

INCIDENCE OF CONTAGIOUS ABORTION AMONG COWS *in* CATTARAUGUS COUNTY¹



THE incidence of contagious abortion in cattle in Cattaraugus County was studied last summer in a sample of the rural area. Such a study was prompted by the fact that several cases of undulant fever occurred in Cattaraugus County in 1930. The possible relationship between contagious abortion in cattle and undulant fever in the human population was not included in this phase of the general inquiry. The collection of data on contagious abortion was made possible in the course of a sanitary survey of 720 households living in Ashford, Ellicottville, Mansfield, Great Valley and Humphrey Townships, where epidemiological studies are being conducted by the United States Public Health Service in collaboration with the Milbank Memorial Fund.²

Of the 720 families visited, 78 per cent or more owned milch cows at the date of visit. For the cow-owning farmers data relating to contagious abortion during the twelve months preceding date of visit were obtained for 561 herds in which there were 6,921 cows. The record of abortion was based on the statement of the cow owner.³ It is believed that it is a minimal statement for the reason that in several instances abortions, which were probably contagious abortions, occurred in herds whose owners failed to recognize the disease.

Of the 561 herds, 81 or 14.4 per cent were affected with

¹ From the Division of Research, Milbank Memorial Fund. The data were collected by Mr. Clinton N. Woolsey with the cooperation of the Cattaraugus County Department of Health.

² See page 48.

³ Since no bacteriological data were obtained in connection with this particular inquiry, it is not known how much of the infection was due to *Brucella abortus*, *Brucella suis*, or other variety. It is presumed that *Br. abortus* was chiefly, if not entirely, responsible.

contagious abortion during the preceding year. Of the 6,921 cows in these 561 herds, 228 aborted during the preceding year, giving a rate of 3.3 per cent.

As stated above, it is believed that this rate is not an exaggerated one and is probably an understatement. It was found impracticable to obtain a record for each cow which calved during the preceding year; so that upon the assumption that on the average a cow belonging to a milch herd calves once a year, the percentage is based on the number of abortions by the number of milch cows owned at the time of the visit.

From the data obtained it was possible to classify the herds into those augmented by purchase and those not so augmented during the preceding year, and the herds which were augmented could be further classified into those augmented by purchase of cows from within the County and those augmented by purchase of cows from outside the County. It is interesting to note that the percentage of herds affected by the disease was higher for herds which had been augmented by purchase during the year than for herds to which no new cows were added, as the table shows.

The number of herds which were augmented by purchase from without the County is probably too small to yield a dependable conclusion.

	TOTAL NUMBER of HERDS	NUMBER AFFECTED BY CONTAGIOUS ABORTION	PER CENT AFFECTED BY CONTAGIOUS ABORTION
Herds to which no cows were added by purchase during year	453	59	13.0
Herds augmented by purchase of cows from owners in County	89	16	18.0
Herds augmented by purchase of cows from outside of County	17	6	35.3