## Opposition to HR1373:

Chairman Ruby and members of the House Human Services Committee.

Hello. My name is Christy Broadwell, and I am a reproductive endocrinologist currently practicing and providing IVF care in the state of North Dakota at Sanford Reproductive Medicine. I grew up on a farm outside of Valley City with my brother David, mother Mary and father Keith, who also grew up on that same farm. I attended Valley City High School and upon graduation attended Minnesota State University—Moorhead (MSUM). I had the privilege of receiving my medical education at the University of North Dakota as well as within the clinics and hospitals throughout the state — I completed clinical rotations in East Grand Forks, Cando, Fargo, Oakes and Minot throughout my four years of medical school. I know there are many legislators that worked very hard to provide that 4-year medical education to North Dakota students, and I am grateful for their work.

I completed a 4-year Ob-Gyn residency at the University of Iowa. I then completed a 3-year fellowship in Reproductive Endocrinology and Infertility at the University of Vermont.

I have been practicing in the field of Reproductive Endocrinology and Infertility for 13 years, of which the last 5 have been within the state of North Dakota. I consider it a privilege to give back to the state of North Dakota that provided so much for me and allowed me to achieve my dream of becoming a physician.

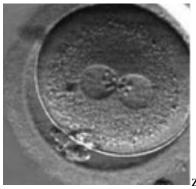
I am here to oppose HB 1373.

One of the primary concerns I have is that the bill's changed definitions of "unborn child" do not consider the natural biological processes involved in in vitro fertilization (IVF), and would likely mean the end of this vital service for would-be parents in North Dakota.

Please allow me to take a few minutes to explain the IVF process.

A woman is born with every egg that she will ever have, but the large majority of these are not accessible until the egg "wakes up" from hibernation and becomes part of a resting or antral follicle. Each month a group of these antral or resting follicles can be stimulated by a hormone called follicles stimulating hormone (FSH). Due to feedback within our reproductive system, usually only one small, antral follicle grows into a mature follicle that can release an egg, a process called ovulation. After this step, it can be possible for a sperm to fertilize that egg within the fallopian tube. Each month, this leads to one opportunity for egg and sperm to combine to create a zygote.

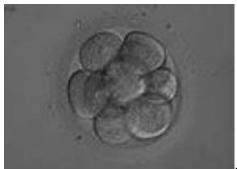


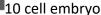


Mature oocyte

zygote

Following this, the single cell with DNA from egg and sperm undergo cell divisions to create an embryo and then a blastocyst. These steps are necessary in order for implantation and the start of detectable (? Maybe poor word choice) pregnancy.







Blastocyst

It is important to know that many eggs may fertilize but do not continue to grow and develop into an embryo or blastocyst. Even if fertilized eggs or a zygote develops into an embryo, not all embryos implant to create a pregnancy. It is estimated that, in people who have unprotected sex, only about half of fertilized eggs successfully implant into the uterus to initiate a pregnancy. While it is true that every baby born developed from a fertilized egg that matured into an embryo, a substantial number of fertilized eggs and embryos naturally expire long before ever developing into a fetus, a baby, or an adult capable of speaking to this Committee today.

During the in vitro fertilization (IVF) process, medication is used to stimulate the growth of multiple follicles. This medication is given for approximately 10-12 days while we monitor response with ultrasounds and blood work. The number of follicles that grow is unique to an individual response to medication can vary dramatically. When ready, the eggs are retrieved by a surgical procedure prior to their own release or ovulation. These eggs are then transferred to the embryology lab where highly trained staff utilize convention insemination or intracytoplasmic sperm injection to fertilize each mature egg. After an egg retrieval usually

only 70% of mature eggs fertilize, and of those fertilized eggs, only 50% continue to develop into an embryo and a blastocyst, which can be transferred into a uterus.

Although, not every couple requires IVF therapy to conceive and build their families, over 3% of all babies born in the United States each year are conceived with the use of IVF. This results in ~100,000 births / year and over 8 million individuals have benefited from this amazing technology since its inception. Everyday there are dedicated and highly trained people that deliver this care throughout the country. We are lucky to have these skilled individuals within the state to provide this for our population. In the last 5 years, our clinical work and IVF treatments have resulted in 150-180 births / year to couples within North Dakota, Minnesota, Montana and South Dakota. In the last 30 years, families have been created and expanded with approximately 2000 babies born with this medical treatment.

If this bill were to pass, medical professionals like me, who go to work every day to help people who desperately want to raise a family, could be charged with homicide or be civilly liable for:

- the failed development of a fertilized egg to an embryo
- failed development of an embryo to a blastocysts or
- the failure of a transferred embryo / blastocyst to implant and develop into a viable pregnancy

## Even though these are natural and uncontrollable aspects of reproductive biology.

Furthermore, there is the potential for women to be held accountable for pregnancy losses, even though they did nothing wrong and have no control over the outcomes. This bill would place an unjust burden on patients and create significant emotional and legal distress for those already facing the challenges of infertility.

Thank you for your time and consideration. I strongly urge you to vote no on this bill.

I will stand for any questions you might have.

Sincerely,

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