Chairman Wanggaard and members of the committee, thank you for considering my testimony today. My name is Dr. Louella Amos and I am a pediatric pulmonologist at Children’s Wisconsin and Associate Professor of Pediatrics for the Division of Pulmonary and Sleep Medicine with the Medical College of Wisconsin.

Today, I want to share Children’s Wisconsin’s (Children’s) perspectives on the Tobacco 21 legislation and respectfully suggest an improvement to this important bill. We appreciate the bill’s authors, Senator Marklein and Representative Spiros, as well as the bipartisan cosponsors of this legislation for taking the lead on this crucial issue and I hope that together we can craft a proposal that will be a positive step in addressing this public health crisis.

Let me first start by saying that at Children’s, we strongly believe that e-cigarette and tobacco use is never appropriate, healthy or safe for kids and teens. My mantra is the only thing that should be inhaled into anyone’s lungs is air. While the federal government passed a national law to raise the age to legally purchase tobacco and e-cigarette products from age 18 to age 21, passage of a state-focused bill is necessary. Stakeholders who receive their authority from state law, including law enforcement and retail partners, need this legislation to ensure they can help keep these harmful products out of the hands of our young people and out of our high schools. Strong, adequate compliance and enforcement is essential to limiting youth access to these products.

As we have all seen in the past few years, the vaping and tobacco industry is ever-evolving. This is why we want to ensure that this legislation is comprehensive in covering all products and is enforceable. Children’s and our partners believe the definition of “vapor products” should be amended as the current version does not cover non-nicotine e-liquids, other substances or parts/accessories purchased and used by those who vape. While products that contain nicotine would be covered, we know that even liquids/substances without nicotine still contain harmful ingredients that contribute to EVALI, including vitamin E, diacetyl, formaldehyde and acrolein.

To ensure the legislation covers all products and is enforceable, we recommend the following definition: “Vapor product” means any device that may be used to deliver any aerosolized or vaporized substance to the person inhaling from the device, including, but not limited to, an e-cigarette, e-cigar, e-pipe, vape pen, or e-hookah. Vapor products includes any component, part, or accessory of the device, and also includes any substance that may be aerosolized or vaporized by such device, whether or not the substance contains nicotine. Electronic smoking device does not include any battery or battery charger when sold separately. Electronic smoking device does not include drugs, devices, or combination products authorized for sale by the U.S. Food and Drug Administration, as those terms are defined in the Federal Food, Drug, and Cosmetic Act. In addition, we recommend using the word “substance” instead of “liquid” as the tobacco and vaping industry are now marketing products, like e-gels, that might not be defined as liquid.
Let me share a couple reasons why we are concerned about youth tobacco and e-cigarette use:

- Traditional tobacco and many e-cigarette products contain nicotine. This highly addictive drug has a negative impact on brain development, which continues until the mid-20s. The adolescent brain is exquisitely sensitive to nicotine, which can cause problems with learning and memory, as well as long-term behavioral impairments including depression, anxiety and mood disorders.

- Studies have shown that high exposure to nicotine in children makes them more susceptible to nicotine addiction and puts them at risk for lifelong addiction to tobacco products and other drugs. While there are resources available for youth to quit using traditional tobacco products, there are limited resources addressing youth e-cigarette cessation. Some may turn to using traditional tobacco products instead which also have significant health risks. As with most public health issues, prevention is critical.

- There is not sufficient data or research regarding both the short- and long-term health impacts of e-cigarette use among adults, let alone teens. We continue to learn about the effects of inhaling the aerosol produced by these products, which contains harmful chemicals, heavy metals and ultrafine particles. Importantly, these products are easy to use: vaping devices, pods/cartridges and disposable products come in appealing and pleasant flavors (even with the federal action targeting flavored products); they are easy to hide and have no residual odor; they are less expensive than traditional tobacco products; and they don’t require a lighter.

- Based on Wisconsin 2019 Youth Risk Behavior Survey data, 6% of high schoolers use traditional combustible cigarettes, 5% use cigars or cigarillos and 3% use hookah and smokeless tobacco. In stark contrast, 21% of high schoolers use electronic vapor products. This effectively represents a new generation of nicotine addicts and potential future traditional tobacco users. These statistics are alarming and should concern parents, providers and policymakers.

As you may know, Children’s has been on the forefront of the nationwide outbreak of severe lung injuries associated with vaping and use of e-cigarette products. Since first identifying the e-cigarette or vaping-use associated lung injuries (EVALI) in 2019, Children’s continues to see teenagers admitted to our hospital with severe respiratory distress and lung injuries related to vaping. These previously healthy teens experienced weeks to months of fatigue, GI complaints, weight loss and ultimately chest pain, shortness of breath and acute respiratory failure leading to their hospitalization. Post-hospitalization follow-up, some teens have reported losing sports scholarships due to their illness, have objective evidence of residual lung disease, and despite their horrible ordeal, some are so addicted that they are physiologically and psychologically unable to quit vaping. We have seen teenagers admitted over the course of the last year, including one who was admitted twice due to relapse. Regardless of the contents being used in these devices, they have no place in the hands of our youth. All of this occurred because they had access to e-cigarettes.

Our Children’s primary care doctors see firsthand the prevalence of tobacco and e-cigarette use and are very concerned about the severe risks these products pose to kids’ health. As a physician, it’s frustrating that after years of progress in decreasing teen tobacco use, we have witnessed an alarming increase in the use of the next generation of harmful products. In talking with our patients, some describe fewer students vaping in their schools while others describe experiencing an increase in vaping among their peers. The key is prevention because right now, those who are hooked are having a hard time quitting, especially with the adolescent mental health crisis exacerbated by the pandemic. While it is very
important to tackle the current e-cigarette crisis, we must also at the same time take action to reduce
the harm and death toll caused by traditional tobacco use.

We are all familiar with the harmful risks associated with tobacco use including various cancers, lung
disease, heart disease, stroke and more. In Wisconsin, approximately 7,000 people die each year from
smoking-related causes with a direct health care cost of $3 billion. And each year, teens begin the habit
and risk becoming life-long tobacco users. We know that tobacco/nicotine habits start when you’re
young: 90% of adults who use tobacco started in their teen years and 99% started before age 26. The
younger a person starts using tobacco, the faster they become addicted and the harder it is for them to
stop. Preventing use in the first place is critical to reducing the number of youth who smoke or use e-
 cigarette products.

Importantly, three-quarters of high school students say it is easy to obtain tobacco products. 80% of kids
turn 18 while in high school; unfortunately, this makes it easy to supply these products to their younger
friends and classmates. Raising the purchase age to 21 will make it more difficult for kids to access these
products. Younger teens and middle schoolers are not as likely to be friends with 21-year-olds. Adults
should be doing what we can to make these products unappealing and as hard as possible for our kids to
get their hands on them.

We hope to see cross-sector cooperation in preventing e-cigarette possession among our young people.
While a comprehensive strategy is needed to address youth tobacco and e-cigarette use, including
making sure that there are addiction resources for teens and families, we believe that Tobacco 21, with
these definition modifications, would be a strong step in the right direction. We must do what we can to
prevent kids from having easy access to these products and reduce their opportunities to try them in the
first place.

Tobacco 21 is an important component of addressing this public health crisis among our youth. I again
ask for your collaboration to improve this important legislation. Please contact me with any questions
you may have.

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Children’s Wisconsin (Children’s) serves children and families in every county across the state. We have inpatient hospitals in
Milwaukee and the Fox Valley. We care for every part of a child’s health, from critical care at one of our hospitals, to routine
checkups in our primary care clinics. Children’s also provides specialty care, urgent care, emergency care, dental care, school
health nurses, foster care and adoption services, family resource centers, child health advocacy, health education, family
preservation and support, mental health services, pediatric medical research and the statewide poison hotline.