Good morning Chairman Johnson and members of the House Agriculture Committee. My name is Julie Wagendorf. I am an environmental health practitioner for the North Dakota Department of Health Division of Food and Lodging. The Division of Disease Control also provided information included in this written testimony. I am here today to testify on the behalf of the Department in opposition to House Bill 1433.

The Department of Health opposes House Bill 1433 largely due to the inclusion of unpasteurized ‘raw milk and raw milk products’ in the ND Food Drug and Cosmetic Act NDCC Chapter 19-02.1 which the Department of Health is responsible for enforcing. The Department of Health, as well as the Centers for Disease Control and Prevention (CDC) and the U. S. Food and Drug Administration (FDA), recommends against consuming raw milk and raw milk products because these products can carry harmful bacteria, viruses, or parasites that can make people sick (examples include Salmonella, E. coli, Campylobacter, Listeria, Mycobacteria bovis, Brucella, Giardia, and others).

Getting sick from raw milk or raw dairy products can involve several days of diarrhea, sometimes bloody diarrhea, stomach cramping, and vomiting. Although not as common, severe infections can lead to kidney failure, paralysis, chronic health conditions, and even death. Young children are more likely to suffer the consequences of severe illness than adults. Pregnant women, senior citizens, and people with weakened immune systems also are more likely to get seriously ill from the germs in raw milk.

Nationwide, of dairy product-associated outbreaks reported to the CDC through 2007 and 2012, 81 percent were found to be associated with consumption of raw milk or cheeses made from raw milk. During this 6-year time frame, the CDC analyzed 81 outbreaks due to the consumption of raw milk reported from 26 states. The most frequent organisms responsible for these outbreaks were Campylobacter, E. coli O157, or Salmonella, accounting for 979 sick people and 73 hospitalizations. A substantial proportion of the raw milk-associated disease burden was found in children – nearly 60 percent involved at least one child under
the age of five. In addition, CDC reported that unpasteurized milk is 150 times more likely to cause foodborne illness and results in 13 times more hospitalizations than illnesses involving pasteurized milk products.

In North Dakota, from 2012-2016 there were 23 Salmonella, E. coli, and Campylobacter cases who reported consuming raw milk or raw milk products during their incubation period. Approximately one-third of confirmed cases consuming raw milk in North Dakota were children under the age of 18. By enacting this legislation, the likelihood of exposure to illness-causing germs will increase, resulting in higher case counts, increased hospitalizations, and an increased number of foodborne outbreaks in the state. Analysis by the CDC has revealed that the states where the sale of raw milk was legal had more than twice the rate of raw milk-related outbreaks as states where it was illegal.

The occurrence and determinants of disease outbreaks associated with consuming raw milk in the U.S. is well documented and widely received by local, state, and federal public health officials, health care providers, and academia. For instance, the American Academy of Pediatrics released a position statement that advises against the consumption of nonpasteurized (raw) dairy products by infants, children, and pregnant women, and recommends that pediatricians counsel caregivers against consumption of these products. Please refer to the provided reference handout for additional examples. A producer may contest this information by underscoring the need for the end consumer to become educated and be more informed by asking the right questions, getting to know your farmer, and only buying raw milk from ‘clean’ farms with ‘healthy animals.’ Salmonella, E. coli, Campylobacter, and Listeria are types of bacteria that are commonly found in an animal farm environment and can be carried in milking animals including cows, sheep, and goats. Animals that carry these and other germs usually appear healthy; therefore, a health assessment of the animal is not an effective means for controlling harmful bacteria on the farm or in milk.

Furthermore, presence of bacteria in the environment or in a milk product is not obvious by sight, smell, or taste. Milk can get contaminated on a farm by different ways such as from the environment (e.g., cow feces, dirt, processing equipment), infection of the cow’s udder, cow disease (bovine tuberculosis or brucellosis), insects, rodents, or by humans cross-contaminating with soiled hands. The concern the Department of Health has about introducing raw milk and raw milk products into markets does not necessarily reflect on the producer, how the producer cares for and keeps their animals, or how clean and sanitary the
environment on the farm is. Pasteurization provides a ‘kill step’ and is the only way to eliminate bacteria in milk that can make people sick.

No matter what precautions are taken by the producer, there is no guarantee that the unpasteurized milk is free of harmful germs. Furthermore, raw milk products – yogurt, cottage cheese, cheeses, whipping cream, cheese curds, sour cream, buttermilk, ice cream – lead to an even higher risk for contamination since these products undergo more complex processing than the raw milk they are made from.

In addition to pasteurization, controlling for the growth of harmful bacteria such as *Listeria* in dairy products also requires monitoring of cold holding temperatures at or below 41°F and controlling the shelf-life of product using date marking. House Bill 1433 could potentially allow raw milk and raw milk products that already have a higher probability of *Listeria* contamination to be transported from the farm to farmers markets, farm stands, meeting places for end consumers, etc., without oversight of proper packaging and temperature controls during storage, transportation, or while on display. *Listeria* grows readily in the environment at temperatures as low as 45°F and can survive for long periods of time. In order to control for this dangerous bacteria, proper cleaning methods are needed, temperature monitoring for cold holding is required, and disposal of expired products is important. *Listeria* infection is extremely dangerous for a pregnant woman and her fetus. This bacteria can cross the placenta and infect an unborn fetus resulting in stillbirth, pre-term labor, or spontaneous abortion.

Section 4-30-55.2 on page two of HB 1433 does not include any requirements of a label or availability of a written statement that informs the end consumer about safe handling instructions and, most importantly, a consumer advisory that clearly warns people of the health risks they are assuming. Additionally, this law will allow for the consumption of raw milk and raw milk products by individuals unable to make informed decisions such as young children and even some aging seniors. As you recall from earlier in my testimony, these groups are at increased risk for infection and severe complications from illness.

Some people may think that drinking raw milk is a healthy choice. Instead they put themselves at increased risk for illnesses that cause diarrhea, stomach cramping, vomiting, and, although not as common, serious complications including kidney failure, paralysis, stroke, or death. According to the FDA, research shows no meaningful difference in the nutritional values of pasteurized and unpasteurized milk. Regardless of the health benefits that might be claimed by others, these
unsubstantiated claims do not outweigh the risk of negative health outcomes that I have described to you today.

Currently in North Dakota, under the Food Handler’s Education Act NDCC 23-09.2, low-risk food items that are home-processed, home-canned, and home-baked are allowed for direct sale from the producer to the consumer at farmers markets and food stands. A list of low-risk food items and labeling requirements are referenced on the enclosed fact sheet. The Department of Health could support a law allowing direct producer to consumer sale of foods, administered uniformly throughout the state, provided necessary guidelines are provided to mitigate the risk of disease-causing germs and other forms of adulteration resulting in injury or harmful health effects to the end consumer.

Chairman Johnson and members of the committee, thank you for listening to my testimony. I am happy to answer any questions you may have.

HB 1433-Wagendorf-Food Freedom Act-2017-02-09