June 29, 2020 Update from the Vice President and Dean

ALVSCE_Bulletin <alvsce_bulletin-bounces@list.cals.arizona.edu> 
on behalf of
Agriculture, Life and Veterinary Sciences, and Cooperative Extension Weekly Bulletin
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ATT00001.txt;

Good afternoon, everyone -

If you have received an email from me within the last week or so, you'll have seen my latest email signature:

*My mask protects you, your mask protects me. We've controlled infectious diseases without vaccines for thousands of years. Wearing our masks means we can have a functioning economy and concurrently save thousands of lives.*

Since May 26, the numbers of SARS-CoV2 infections diagnosed in Arizona have been increasing exponentially. There has been more RNA PCR testing, but the numbers of infections have been increasing at far greater rates than the testing. This of course means the numbers of people needing hospital care for COVID has increased. Two weeks ago, Phoenix hospitals experienced *doubled* demand compared to the immediately previous weeks. Last week, Tucson-area hospitals experienced doubled COVID demand compared to the immediately previous week. Today, Arizona’s hospitals are facing the greatest COVID caseload challenge they have had during this entire pandemic.

Thankfully since the May 15 reopening, biomedical scientists like ours in CALS and the rest of the UA have learned much more about the virus SARS-CoV2 and its epidemiology, as well as COVID treatment. The latter helps our physicians, nurses and respiratory therapisits treat people.

And it is up to us all to use the knowledge we have to keep the caseload down.

We now know five things well enough that we can all work together to use them. If we do, we will keep the disease at bay, return its exponential growth to linear growth, keep our economy moving and make it more likely we can get students back on campus in the fall and so protect thousands of our jobs.

1. At least 1/3 of Arizonans, and potentially as many as 80%, when infected with SARS-CoV2 virus will never have symptoms of disease (COVID), not even an elevated body temperature. These people are called "asymptomatic".
2. Asymptomatic people are *more contagious* than those with symptoms (even if the symptoms are simply an elevated body temperature and a mild headache; [Nature Medicine](https://www.nature.com/articles/s41591-021-01127-1)).
3. Pre-symptomatic people, i.e. 4-5 days after SARS-CoV2 infection, are *highly contagious* and like asymptomatic people, they don’t know it.
4. We know that most people in Arizona being infected since May 15 are in the 20-45 year age range, and the vast majority will be asymptomatic or mildly symptomatic.
5. SARS-CoV2 is primarily spread from respiratory droplets, and it spreads more easily inside buildings than outside. 6 feet is not a magic number, especially inside (a cough or sneeze, or even
loud singing, can spread infectious virus 20 feet), and masks alone on an infected person can decrease infections by 11/12ths.

As my email signature reiterates, humans have controlled infectious diseases without vaccines for thousands of years. We don't need to wait until a vaccine arrives to ensure our emergency care and hospital system is not overloaded and won't collapse. We can live with SARS-CoV2, minimize COVID disease and run an economy. But like a lot of things worth doing, it requires commitment to the hard focused work and always keeping our endgame front of mind: keeping safe our loved ones, essential service workers, and those least likely to recover from COVID -- and keeping our economy running to minimize layoffs and the well documented terrible effects on families of economic recessions. Here's how:

- Wear your mask when with others, especially inside, and especially if you feel just fine.
- Use social distancing and minimize trips away from home.
- Practice exemplary biosecurity, i.e. assume everyone you know is infected and every place you are in has infectious SARS-CoV2.

This Fourth of July holiday, I am taking the opportunity for more family time and actively honoring the sacrifices our firefighters, farmers and all food-chain employees, custodians, healthcare providers, and first and last responders have made and will make for me. I will be thinking about you and the sacrifices you have made already and what we must go through together on this long journey. I am going to mask up, socially distance and not leave my home to do all I can to decrease the future sacrifices these heroes have to make.

Best wishes,
Shane

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All UA employees must wear a face covering inside all UA buildings (except when in private offices, work spaces, and formal meeting areas where physical distancing of at least six feet is possible) and in UA outdoor spaces except where physical distancing of at least six feet is possible.

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The University of Arizona is located statewide on the ancestral homelands of indigenous peoples.