Reproductive Facts Regarding COVID-19 Vaccination

- As of July 16, 2021, the 7-day moving average of daily new cases of COVID-19 in the United States (U.S.) increased by nearly 70% compared with the previous 7-day moving average.\(^1\)

- The current status of the COVID-19 pandemic in the U.S. has been called “a pandemic of the unvaccinated”\(^2\). The incidence of COVID-19 hospitalizations and deaths fell precipitously as COVID-19 vaccinations became widely available. Unfortunately, hospitalization rates are rising again, due to the highly contagious delta variant, especially in states with low vaccination rates. Nearly all (97%) recently hospitalized patients are unvaccinated.\(^2\)\(^-\)\(^5\)

- Current CDC data suggest only 16.3% of pregnant women included in CDC’s Vaccine Safety Data link have received ≥1 dose of a COVID-19 vaccine during pregnancy.\(^6\) This low rate of vaccination is particularly concerning given the known increased risk of adverse outcomes for women infected with COVID-19 during pregnancy.\(^7\)\(^,\)\(^8\)

- Reproductive endocrinologists should discuss COVID-19 vaccination with all patients and encourage vaccination for all patients during evaluation and treatment for infertility. Vaccination either pre-conception or early during pregnancy is the best way to reduce maternal/fetal complications. Physician counseling has been shown to have significant positive impact on patient willingness to consider vaccination.\(^9\)

- None of the currently available COVID-19 vaccines reach or cross the placenta. The intramuscularly administered vaccine mRNA remains in the deltoid muscle cell cytoplasm for just a few days before it is destroyed.\(^10\)\(^,\)\(^11\) However, protective antibodies to COVID19 have been shown to cross the placenta and confer protection to the baby after delivery.\(^12\)\(^,\)\(^13\)

- COVID19 vaccination does not induce antibodies against the placenta.\(^14\)

- Existing data suggest COVID19 vaccination during pregnancy does not increase risk of miscarriage.\(^15\)

- COVID19 vaccination does not impact male or female fertility or fertility treatment outcomes.\(^16\)\(^-\)\(^18\)

REFERENCES


