

Contagious Abortion, Its Spread and Control

Hygienic Measures are Effective If Faithfully Carried Out

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THOSE dairymen and breeders who are willing to undertake and faithfully carry out permanent hygienic measures may with reasonable security expect to control and minimize the disease, but the work must be permanent, sincere and intelligent.

We advise, first, that the newborn calf be cared for in such a manner as to insure it against serious infection from abortion and other organisms and thus to guard its health and vigor. When the cow has reached her 270th day of pregnancy, or sooner if earlier calving seems probable, give her a thorough bath with warm water and soap, lathering the skin repeatedly until thoroughly clean. Rinse off the soap and water with a 2 per cent. solution of carbolic acid or cresol compound. Place the cow in a clean, disinfected stall. After the bathing, wash the tail, vulva, thighs and udder daily with warm one and a half to two per cent. solution of bacterol, cresol, lysol, carbolic acid, or other similar disinfectant, and douche the vagina daily with a 0.25 per cent. Lugol's solution. Lugol's solution, or compound solution of iodine, consists of 6 Troy dram of iodine crystals and 1½ Troy ounces of potassium iodide dissolved in 1 pint of water.)

Preserving the Calf from Infection.

When the calf is born, rub it dry and disinfect the stump of the navel cord. Do not tie it. Do not touch the navel stump with the hands. Fill a goblet or glass to the brim with 1-1000 corrosive sublimate solution, and, having the calf held on its feet, push the goblet against the navel region so as to submerge the navel stump completely, and keep it submerged for 15 minutes (Corrosive sublimate tablets can be purchased of a size that one to one pint equals 1-1000). Then dust the navel stump over heavily with a powder composed of equal parts of powdered alum and boric acid, and repeat every 30 minutes until the navel stump is dry. Place the calf in a clean, dry, comfortable stall, and keep it alone until two or three months old. Do not permit the calf to suck.

In feeding the newborn calf, select the milk of a healthy cow which has calved promptly and naturally in thirty minutes or less, has expelled her afterbirth quickly and naturally within two hours, and has no discharge from the uterus. Milk from cows which have calved slowly or had inflammation of the uterus, with discharges, and especially with retained afterbirth, is dangerous.

Before drawing milk from the cow to feed to the calf, wash her vulva, tail, thighs and udder and douche the vagina according to the plan recommended prior to birth. The milker should first disinfect his hands and should use a sterilized pail. The first milk from each teat should be discarded. Repeat the washing of the vulva, tail, thighs and udder immediately before each milking. Repeat the vaginal douches daily until all discharges from the vulva have ceased.

The first milk, or colostrum, is not necessary for the calf.

Ideally, it would be best to feed calves upon boiled or sterilized milk. The process is yet in the experimental stage. Some

calves grow thrifflily upon boiled milk from the first; others die. In the meantime, calves grown under the conditions recommended are reasonably safe, and at eight to ten days of age may be placed with safety upon milk boiled in a water bath. The milk which is boiled may be drawn from any economic source, mixed milk from the dairy, milk from tubercular cows, skimmed milk, or whey from creameries or cheese factories.

These recommendations have a triple purpose:

(1) We minimize the infection of the newborn calf with abortion bacilli and thus obtain the greatest security at present available against abortion, inflammation of the uterus and retained afterbirth two years later in first pregnancy.

(2) Combined with reasonable cleanliness of calf stalls and prudence in feeding, they have proven in extensive trials largely to eliminate white scours.

(3) Their application eliminates largely that very extensive and destructive group of cases of mastitis (garget) immediately following calving. The infection of the udder is apparently due chiefly to discharges coming from the uterus and oozing down the thighs, tail and udder. The infection thus reaches the orifices, chiefly of the hind teats, and, passing up the canal, establishes the mastitis.

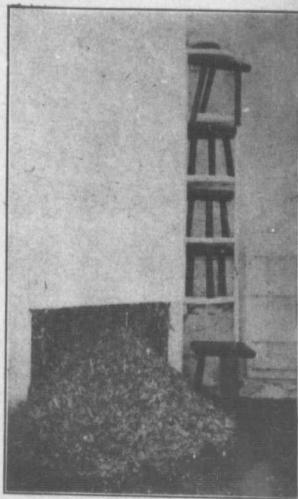
When all discharges after calving have disappeared, decrease the douchings of cows in the dairy to three times a week, though it would be profitable to continue the external washing of vulva, tail and udder daily in the interests of clean milk, as well as of the health of the cow.

When ready to breed a halfer or a dry cow, douche the vagina three times a week with 0.25 per cent. Lugol's solution (one ounce Lugol's solution to three gallons and one pint of water) for 21 days, or one heat interval, and then breed. Continue the douching for another three weeks, when, if the animal appears to be safely in calf, the douching may be decreased to once a week until time for calving approaches, when the care above outlined for the cow at that period should again be applied.

When abortion or retained afterbirth occurs, each case should be handled individually by a skilled veterinarian and the genital organs should be restored to health as promptly as possible.

Treating Valuable Breeding Herds.

In valuable breeding herds, according to our researches, if the breeder desires the most efficient



A Corner in a Well Kept Stable.

Shavings or cut straw for bedding is delivered right behind the cows through the sheet with the minimum of dust. Shelves are provided for the milking stools.

practical control, it can be obtained reliably only by regarding each breeding animal as a suspect and introducing, as a permanent practice in breeding hygiene, a course of uterine douches of, say, two per cent. Lugol's solution once a week for three or four weeks just prior to breeding, in conjunction with the other measures above advised. Such cows then usually breed safely and carry their calves well.

It is imprudent to sell cows that have aborted. They are just as safe to breed, after proper handling, as are other cows. The popular rule of holding an aborter for three months or for six months after aborting or for a period of three months after the date when she should have calved is imprudent and illogical. The cow which has aborted should be bred when her genital organs have been brought back to health. This may be in one month, it may be never, and the time elapsing after the disaster has nothing whatever to do with it. If a cow aborts during the first four months

of pregnancy, the membranes usually come away with the fetus, there is no afterbirth, and no notable discharge follows. If left to herself the cow may be in good condition to breed in fifty or sixty days, or if her uterus is carefully disinfected three or four times she may be in excellent condition for breeding in thirty days. If the cow has suffered from retained afterbirth and been neglected or even given the best possible attention, she may never again be fit to breed.

When sterility occurs, an expert veterinarian should be called early to examine the genital

(Concluded on page 13.)



Hog Raising is the Dairyman's Most Profitable Side-line.

With quotations as high as \$11 at country points, those who have stayed with the hog in less prosperous seasons are now reaping their reward. Of course, the bacon hog is the one desired, and show ring standards in Canada have changed to conform to this demand in so far as Berkshire and similar breeds are concerned. The ones here illustrated are between the fat type and the most desirable bacon type.