SCRIPT FINAL DRAFT

[Title slide]

Hi, my name is Annemarija; today Elisa and I will talk about melanoma rates in Vermont and some possible policy recommendations.

Melanoma is a type of cancer that arises in melanocytes, the cells that produce melanin. Melanoma is the least common but most deadly type of skin cancer, accounting for about 1% of all skin cancer cases, but the vast majority of skin cancer deaths due to its likelihood of spreading if not diagnosed early.

Anyone can develop skin cancer. However, Ultraviolet radiation (UVR) is the major etiologic agent in the development of skin cancers. Too much UV radiation from the sun or sunbeds can damage the DNA in skin cells causing skin cancer.

[UV intensity map]

So in this map, we can see the intensity of UV radiation by county for states with available data. Since it decreases moving away from the equator, it's not surprising that Vermont has one of the lowest measures, similar to those of neighboring states.

[Cancer rate map]

However, Vermont recorded one of the highest age-adjusted melanoma incidence rates between 2014 and 2018: 38.1 per 100,000 people, in fact, in this data set it was second only to Utah, a considerably sunnier state.

Why this disparity? There is a plethora of potential reasons that could explain why Vermont is an outlier: the skin tone of the population, use of tanning beds, family history of cancer.

But since as much as 90 percent of melanomas are estimated to be caused by UV exposure, the most preventable risk factor, and since we know that UV intensity itself is not to blame, it's possible that Vermonters are not taking the necessary precautions to protect themselves from sun damage.

SWITCH SPEAKER

This is reinforced by the data provided to us. In 2015, the Youth Risk Behaviour Survey found that the average rate of adolescents, in grades 9 to 12, reporting getting a sunburn in the last 12 months was 66%, which exceeds the national average (indicated by the red line) by almost 10 percentage points. And even though fewer younger children in grades 6 to 8 reported being sunburnt, the rate still exceeded the Healthy People 2030 goals – proposed by the US department of health and human services – by more than 10% (noted with the dash line).

So these statistics are alarming since having 5 or more sunburns doubles your risk for melanoma, according to skin cancer foundation. This once again shows a lack of preventative behaviors, which is rational to think to be correlated with the high incidence rate of skin cancer.

POLICIES:

That being said, we are aware that in recent years the Vermont Department of Health has raised awareness about this issue as well as helped protect residents from the dangers of UV radiation.

From 2012, several measures were implemented including state legislations prohibiting the use of tanning devices for those under 18 years of age, public service announcements and educational conferences. Nevertheless, the desired result has not been achieved yet. That’s why we strongly recommend continuing with these efforts.

Unfortunately, some statistics from latter years are less than ideal and demonstrate a need for further intervention: the adolescent percentage of reported sunburns actually increased in 2019 to 73%.

So what can the Vermount Health department do?

First, communities can continue implementing proven preventative strategies to support sun safety. Secondly, to account for already done and irreversible sun damage, there is a need for an improvement in early diagnostic strategies. Knowing simple methods such as the ABCDEs of melanoma self-detection (asymmetry, border, colour, diameter and evolving) can help people recognise the early signs of melanoma and reach out for professional help.

As a matter of fact, early detection can make a huge difference when it comes to melanoma treatment.

In conclusion, despite being dangerous, melanoma has a 99% 5-year survival rate if localised, emphasising the need for early detection, even so people should be incentivized to take preventative measures to minimise their risk. We sincerely hope that the department of health of Vermont will continue adressing this essential issue.