

to use the vaccine on pregnant animals nor in herds in which the disease is not present.

The preparation and use of abortion vaccines are as yet largely in the experimental stage, and the evidence at hand so far is only sufficient to recommend their use in affected herds on heifers and non-pregnant cows before breeding as a means of assisting materially in obtaining living calves at full term.

HOW TO OBTAIN VACCINE.

The Health of Animals Branch of the Department of Agriculture at Ottawa will supply qualified veterinary surgeons, with contagious abortion vaccine, free of charge, providing an owner of cattle makes a request that he desires to have his animals vaccinated, and furnishes the name and address of the veterinarian he desires to employ and the number of animals to be treated. On receiving such a request the vaccine will be sent to the veterinary surgeon, with directions as to its use.

Owners desiring to avail themselves of this arrangement may do so by writing to the Veterinary Director General at Ottawa.

Abortion vaccines are also sold by commercial concerns, and may be obtained through reputable veterinary surgeons and used under their direction.

TREATMENT OF WHITE SCOURS.

Where abortion disease exists in a herd, outbreaks of White Scours may occur among the calves, causing severe losses at times. In these cases the healthy calves should be immediately removed from among the sick or . . . The soiled bedding should be frequently removed from the calf pens and replaced with clean bedding. The stalls should be well disinfected from time to time. If veterinary assistance is available it should be obtained for the administration of special remedies such as the serum and bacterin treatment. After the affected calves are a few days old they may be fed on boiled milk to which may be added half a teaspoonful of lysol or formalin morning and evening until relief is afforded.

STERILITY.

In herds where sterility or barrenness prevails to an increasing extent among the females it should be considered as a resulting phase of abortion disease. Where the barren females are only of ordinary beef value, they may be disposed of for slaughter. In the case of valuable cows being affected, the services of a skilled veterinarian should be obtained for the purpose of treating the womb by the Albrechtsen method, and to manipulate the ovaries with the hand to rupture cysts, if present, and to expel retained *corpus luteum*, or the so-called brownish body. This operative treatment of the womb and ovaries by a skilled person results in restoring many valuable cows to breeding usefulness.