July 9, 2019

Medical Board of California
2005 Evergreen Street, Suite 1200
Sacramento, CA 95815

RE: Science and SB 276 (limiting medical exemptions to vaccination)

Dear Directors of the Medical Board of California,

It is important that the Medical Board of California (MBC) explore the scientific basis and medical legitimacy of laws like SB 276, as they directly impact the health and safety of millions of healthcare consumers in California. On behalf of hundreds of doctor and scientist members of Physicians for Informed Consent, I am writing out of our concern that some legislators, without robust scientific justification, are singling out medical doctors who recommend medical exemptions to vaccination and labeling them as “fraudulent.”

The data currently available shows that increasing vaccination rates or limiting medical exemptions will not eliminate measles outbreaks. For example, in 2007, the Centers for Disease Control and Prevention (CDC) conducted a study on waning immunity after two doses of measles, mumps and rubella (MMR) vaccine. The results, published in *Archives of Pediatrics and Adolescent Medicine*, showed that:

1. About 35% of vaccinated 7-year-olds are susceptible to subclinical measles.
2. About 60% of vaccinated 15-year-olds are susceptible to subclinical measles.
3. By age 24–26, a projected 33% of vaccinated adults are susceptible to clinical measles.

This means that about half of all California schoolchildren, who are fully vaccinated with the MMR vaccine, can still be infected with and spread measles, irrespective of the medical exemption rate.

The CDC conducted another study in 2016, published in *The Journal of Infectious Diseases*, which concluded that a third dose (booster shot) of the MMR vaccine is short-lived, lasts only one year, and would not solve the problem of waning immunity.

In addition, there are other infectious diseases where a child’s vaccination status does not significantly affect the safety of other students at school.

1. Tetanus is not contagious, so being vaccinated for it or not doesn’t prevent others from getting it.
2. Hepatitis B is spread through sex and intravenous drug use in the United States, so being vaccinated for it or not doesn’t prevent others from getting it in schools.
3. The whooping cough vaccine doesn’t prevent the spread of whooping cough, so being vaccinated for it or not doesn’t prevent one from spreading whooping cough or others from getting it.
4. The diphtheria vaccine does not prevent the spread of diphtheria, so being vaccinated for it or not doesn’t prevent one from spreading diphtheria or others from getting it.
5. The polio vaccine used in the United States does not prevent the spread of polio, so being vaccinated for it or not doesn’t prevent one from spreading polio or others from getting it.

It’s also important to measure the threat of infectious diseases. For example, before the measles vaccine was
introduced in 1963 there was a 1 in 10,000 (0.01%) chance of dying from measles\textsuperscript{15} (that’s about the same as one’s lifetime chance of being struck by lightning). In addition, three treatments are available for rare severe complications from measles: vitamin A, immune globulin, and the antiviral medication, ribavirin.\textsuperscript{16,17,18,19}

By comparison, the chance of a child dying in his or her first year of life (the infant mortality rate) is currently 1 in 170\textsuperscript{20} in the U.S. overall (0.6%)—which is 60 times greater than the risk of a child dying from measles in 1962, a time period when almost every child had measles by age 15 and 99.99% fully recovered.\textsuperscript{21}

Infant mortality rate (IMR) is a recognized major indicator of the health of a population, not the number of measles cases nor the number of medical exemptions.\textsuperscript{22} West Virginia and Mississippi, which only allow state public health officers to approve medical exemptions to vaccination (like SB 276 would do) have about double the infant mortality rate of California. And Massachusetts and Washington have a lower infant mortality than California, even while allowing non-medical exemptions.\textsuperscript{23} This means that laws limiting medical exemptions are unlikely to improve public health—and may worsen it.

Additionally, it’s important to remember that since the enactment of the National Childhood Vaccine Injury Act of 1986,\textsuperscript{24} which has shielded both vaccine manufacturers and physicians from vaccine injury lawsuits, the National Vaccine Injury Compensation Program has awarded over $4 billion to families who incurred vaccine injuries and deaths.\textsuperscript{25} These families are our canaries in a coal mine, and the physicians that care for them have a heightened awareness of their risk of vaccine injury and how to prevent further harm. For example, the risk of seizure after the MMR vaccine occurs in about 1 in 50 children with a history of seizures, and 1 in 250 in siblings of children with a history of febrile seizures (and 5% of those would develop epilepsy).\textsuperscript{26,27} The average doctor is not yet familiar with these research findings (even though they were published 15 years ago) and wouldn’t consider recommending a medical exemption to vaccination on such a basis—but there are many doctors experienced in this arena who are knowledgeable and adept in protecting such families.

Finally, in the United Kingdom, the chickenpox vaccine is not routinely recommended because chickenpox is considered a mild illness in healthy children and vaccination is thought to increase the risk of herpes zoster in adults—that doesn’t mean British doctors are “fraudulent.”\textsuperscript{28} In Denmark, the hepatitis B vaccine is not routinely recommended—that doesn’t mean that Danish doctors are “fraudulent.”\textsuperscript{29} And in nearly all U.S. states there is either a personal belief or religious exemption to vaccination for school attendance, so doctors in those states don’t need to recommend medical exemptions for children to attend school if their vaccine recommendations are not in sync with the average doctor’s recommendations—those doctors are not “fraudulent” and neither are California doctors who, due to current law, are obligated to put their medical opinion regarding vaccination in writing, for the purpose of school attendance.\textsuperscript{30}

Will each of you, as a director of the MBC, investigate the scientific data for yourself? Or will you rely only on the interpretations of these data given to you by others? As scientific truths are verifiable, and the health of California’s children is at stake, we urge you to be sure of your decision.

We request that you oppose any legislation that limits the ability of physicians to issue medical exemptions to vaccination.

Respectfully,

Shira Miller, M.D.
Founder and President
Physicians for Informed Consent

Physicians for Informed Consent (PIC) delivers data on infectious diseases and vaccines, and unites doctors, scientists, healthcare professionals, attorneys, and families who support voluntary vaccination. Visit physiciansforinformedconsent.org for more information.