

Chairman Larsen, and members of the Senate of Industry and Business Committee, hello my name is Corina Larson, and I am an Oncology/ Survivorship Nurse and Tobacco Treatment Specialist (TTS)/ Cessation Counselor at Bismarck Cancer Center.

Today I am here to encourage a Do Not Pass on HB 1229.

I am here to educate you on the types of cancers linked to tobacco products. Most common are oral, mouth, head and neck, esophageal, lung, stomach, pancreas, cervical, bladder, kidney and colorectal.

State of ND estimates 4370 new cancer cases in 2023, 1600 of those are tobacco risk cancer types as listed above, 1320 deaths are estimated with 560 of those deaths' being tobacco 'at risk' type cancers. (American Cancer Society)

Usually when we associate smoking whether it is cigarettes or cigars, we think of lung, but all these other systems are affected as well.

In 2022 Bismarck Cancer Center treated 761 cancer patients of those 170 were a tobacco related cancer. Here is the breakdown of those types treated.

20-Oral/lip/head and neck/glottis 10 with a history (Hx) of tobacco use- 1 received Tobacco treatment (TTS)

10- Esophageal/stomach- Hx-6, TTS-1

22- Colorectal- Hx-5, TTS-1

92- Lung, Hx-49, TTS-33

11-Endometrial/cervical, Hx-6, TTS-1

5 -Kidney/bladder, Hx- 4, TTS-0

10-Gallbladder/pancreas, Hx-5, TTS-1

I did not include any metastatic treatments such as bone, brain, skin, or lymphomas that may have been an at-risk tobacco cancer.

As a survivorship nurse and TTS I gather health information of the patients cancer journey, educate on side effects from radiation therapy and educate on survivorship moving forward after treatment. That includes healthy living and healthy lifestyle. Exercise, weight control, limiting alcohol and avoiding tobacco. I also offer tobacco counseling, during and after treatment, to cut down to quit use of all tobacco products.

- I educate patients about the harmful effects of tobacco products from the 70 carcinogens (cancer causing chemicals) that are found in all tobacco products
- Nicotine causing the thickening of blood causing a higher risk for stroke and heart attack, peripheral vascular disease, decrease in wound healing.
- I teach behavior modifications, removing triggers to aid in cutting down and quitting. Much like smoke free laws- making it more inconvenient to smoke reduces triggers. No smoking in the house, car, restaurants, bars.

In May of 2021 I was Nationally Certified in Tobacco Treatment Practice in studying for this exam statistics show over 68% of smokers want to quit, 55% will try and only 7.5% will quit. And most will need to attempt 8-11 times to quit for good. (CDC)

In 2021 I met with 227 patients and with counseling 25 quit. In 2022 I met with 173 patients and 20 quit.

In the US 38,000 annual deaths are attributed to Secondhand Smoke (SHS) due to increased heart disease, risk of stroke, cancer, Type 2 Diabetes and pulmonary disease. I also discuss 3rd hand smoke exposure of fabric upholstery carpet, and walls. NNK (4-methylnitrosamine) was identified from surface dust in smokers' homes. Oral ingestion causing lung and stomach cancer. (Mayo) (NIH)

Cigars are not any different. Each cigar contains as much nicotine as a pack of cigarettes. And even if you do not inhale, large amounts of nicotine can be absorbed through the lining of the mouth. Unfiltered tobacco use is a higher cancer risk than filtered (France). We know that cigar smoking causes cancers of the oral cavity, larynx, esophagus, and lung. **Cigar smokers have an increased rate of pancreatic cancer.** (NCI)

Let me give you some insight of the journey of a head and neck cancer patient and their treatment. Imagine having difficulty swallowing or not being able to swallow, and you have a feeding tube, dry mouth, everything tastes awful, there may be mouth sores and pain. You make it through treatment of both chemotherapy and radiation. Now the new life of a survivor starts. Maybe permanent dry mouth, you must constantly carry water with you, difficulty swallowing afraid you may choke, permanent taste changes- a steak does not taste like a steak, going out to eat is not enjoyable anymore. Maybe you have lost your singing voice, there may be permanent facial scarring, or distortion. Many of our head and neck survivors tell us 'I do not think I would do this again!' Plus, the fear of recurrence!

- Smokers who continued smoking during/after head/neck cancer treatment had 2.7 times higher risk of dying (from any cause) and 2.1 times higher of cancer-related cause, than non-smokers. (Univ of Michigan)
- Quitting smoking for 1-4 years after head/neck cancer diagnosis reduce risk of recurrence by 25%
- Quitting smoking for 20 years returns risk level to non-smokers
- Quitting alcohol consumption for 20 years returns risk level to non-drinkers (International Head/Neck Cancer Epidemiology Consortium)

Nearly 90% of smokers begin by the age of 18 they are influenced by peers, parental influences, friends, social media, TV and movies. (CDC) Cigarette consumption has decreased but flavored tobacco in forms of vapes, chew and cigars has increased. Our youth do not remember the days when everyone smoked in the hospitals, movie theaters, restaurants, and other public places, by condoning cigar smoking in public places creates confusion to both youth and employees working in those establishments. Secondhand smoke is not safe. Do not confuse the issue that cigars seem safe enough to smoke indoors without serious health consequences for those exposed.

The Smoke Free law is an exceptional public health accomplishment that protects everyone from the dangers of secondhand smoke exposure. Clean smoke free air should remain the standard of care in public places to help reduce cancer risks.

Again, thank you for this time in front of you, chairman Larsen.

I stand ready for any questions you may have.

(NIH) National Institute of Health Thirdhand smoke: Genotoxicity and Carcinogenic Potential -B Hang-2020

France: <https://www.sciencedirect.com/science/article/abs/pii/S0964195595000410>

(NCI) National Cancer Institute (1998) Smoking and Tobacco Control Monograph 9: Cigars: Health Effects and Trends- last updated 10/21/2010 chapter 4

Univ of Michigan: [Does Quitting Smoking Make a Difference Among Newly Diagnosed Head and Neck Cancer Patients? | Nicotine & Tobacco Research | Oxford Academic \(oup.com\)](#)

International Head/Neck Cancer Epidemiology Consortium: [Cessation of alcohol drinking, tobacco smoking and the reversal of head and neck cancer risk | International Journal of Epidemiology | Oxford Academic \(oup.com\)](#)