

Josh Stanley Written Testimony 2/25/2015

It is an honor to be back in Pennsylvania to address this committee. I am excited to see the progress that has been made to bring relief to the people of Pennsylvania and I applaud the pragmatic angle that the State has taken to produce from what I have seen, one of the most comprehensive and safest medicinal cannabis bills to date in the United States.

There are a couple of concerns that I am eager to address with the committee. The first being that the more science continues to back up the recent discoveries of the human endo-cannabinoid system, the more relevance we are seeing for a variety of illness and disease states. It is not a surprise anymore to the scientific community that considering the endo-cannabinoid system has recently been found to be the most prevalent cell receptor system in all mammals, and the two endo-cannabinoids that our bodies produce serve two primary functions of immune and neurological function. These phyto-cannabinoids produced by the cannabis plant are essentially identical to our own endo-cannabinoids and are thus able to serve to physiological gaps the when our bodies are deficient in cannabinoid function. This is truly a new and exciting science, which leads us to the reason that this plant is providing relief for so many illnesses.

Currently through clinical and observational research study approaches, we are finding that use of the cannabis plant is providing dramatic impacts on the specified approved conditions in this bill. Yet I sincerely hope that you will consider other illnesses and disease states that cannabis has proven clinically to provide relief for.

The position that cannabis has not been adequately studied in a clinical sense is simply false. There are over two thousand studies that have been conducted on cannabis as it relates to a wide variety of illness in many other countries around the world. If we accept these professional and compelling institutional findings as accurate, then we must allow for all conditions that have been proven from a clinical, scientific and observational standpoint to be treated by cannabis. It is not difficult to ascertain what conditions this plant works for and which ones it does not. The ten approved conditions are a great starting point and will no doubt bring relief to many in Pennsylvania. However, you will find that there are more and more suffering from other conditions which medical science clearly backs up. The most notable conditions to address would be **neuropathic pain, diabetes, muscular dystrophy, lupus, alzheimer's, and arthritis**. It was just last January that I addressed the Senate in Pennsylvania with Dr. Mark Rosenfeld who is a leader in scientific cannabinoid research. Dr Rosenfeld testified about the remarkable discoveries that relate to the treatment of diabetes. That clinical research is indicating that cannabidiol is showing true clinical promise in potentially to reversing type 1 and type 2 diabetes if caught in early stages. This is research that he has been doing for years in Israel. It is clinically understood now that the use of CBD and THC also shows a significant reduction in reliance on insulin treatment. If the science is pointing us in these directions, I would hope that we would follow. What if we have an opportunity to combat diabetes? This is a disease now

considered public enemy number one in regards to American's health. I think that this is something to strongly consider.

It would be a shame to suffer from a condition that science has proven beneficial for, only for the state you live in to not recognize your suffering as applicable. This type disconnect is what brings us back to Pennsylvania to discuss these topics. Parents of very sick children tuned in to CNN while their children seized in their lap, only to see these other children with the same and similar conditions receive benefit from a whole plant organic compound that we know as CBD. I cannot imagine what must have been going through their minds as their child seizes and fights for life and to know that relatively a few short miles away across an invisible state line, other children may have access to this safe and natural form of treatment but they cannot because they live in a state that does not allow it.

The discussion continues on how we can work together to ensure that this does not happen to anyone again in the state of Pennsylvania.

Another important topic to note is placing unnecessary limits on methods of ingestion. I am not speaking of smoking but rather vaporization and other safe inhalation techniques such as inhalers that are able to ensure that no harmful carcinogens are being introduced into a patient's system. This is a safe and proven method of ingestion that is being widely recommended by physicians in qualifying states.

It is understood that Cannabis is showing to be effective in a growing variety of uses, but just like pharmacology, there must be other methods of delivery, especially in medical circumstances where time is of the essence. I am speaking of immediate relief. This is also known as rescue medication. Asthma medications come in pill form but I don't know many asthma patients who do not carry their rescue inhaler with them at all times. The same goes for steroid use, allergy sufferers and many other medical emergency relief aids.

By not allowing vaporization, you are inhibiting a number of very important patient health concerns. To understand the scope of this, it is vital to understand the manner in which cannabis interacts with our physiological systems. Cannabis is fat-soluble and is absorbed through our fat cells. So, cannabis, though effective for a variety of treatment conditions, takes some time to take effect. Typically from time of ingestion, to effect is between 45 minutes to one hour.

In the case for medicinal cannabis, I have witnessed the need for vapor inhalation in a variety of rescue type situations.

- Children/Adults with epilepsy who fall into fits need emergency access to the vapor form of cannabis via a vapor oxygen mask.
- Multiple sclerosis, parkinsons, ALS, patients are in constant need of emergency vaporization to combat muscle spasms, muscle cramps and tremors as any and all of these symptoms may occur just as epileptic seizures at any time.

- Veterans dealing with phantom pain, neuropathic pain and PTSD utilize this safe and effective method quite often to alleviate these types of symptoms that can attack with no warning.
- Cancer patients, particularly those undergoing chemo therapy who experience sudden nausea due to chemo treatment rely on vaporization.
- AIDS/HIV, lupus, fibromyalgia and many others.

A veteran contemplating suicide does not have 45 minutes for medicine to take effect. A child in a sudden seizure does not have 45 minutes. A cancer patient suffering the effects of Chemotherapy does not have 45 minutes.

I have no doubt that the majority of the constituents here in Pennsylvania are very proud of their leaders for representing their wants and needs. Once again, you have done an excellent job with this piece of legislation and it is my sincere hope that you are able to amend this bill in lieu of the testimony and facts that will be presented on February 25th.

I have assisted in writing several medicinal cannabis bills in various states and countries. Pennsylvania is one of the first states that I have seen to put the time and effort into creating a piece of legislation that will surely provide an impactful, safe and successful model for the production, research and development, safety and distribution of this often misunderstood plant. These programs have become quite successful in treating the above-mentioned illnesses and have had no negative impact, fiscal or otherwise on their respective state or country. (In fact quite the opposite) Crime and teen use has gone down in the State of Colorado. Tax revenues and license fees have shown positively for each region. Traffic accidents are at near all time lows since enacting responsible legislation in Colorado. Perhaps most telling of all is the recent *Newsweek* report that shows a 25% reduction in opiate related deaths in all medical cannabis states. We are talking about a plant that literally has no known overdose potential. One that not one death has been attributed to its direct use in recorded history. A medical safety ratio that is not even able to be measured compared to that of opioids.

This is a win, win for children and patients in need and the medical community benefits by taking part in research and development projects to define and create further cannabis treatment options for this great state.

I am confident that this legislature is one that truly represents the needs of its people. There are many here in need and looking to you for leadership.

Respectfully,

Josh Stanley
Strains of Hope Foundation
Strainsofhope.org
720 237 4504