

Reproductive Status of U.S. Holsteins and Jerseys

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Regular reproduction continues to be a challenge in dairy herds. Researchers at the Animal Improvement Programs Laboratory of USDA have reported regional and national statistics on reproduction in the July 2009 issue of the Journal of Dairy Science. These statistics were obtained from DHI records from 1996 to 2007 for nearly 20 million AI breedings. These breedings occurred during over 8 million lactations of over 5 million Holstein and Jersey cows in over 23,000 herds. Data reported were days to first breeding (DFB) after calving, nonreturn rate at 70 days after breeding (NRR70), conception rate (CR), number of breedings per lactation (NB), breeding interval between first and last breeding (BI), days between calving and last breeding (DLB) and calving interval (CI). Statistics were summarized separately for Holsteins and Jerseys by year and for Holsteins by six regions of the US.

Several changes in reproduction are apparent in reviewing the statistics and are highlighted in the table below. First breedings after calving appear to be taking place sooner in recent years. DFB increased slightly from 1996 to 1999 for both breeds and then decreased until 2007. For Holsteins DFB went from 92 up to 94 days and down to 85 days and for Jerseys from 85 up to 88 days and down to 83 days. Nonreturn rates at 70 days for first breedings after calving have decreased. NRR70 decreased in Holsteins by 9% (54% to 45%) while in Jerseys it decreased 5% (from 57% to 52%). For all breedings, the decrease in NRR70 was 8% (from 52 to 44%) in Holsteins and 6% (from 54 to 48% for Jerseys). Conception rates for both first and all services declined in Holsteins and Jerseys; by 2% for first and 3% for all services in Holsteins and by 3% for first and 4% for all services for Jerseys. The number of breeding per lactation (NB) increased in both breeds by .4 breedings in Holsteins and .3 breedings in Jerseys. This was accompanied by a lengthening of the breeding interval from first to last breeding (BI) in Holsteins of 18 days and in Jerseys by 11 days. Days from calving to last breeding (DLB) reflected the combined changes of decrease in days to first breeding and an increase in the number of breedings. The DLB increased 10-11 days from 1996 – 2006 for Holsteins and Jerseys. Overall calving interval (CI) increased 12 days in both breeds. For Holsteins CI in 2006 was 12 days longer than for Jerseys.