

Good morning. My name is Dr. Karen Rothman. I am a Dermatologist and Pediatrician employed by the UMass Memorial Medical Group. I am on the Boards of both the Massachusetts Academy of Dermatology and the Melanoma Foundation of New England. I am speaking to you this morning to express my views and the views of the Boards that I serve.

I have been a Dermatologist for 20 years. I live and practice Dermatology in Westboro, where I see about 40 adults and children each day. I, as well as many of my Pediatric and Dermatology colleagues, have cared for patients who have experienced a variety of problems associated with tanning beds. Although it would be my personal preference to see tanning beds banned altogether, I feel that many of my concerns about tanning beds are addressed in Senate Bill 1329 and urge you to support the bill.

My first concern is that tanning beds can cause burns. More important than the pain they cause, every sunburn doubles a person's chance of developing skin cancer. Twenty to twenty-five % of Americans get skin cancer, and the major risk factor for getting skin cancer is having burns. We have no accurate data on how many people get burns from tanning booths, because there is no requirement to report tanning bed related burns or other side effects to the Dept of Public Health or any other safety organization. Last year I surveyed members of the Massachusetts Academy of Pediatrics. Many Pediatricians had patients who were burned in a tanning booth in the previous year. One of the responding Pediatricians detailed severe, blistering burns covering 70% of a child's body after using a tanning bed.

People can burn in tanning booths for a variety of reasons:

- a. People with very fair skin may not have the ability to tan.
- b. The tanning bed lights are supposed to put out only Ultraviolet A (known as UVA) light, which causes tanning of the skin. However, as the light bulbs get old, they begin to also put out Ultraviolet B (known as UVB) light, which causes burning.
- c. Some people stay in the tanning bed too long. This can happen when people fall asleep in the beds and no one else is monitoring them, when the timer that is set malfunctions, or when a person chooses to set the timer for too long.
- d. Some medications make people more sensitive to UVA light and increase the risk of a burn. Many of the antibiotics and creams we use to treat teenage acne have this effect.

My second concern is that tanning beds can cause eye damage, including cataracts and macular degeneration, if a person does not shield their eyes properly. Goggles are supposed to be worn while a person tans in a tanning bed. However, many tanning bed clients don't wear goggles because they want their eyelids to be tanned. To avoid the problem of getting white lines, a few of my patients have told me that the operator of the tanning bed told them to just take the goggles off and keep their eyes closed. One of my patients, who used tanning booths extensively while in her twenties and thirties, described how she burned her eyelids several times a week to keep her tan even. Now in her forties, she has already been operated on for cataracts and has macular degeneration. I have also treated her for precancerous growths near her eyes. The reality is that once a person is in a tanning bed it is impossible for the tanning bed operator to know whether or not the client is actually wearing goggles. Teens in particular are more focused on what looks good to them now rather than on what could harm them later in life. Last year a Massachusetts Pediatrician reported to me that one of their patients had severe eye damage from exposure to 300 times the recommended dose of tanning bed light.

My third concern is infections: Epidemics of warts and herpes have been reported in tanning salons. Tanning beds are supposed to be cleaned between clients. However, this is not consistently done. One of my patients works in a hair salon with a tanning booth in the back. Her boss has told her that she should not stop cutting a person's hair when someone wants to use the tanning booth. She just hands clients the key to the booth, so they can let themselves in, set the booth to their own specifications, and let themselves out. When she takes a break from hair cutting, and also at the end of the day, she cleans the booth. Every day she cleans gum and a variety of other partly eaten foods in the booth. People sweat in tanning booths. Should anyone, let alone your daughter, have to lay down or stand on a surface that has been touched by many other sweating bodies that day without being cleaned?

My forth concern is that tanning is part of a risk-taking behavior pattern. Many people believe they look thinner when they are tan. Studies as well as my own experience as a dermatologist tells me that even people who have had skin cancer and have given up tanning still feel they look better when they are tan. A number of studies have documented that teenagers who tan often engage in other risky behaviors such as smoking, binge drinking, and anorexic eating patterns. Several of my patients who previously used tanning beds recall how hard it was to give up the beds. They describe themselves as having been addicted to them. Both adults and children who come to my office obviously tanned from regular tanning lie and say they have not been, or have not been there often. When tanning salons advertise unlimited tanning for a fixed price, especially prior to high school proms, it encourages people to feed their addiction in their quest for what they view as an ideal appearance.

My major concern about tanning beds relates to skin cancer. I diagnose somewhere between fifteen and thirty new skin cancers in my patients each week. More than 1 million new skin cancers are diagnosed each year in the US. The FDA labels ultraviolet light as a carcinogen. Several studies over the last few years have shown that the rates of certain types of skin cancer in patients who use tanning beds regularly are 2-3 times higher than age-matched controls who do not use tanning beds. Another study showed that women who use tanning beds once a month have 55% more melanomas, the deadliest form of skin cancer. The tanning bed industry argues that it could be outdoor tanning that is causing the skin cancers. The problem is that ultraviolet light damage is cumulative. This means that our skin remembers every time we damage it. It doesn't matter whether we damage it tanning outside or in a tanning booth. Ultraviolet A, the kind of light emitted by tanning beds, damages the DNA at the base of the epidermis in our skin. This is where almost all melanomas begin. Damaging DNA causes cancer, and children who damage their skin's DNA are especially susceptible to skin cancer later in life. The rate of skin cancer in children has quadrupled in the last five years. Melanoma rates are rising exponentially in the US, and Massachusetts now has the tenth highest rate of melanoma in the nation. A person dies of melanoma in the US every 55 minutes. According to the American Academy of Dermatology, the cost of treatment of nonmelanoma skin cancers in 2004 was 1.5 billion dollars. If we include treatment of melanomas and extrapolate to 2007 dollars, it is likely that we will spend close to 2 billion dollars treating skin cancer in the US this year.

Some may argue that tanning beds provide an easy way for New Englanders to get Vitamin D. Sunlight does help us to metabolize Vitamin D into a form that promotes the absorption of calcium into our bones to help prevent osteoporosis. However, it is only UVB light that does this. UVA light, the primary spectrum of light put out by tanning beds, does not help with Vitamin D deficiency or osteoporosis. Furthermore, exposing the back of your hands to natural sunlight for 20 minutes a week will provide all of the vitamin D that your body can absorb through sun exposure.

According to the tanning bed industry, there are over 30 million tanning bed users in the US each year, and at least 25% of them are teenagers. This industry generates 6 billion dollars annually in the US. One of my patients, who owns a few tanning salons, boasted to me that he has made more than a million dollars profit from owning tanning salons over the last three years, and that he never even has to go into the salons himself. He just hires people at minimum wage to run the places for him while he works at a different job. His wife stopped using the tanning beds when she developed a 2 inch brown spot on her cheek, and he will not allow his children to tan in the beds. If the owners of tanning beds don't want their family members to use tanning beds, doesn't that tell you that they have concerns about their safety as well?

Please support Senate bill 1329 to limit the use of tanning beds by teens and to impose greater safety regulations on tanning beds used in MA.

Thank you for your time. I would be happy to answer any questions you have for me.

Good morning. Thank you for the opportunity of speaking to you. I am here in support of Tanning Bill 1329. My name is Dr. Marie-France Demierre. I am a Dermatologist and I am also specialized in Skin Oncology, a field that further advances our understanding of skin cancers, prevention and treatment. I am the Director of Skin Oncology at Boston Medical Center, Boston University School of Medicine and Associate Professor of Dermatology and Medicine at Boston University School of Medicine. I care for more than three thousand skin cancer patients every year at Boston Medical Center.

We have a rising epidemic of skin cancer in the United States. Half of all cancers are skin cancers. Skin cancers represent a significant public health burden. Skin cancer rates have increased in young populations.

Furthermore, one in 5 American will develop skin cancer. Melanoma is the most fatal form of skin cancer. Melanoma is second after leukemia with regards to potential life lost. In other words, melanoma kills young people and young parents. Melanoma has also been increasing in pediatric populations in the United States.

We do know that tanning damages our skin's DNA, and puts persons at risk for skin cancer. We know that damage at a young age, increases one's risk of skin cancer further. We know that indoor tanning lamps emit amounts of UVA that can be 10 to 100 more than what one individual should receive. UVA can penetrate deeply in the skin and affect DNA, proteins and other important components of cells. Some of the effects may not be visible for years, such as skin aging and skin cancer. There is mounting evidence that indoor tanning contributes to skin cancer risks. There is now epidemiologic evidence from 2 large studies that melanoma increases with regular use of indoor tanning especially among younger individuals.

Moreover, there is also clear evidence that the indoor tanning industry is unregulated and that those most at risk of skin cancers, young fair skin individuals are able to receive indoor tanning sessions without ever having their age checked. I have personally been involved in research on the compliance of the indoor tanning industry for the past 7 years. Our own published research showed that in Massachusetts 81% of 100 businesses tested sold a session to a 15 year old without a parent's permission, in violation of Massachusetts state laws. Our research has also shown that among adolescents who had tanned indoors in Massachusetts, 53% had never been asked for parental permission.

We know that the indoor tanning industry uses marketing strategies that target high school students, offering free sessions or special promotions for proms and that they employ teenagers. Given our societal responsibility towards our citizens and our youth, the mounting epidemic of skin cancer, the link between use of indoor tanning among younger individuals and melanoma, I personally urge you as legislators, to minimize use of tanning beds in our citizens, particularly our children. As a citizen of the Commonwealth and a skin cancer expert who is dedicating my career to treating and preventing skin cancer, I urge you to support this bill to limit the use of tanning beds to minors and strengthen our state's regulation of tanning facilities.

Thank you for your time.
Marie-France Demierre, M.D.

THANK YOU FOR GIVING ME THE OPPORTUNITY TO SPEAK BEFORE YOU TODAY IN SUPPORT OF SENATE BILL 1329. MY NAME IS ALAN GELLER, I AM A RESEARCH ASSOCIATE PROFESSOR OF DERMATOLOGY AT THE BOSTON UNIVERSITY SCHOOL OF MEDICINE AND FORMER CO-CHAIR OF THE NATIONAL COUNCIL ON SKIN CANCER PREVENTION, THE UMBRELLA GROUP FOR THE MORE THAN 40 US ORGANIZATIONS DEVOTED TO STAMPING OUT SKIN CANCER.

I WOULD LIKE TO MAKE TWO POINTS FROM OUR RESEARCH:

ONE, WE HAVE AN **EPIDEMIC** OF TANNING BED USE AMONG US TEENAGERS, PARTICULARLY AMONG TEENAGE GIRLS.

AND TWO, HIGH TANNING BED USE LEADS TO MORE SKIN CANCER THAN WE WOULD EXPECT FROM OUTDOOR SUN ALONE. MANY MORE CASES WILL FOLLOW IF WE CAN NOT RESTRICT TEENAGE TANNING BED USE.

POINT ONE-EPIDEMIC TANNING BED USE

MORE TEENAGE GIRLS NOW USE TANNING BEDS THAN SMOKE CIGARETTES. THE NUMBERS ARE QUITE STAGGERING-7% OF 14 YEAR OLD GIRLS USE TBEDS EACH YEAR, THIS DOUBLES TO 15% FOR 15 YEAR OLD GIRLS, AND GOES TO 35% FOR 17 YEAR OLD GIRLS. THIS IS **NOT** JUST ONE-TIME USE, LIKE THE DAY BEFORE THE HIGH SCHOOL PROM. OF THE TEEN USERS, MORE THAN 40% HAVE USED TANNING BEDS 10-30 TIMES IN JUST THE PAST YEAR. PACKAGE DEALS ALLOW YOUNG USERS TO BUY AT LEAST 10 SESSIONS FOR \$30 DOLLARS OR LESS.

GIRLS WHO FREQUENTLY USE TANNING BEDS OFTEN COME FROM PLACES LIKE NEW ENGLAND WHERE TEENS WANT A YEAR-ROUND BRONZED LOOK. TEENS NOT ONLY WANT TO LOOK GOOD BUT OUR RESEARCH SHOWS THAT THEY ARE MORE LIKELY THAN NON-USERS TO BE OVERLY CONCERNED WITH BODY IMAGE AND HAVE A PREOCCUPATION WITH THEIR WEIGHT.

POINT 2-DISEASE RATES

SADLY, WE ARE JUST BEGINNING TO SEE THE EFFECTS OF TANNING BEDS SINCE THEY WERE HARDLY USED BEFORE THE MID-1980'S. USE HAS STEADILY GROWN SO THAT WE NOW HAVE 1 MILLION USERS PER DAY. AND SINCE CANCERS LIKE SKIN CANCER TAKE MANY YEARS TO GROW AFTER FIRST EXPOSURE TO A KNOWN CARCINOGEN, IT WILL BE MANY YEARS BEFORE WE KNOW THE REAL CONSEQUENCES FOR TEENS AND YOUNG WOMEN WHO STARTED USING THEM MANY YEARS AGO. SUPPORT OF LEGISLATION BEFORE US THOUGH CAN PREVENT UNTOLD DISEASE AND MORBIDITY.

EARLY REPORTS OF THE LINK BETWEEN TANNING BED USE AND CANCER ARE VERY UNSETTLING. TWO MAJOR STUDIES HAVE LOOKED AT TANNING BED USE AND THE AUTHORS WERE ABLE TO SEPARATE TANNING BED RISK FROM OUTDOOR LIGHT. IN THE FIRST, EUROPEAN TEENS WHO USED TANNING BEDS ABOUT 40 TIMES IN TOTAL BETWEEN THE AGES OF 15 AND 29 HAD MELANOMA RATES 55% GREATER THAN NON-USERS. SECOND, A STUDY IN NEW HAMPSHIRE FOUND RATES OF BASAL CELL AND SQUAMOUS CELL CANCER TO BE 2 TO 3 TIMES HIGHER IN TANNING BED USERS THAN PEOPLE WHO NEVER USED THEM. MOST IMPORTANT, THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER JUST CONCLUDED THE MAJOR STUDY TO DATE WHEN THEY LOOKED AT EVERY TANNING BED STUDY OUT THERE---SHOWING A 75% INCREASE IN MELANOMA AMONG PEOPLE WHO STARTED USING TANNING BEDS BEFORE AGE 35. UNFORTUNATELY, AS I HAVE REPORTED, TANNING BED USE IS STARTING MANY, MANY YEARS BEFORE AGE 35.

WE WOULD LIKE TO MAKE MASSACHUSETTS A MELANOMA-FREE STATE. WE KNOW WHAT CAUSES MELANOMA AND WE KNOW HOW TO PREVENT IT. WE CAN MAKE A GREAT LEAP FORWARD TODAY IN PREVENTING MELANOMA AND OTHER TYPES OF SKIN CANCER BY RESTRICTING TANNING BED USE AMONG OUR CHILDREN AND TEENS.

THANKS AGAIN FOR THE OPPORTUNITY TO SPEAK BEFORE YOU TODAY ON BEHALF OF SENATE BILL 1329.

My name is Jeff Mazza. I am a teacher at Shrewsbury High School and am writing this email in support of the proposed tanning bill (S 1329).

In this brief statement, I will write about my own experiences with teenagers in and around the topic of tanning bed use. However, these experiences are not unique to me in any way, but are commonplace among any of my colleagues at Shrewsbury High School or any other high school in the Commonwealth of Massachusetts.

As a high school teacher, I don't have to look far to see the effects of the abuse of tanning beds by young teenage girls. I go to work surrounded by 1700 teenagers each day. In my seven-year career, I have seen countless teenage girls (and occasionally boys) flock to tanning beds all year long without any idea of the implications to their health. The vast majority of these students are under the age of 18. As sophomores at the ages of 15 and 16, tanning becomes more and more popular as semi-formal dances, driving, and other rites of passage into adulthood rear their heads. Many girls display addictive tendencies, meeting in groups after school to go tanning, starting in the fall and going through the winter and into the spring. When I ask my classes every year, regardless of the grade level, how many students have a friend who uses a tanning bed several days a week, nearly every girl raises her hand. There are even those who lie to their parents about going to a friend's house, but instead go to an indoor tanning facility.

As a parent, I find this behavior disturbing. As a biology teacher, I find the lack of knowledge about the dangers of UV radiation shocking. When students do learn of the dangers, many continue to go tanning. A common belief I hear from many teenage girls is that if they do not get a sunburn no damage is being done. Therefore, if they continue to go tanning there is no need to worry about skin cancer since they have a good „base.% Some students even went as far as to say that „tanning is good for you% after hearing a news story about the beneficial aspects of limited UV exposure. Apparently the word limited did not have an impact.

There are some things that do have an impact, albeit limited in capacity. One of these is listening to a classmate tell of her experience of being diagnosed with squamous cell carcinoma at the age of 14. This former student of mine pleaded with her classmates to avoid tanning beds at all cost. Many of the students in the class were taken aback as someone their own age described her personal experience with skin cancer. Unfortunately, this student discovered that the impact her story has is limited as most girls her age have the „it can't happen to me% attitude that many teenagers have when it comes to any risk-taking behavior. Two of the habitual tanners in that class told me in person that while the experience of their classmate was scary, they would continue to go tanning because they felt that the same thing could not happen to them.

Perhaps part of the reason for this attitude is due to the fact that the dangers of tanning beds are not as well publicized as the dangers of smoking and alcohol abuse. Those substances have laws regulating their use by those whom are underage. Even though these laws do not prevent all illegal use of tobacco and alcohol, they do help young people realize that these substances can be dangerous. Since tanning bed use does not have any strict regulations towards underage teens, many teenagers do not view tanning beds as a health risk.

Still there are other students who say that they are aware of the dangers, but going tanning makes them feel better, or it reduces facial acne. To them, those things are more important than the dangers they are facing. Being happy or having a clear complexion is more immediate and noticeable while the damage that they incur while achieving these goals may go unseen for years. In addition to the darkening of the skin, these are two other popular reasons I hear time and time again as to why many of my students frequent tanning establishments.

Again, the vast majority of these students are under the age of 18. In my professional estimation as an educator who works with teens on a daily basis, any type of law that would regulate the frequent use of tanning beds by teenagers under the age of 18 would be a great benefit to our youth. While it may not prevent all abuse of tanning beds, it would at the very least make it more difficult and deter habitual use in many instances.

**Testimony of
The Massachusetts Medical Society
Before the Joint Committee on Public Health
In Support of Senate Bill 1329
“An Act Further Regulating Tanning Facilities”
June 13, 2007**

The Massachusetts Medical Society is in support Senate Bill 1329, legislation that would bar persons under the age of 16 years from using tanning devices and establish strict parental consent requirements for 16 and 17 year olds. At present, parental consent is required only for children under the age of 14 years.

Although most Americans understand that getting a tan from the sun is dangerous, tanning is still popular for cosmetic reasons. As a result, indoor tanning has grown as an alternative to exposure to the sun. According to a recent article in the Journal of the American Academy of Dermatology, it is not necessarily a safe alternative. (See: “The Indoor UV Tanning Industry: A Review of Skin Cancer Risk, Health Benefit Claims, and Regulation,” 53:6, 1038-1044. J. Levine, M. Sorace, J. Spencer, D. Siegel.) According to article co-author James M. Spencer, M.D., there are immediate risks of sunburns, infections and eye damage during indoor tanning, as well an elevated risk of skin cancer, a disease that kills over 10,000 Americans each year. Indeed, in March 2005, the World Health Organization recommended banning tanning beds for anyone under the age of 18 years; the American Academy of Dermatology and the Massachusetts melanoma Foundation have supported that position.

This legislation would be a major step in the right direction. Not only would it protect minors from injuries and significant cancer risks by limiting their access to tanning facilities, it would also raise the standards for licensure of those facilities and require the registration of tanning operators to assure the safety of those choosing to use indoor tanning facilities.

We urge the Committee to report out Senate Bill 1329 favorably.

June 12, 2007

JOINT COMMITTEE ON PUBLIC HEALTH

Room 130

State House

Boston, MA 02133

RE: Bill S 1329

Dear Legislators:

I am writing in support of Bill S1329.

The main reason for my support is based on the limited control that I have as a Health Agent with the enforcement of the existing State Regulations, 105 CMR 123.000, TANNING FACILITIES. During the inspections of tanning facilities, it is impossible to know if the operator witnessed the parent's or legal guardian's signature as required for young adults who are 14 to 17 years of age.

I have been involved in cases where young adults under the age of 17 have received tanning without the parents consent. This has concerned the parents of these young adults. The damage caused to their skin from over exposure during the use of tanning devices is also another major concern brought to our attention by parents of these same young adults.

Please consider approving S1329, to prevent overexposure and misrepresentation by our young adults utilizing tanning devices. This is in the best interest of public health.

Sincerely,

Mark Oram, MPH

Agent / Director

Ashland Board of Health