LH surge occurs
- ovulation 24-48 hr after surge of LH

- uterine motility high with contractions moving toward oviduct
- **Estrus** or **oestrus** refers to the phase when the female is sexually receptive ("**in heat**").
- Under the control of gonadotropic hormones, ovarian follicles mature. Estrus, (the period of sexual receptivity,) is primarily initiated by the elevation in estrogens from mature follicles just prior to ovulation.
- In most domestic species, ovulation occurs within a day or two after the onset of behavioural estrus,
- **Progesterone** secreted from corpora lutea from previous cycles also promotes behaviours estrus in some species.
- Proestrus and estrus together comprise the follicular phase of the reproductive cycle..
- It is thought that this increased sexual receptivity serves the function of helping the female obtain mates with superior genetic quality.
- In some species, the labia are reddened. In some Ovulation may occur spontaneously. Lordosis reflex, may be exhibited in some animal.

RN College Hajipur