

# STANDARD DEVIATIONS: Déjà vu?

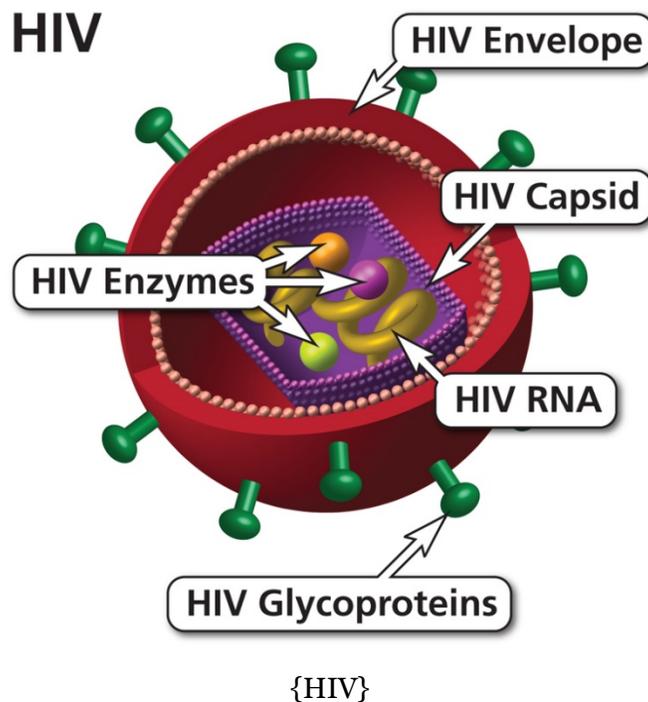
Greetings,

“Those who cannot remember the past are condemned to repeat it.” (George Santayana, 1905).

June 27<sup>th</sup> was National HIV Testing Day. First observed on June 27, 1995, National HIV Testing Day (NHTD) is a day to encourage people to get tested for HIV, know their status, and get linked to care and treatment.

Forty years ago a virus emerged in humans that caused a lot of noise no one listened to. Human Immunodeficiency Virus (HIV) sprang up as a rare disease affecting a small subpopulation of gay men in June of 1981. Thirteen years later (1994) Aids became the leading cause of death for all Americans ages 25 to 44.

Today (well, 2018)? **HIV has claimed 32 MILLION lives.** Our most recent data shows that 40 MILLION people are living with HIV at the end of 2018. In that year (2018), 770,000 died from HIV related causes and 1.7 million new infections were recorded.



Let's just think about that. Right now (6/29/20), 500,000 deaths have occurred from COVID-19 worldwide. We're 6 months into the pandemic so let's extrapolate and say 1 million pass away this year. **With no changes, it will take SARS CoV2 32 years to catch up to HIV, today.**



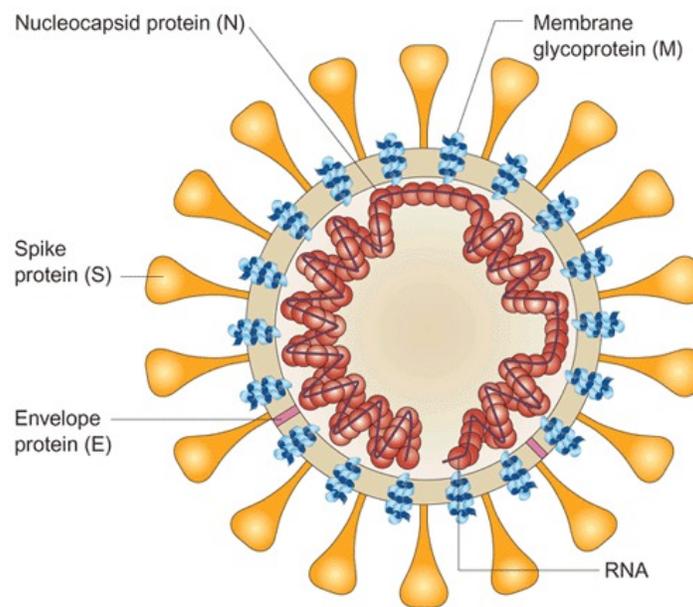
Thing is, ....we're a bit more concerned this time; a tad more proactive, a little more invested in research and treatment. Promising drugs, therapies, vaccines, and remedies are just around the corner.

See, thing is ....there is still no vaccine for the HIV virus; and President Clinton made it a priority in 1997, 23 years ago. President Trump, in the State of the Union Address on February 5, 2019, announced his Administration's goal to end the HIV epidemic in the United States within 10 years. The new initiative seeks to reduce the number of new HIV infections in the United States by 75 percent within five years, and then by at least 90 percent within 10 years, for an estimated 250,000 total HIV infections averted. Remember?

Preventive measures for COVID-19 receive a lot of attention. I can still recall the stigma and controversy of HIV prevention, and it certainly wasn't as well received.

It isn't the lesson from HIV that is making us more aware of risk. It's the demographics of the COVID-19 affected. We still don't see HIV as the problem it is. HIV prevention and treatment are underserved areas of our healthcare for millions of Americans. Resistant mutations of the virus are emerging and thwarting our response efforts. We allow Big Pharma to monopolize the drugs we need for prevention. Sure, we've reduced the rate of new infections, globally, but many regions are still seeing increases and undiagnosed cases rising in all population groups, especially the young. Utah is one of those regions.

Will it take 40 years and millions of deaths to find a vaccine for SARS CoV2? Probably not. Will it take another 40 years to solve HIV?



{SARS CoV2}



In the laboratory, HIV made us safer. Well, we behave safer. The Bloodborne Pathogen Standard, glove use, sharps containers, and laboratory standard precautions all owe their emergence and practice to HIV. The paradigm of biosafety became a tangible aspect of our work when HIV showed up. And, now, lo and behold, biosafety is the central theme of response to the current pandemic all across the land. The lessons of HIV in lab work are proving to be a foundation for our new normal in everyday life.

Life in the lab changed with HIV. We made radical alterations in behaviors in our work on the bench responding to the risks of this novel virus forty years ago! Now those behaviors are becoming commonplace. If the world is only now changing how it sees risk and how humanity regards safety it's not because we remembered HIV but rather because we didn't.

Have a great week and be safe,

Bryan

