States with some of the most productive agricultures are the least protected against COVID-19

We've been watching the Coronavirus maps on the New York Times and they concern us. The county-level map for vaccinations shows a band that runs diagonally from eastern Montana/western North Dakota down through Missouri and Texas and across the South. This light turquoise band indicates that vaccination rates in this area are generally lower than the rest of the US (https://tinyurl.com/pams5sa).

Our concern is that while much of the area is lightly populated, it includes some of the most productive agricultural land in the country.

At the present time, while the level of new cases and deaths due to COVID-19 are significantly lower than they were in the October 2020-May 2021 period, the risk of catching and dying from the disease is not zero and we might see another spike when cooler weather returns this fall.

COVID-19 is not static.

It continues to mutate with every new person that it affects. Right now, the Delta variant is becoming the dominant version in the US and around the world.

According to the YaleMedicine website, "there is...a concern that new mutations of the virus could bring it back, and it might be even stronger" (<u>https://tinyurl.com/yb4ps876</u>).

The Delta variant is highly contagious, and the course of the disease is more severe than seen with earlier variants.

An outbreak of the Delta variant could quickly overwhelm scarce and distant medical resources in rural areas. Infections in rural areas could disrupt farming operations and ownership.

While the Delta variant is controlled by the current vaccines, there is always the possibility that future variants could be less well controlled. If the resistance of a new variant to a new variant were total, that could put us back at the beginning.

We were already seeing problems with the spread of the disease before we relaxed the rules concerning masks and travel. Researchers obtained access to anonymized health insurance claims and queried the data to see if there was a correlation between birthdays and thus birthday parties and small outbreaks of COVID-19. There was. Even when families thought that the friends and family members they invited to the party were safe, the risk was still there and outbreaks of the disease occurred.

Daryll and Harwood have not been together in their woodshop since the beginning of the outbreak in early 2020. Both of us have been vaccinated but we still wear our masks everywhere we go. We both have young grandchildren who are currently unable to be vaccinated. For us wearing a mask when we leave the house is a small price to pay even if the risk of our bringing the disease home is one in a million. If our grandchild were that one who got the disease and then died, we would be burdened with guilt for the rest of our lives.

The solution to the COVID-19 transmission problem is for populations in the US and around the world to achieve herd immunity as quickly as possible and mass vaccination programs are the means to do that.

The idea of herd immunity is that virus dies out when the number of people who have either had the disease and developed antibodies for it or have been vaccinated is high enough to slow and stop the transmission of the disease because the number of potential new hosts who will spread the disease is low.

The number of people required to achieve herd immunity varies from disease to disease and is currently unknown for COVID-19. Thus, the current goal is to inoculate as many people as possible. By doing this we protect children who are too young to receive the vaccine as well as those people whose illnesses makes vaccination riskier.

We need to achieve herd immunity at the community, county, state, national, and international levels to bring this disease under control. This means that it is in the ethical and economic interests of the major developed countries to provide the funds necessary to ensure that we achieve herd immunity at both the local and international levels. It also requires that every person possible steps forward, rolls up their sleeve and gets one of the vaccines.

Policy Pennings Column 1085

Originally published in MidAmerica Farmer Grower, Vol. 37, No. 331, July 16, 2021

Dr. Harwood D. Schaffer: Adjunct Research Assistant Professor, Sociology Department, University of Tennessee and Director, Agricultural Policy Analysis Center. Dr. Daryll E. Ray: Emeritus Professor, Institute of Agriculture, University of Tennessee and Retired Director, Agricultural Policy Analysis Center.

Email: <u>hdschaffer@utk.edu</u> and <u>dray@utk.edu</u>; <u>http://www.agpolicy.org</u>.

Reproduction Permission Granted with:

1) Full attribution to Harwood D. Schaffer and Daryll E. Ray, Agricultural Policy Analysis Center, Knoxville, TN;

2) An email sent to <u>hdschaffer@utk.edu</u> indicating how often you intend on running the column and your total circulation. Also, please send one copy of the first issue with the column in it to Harwood Schaffer, Agricultural Policy Analysis Center, 1708 Capistrano Dr. Knoxville, TN 37922.