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Before the

Senate Committee on Commerce, Science, and Transportation Hearing on

"Current Issues in American Sports: Protecting the Health and Safety of American Athletes"

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Good morning Chairman Thune, Ranking Member Nelson, and Committee members. Thank you for the invitation to speak to you this morning. My name is Jay Butler, Chief Medical Officer for the Alaska Department of Health and Social Services and Director of Public Health, and President of the Association of State Territorial Health Officials (ASTHO). In my role of Chief Medical Officer in Alaska, I oversee state health-related prevention, preparedness, and response activities. I maintain board certifications in internal medical, pediatrics, and infectious diseases, and much of both my clinical and public health activities have been focused on infectious diseases. While I am not a specialist in addiction medicine, I have had firsthand experience with the infectious complications of drug use, including endocarditis, skin and soft tissue infections, and HIV and hepatitis C infections.

During the past 3 months, I have also served as incident commander of Alaska Governor Bill Walker's opioid response activity. In Alaska, we are managing the response to the opioid epidemic much as we would the response to any disaster whether that is a pandemic of infectious disease, a terror attack, an outbreak of wildfires, a major earthquake, or a tsunami. In fact, the intensified, multiagency response started with a disaster declaration by Governor Walker in February. Some have criticized describing the increase in opioid misuse, addiction, and overdose deaths as an "epidemic", and I admit that I generally avoid using the term "epidemic" myself. However, when a single cause of death increases three to four fold over a period of roughly 20 years, as has occurred with opioid overdose deaths in our nation, even the most rigorous definition of "epidemic" has been met.

The first 15 years of this epidemic appears to have been driven by changes in clinical practices relating to pain management and a three-fold increase in prescriptions for opioid pain relievers. The opioid epidemic is like a tsunami in that most of us did not feel the seismic shift in medical practice until the first wave of overdose deaths was upon us. And like a tsunami, additional waves have come ashore—with dramatic increases in heroin deaths over the past decade, driven by the increased prevalence of opioid pain reliever dependence and addiction and by the increased supply, and decreased price, of heroin. The majority of persons who use heroin today report that their addiction started with use of prescription opioid pain relievers. More recently, a third wave of overdose deaths has been driven by an influx of illicitly produced fentanyl and

related synthetic opioids. These drugs have spread throughout our nation—overdose deaths due to synthetic opioids have even occurred in the most remote Alaska villages.

Why are we discussing drug misuse and addiction at a hearing on sports safety? The health benefits of participation in sports and physical activity are extensive and well-documented: reduced risk of cardiovascular disease, obesity and diabetes, and certain types of cancer, better musculoskeletal strength, and improved sense of well-being and social connectedness, to name a few. Active people live longer and have better quality of life. Youth who participate in sports generally achieve greater academic success, have been less likely to use drugs or suffer from depression, and are more likely to be physically active adults.

Despite these benefits, athletes have not been immune to devastating effects of the opioid epidemic. Too often, sports-related injuries managed with opioid pain relievers have been the beginning of a path to physical dependency and addiction. While these drugs can be useful in management of pain in severe acute injuries, too often, they are prescribed in large amounts that can lead to prolonged use, leading to physical dependency and addiction, or to diversion and misuse of unused pills. One coach described to me the too-familiar sequence of a sports injury leading to prescribed pills, leading to more prescribed pills, leading to a friend's pills, leading to any pills that can be obtained, leading to heroin, and ultimately leading to addiction or overdose death. High profile stories of professional athletes who begin using prescription opioids for injury and then struggled with addiction, or died of overdose, may grab headlines, but we need to recognize that the problem of opioid misuse occurs at all levels of competition.[1] One adult recreational softball league in Alaska with roughly 750 participants has had 5 players die of opioid overdose. An epidemiological study of high school students in Michigan found that boys who participated in organized sports were more likely to be prescribed opioid painkillers.[2] What was more disturbing was the finding that participation in organized high school sports actually increased the risk of subsequent opioid misuse. With over 4 million youth sports- and recreation-related injuries occurring each year in the U.S., there is reason for concern.[3]

So what can be done? There are no easy answers and there are no magic bullets. Responding to the health challenges of all substance misuse and addictions, including those that are part of the opioid epidemic, requires a multifaceted and multisector approach as outlined in the 2017 ASTHO President's Challenge on public health approaches to preventing substance misuse and addictions.[4] People are dying today; therefore, let's start with what is immediately lifesaving for those who are already living in addiction. We need to prevent drug overdose deaths by increasing access to naloxone, an easy-to-administer medication that can reverse the fatal respiratory depression that kills in an overdose. We can reduce the risk of life-threatening infections related to drug use by removing barriers to clean syringes and needles and by promoting testing for HIV and hepatitis C infections. While these measures can save lives, they do not solve the problem or treat addictions. To increase the number of people living in recovery, we need to fill the immense gap between the number of people in need of treatment and the availability of services to manage drug withdrawal and maintenance of recovery. We

also need to reduce the stigma associated with addictions and increase recognition of opioid addiction as a chronic health condition involving the brain. Ultimately, we must prevent substance misuse and addictions by reducing the flood of prescription and illicit opioids into our communities and by improving personal resiliency and community connectedness to reduce the need to self-medicate.

I would like to highlight three specific areas of opportunity to reduce the risk of opioid misuse and addiction among athletes at all levels of competition:

First, we can promote evidence-based pain management strategies and more rational use of opioid pain relievers. Opioids can be useful for management of acute pain, and many people who receive these medications use them without problem. However, it has become clear that opioids should not be the first line of treatment following sports injury, and that these medications are used best when prescribed at the lowest effective dose for the short periods, generally less than 3-7 days, as recommended in the Centers for Disease Control and Prevention's 2016 guideline on use of opioids for pain.[5] While there are encouraging data indicating that there has been some recent decline in total amount of opioids that are prescribed, the number of pills dispensed is still often too many.[6] Larger first-time prescriptions of opioids have been associated with higher risk of long-term use, and thus, greater risk of dependency and even addiction.[7] A school nurse recently told me of a high school athlete who returned to school after arthroscopic surgery—in keeping with school policy, he checked his prescription medications in with the nurse, and she was surprised to see a bottle of 120 pills containing hydrocodone. Special care needs to be taken when prescribing these medications to teens: adolescence is a particularly high risk period and use of opioids *as prescribed by a health care provider* by high school students has been linked to increased likelihood of subsequent misuse.[8,9]

Second, we can provide more information on the risks of opioid pain relievers for both health care providers and the public, including coaches, trainers, and athletes. In talking with teens, I frequently hear the sentiment that if opioid pain relievers are prescribed by doctors, they must be safe. We can do a better job in not only describing the risks of opioids but also providing information on what can be done in our communities, including promoting leftover drug return and disposal and talking about the risks of dependency and addiction. Professional athletes and major league sports can play an important role as spokespersons and in promoting conversation to reduce the stigma of addiction and to encourage positive community action. We need to recognize that the goal of complete absence of pain may not be realistic and pursuing that goal will come at the high price of higher rates of addiction and death. There is also a need for better continuing medical education for all health care providers to improve their knowledge and confidence in optimal pain management and the basics of addiction medicine.[10]

Finally, we need to recognize that we all have a part to play in addressing the opioid epidemic. The problem cannot be solved by simply placing blame or by pinning the responsibility to address this health crisis on one sector. The response to the opioid crisis and prevention of future

drug addiction will require teamwork involving the combined efforts of all Americans, including parents, coaches, trainers, and the athletes themselves, as well as organizations such as professional, scholastic, and amateur sports leagues, public health agencies, health care providers, third party payers, the criminal justice system, social service agencies, educators, businesses, and law makers. Working together, sports participation cannot only be made safer, but can also be part of how we reduce the number of people who become newly dependent on opioids and increase the number of Americans successfully living in recovery.

Endnotes

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