### Ramah Berkshires COVID-19 Vaccine FAQ December 14, 2021

#### Why should I immunize my child?

Immunizing children is expected to prevent about 600,000 new cases from November 2021 to March 2022, and keep schools and camps open. Virus outbreaks forced about 2,300 schools to close between early August and October, affecting more than 1.2 million students.

#### How do we know the vaccines are safe for kids?

The COVID-19 vaccine for children has been through rigorous testing and thorough review by the FDA and CDC. Thousands of children participated in the clinical trials. Among those who received the vaccine, it was shown to be safe and effective at preventing COVID-19. COVID-19 vaccines are the most closely monitored vaccines in U.S. history. And the FDA and CDC will continue to monitor the safety of COVID-19 vaccines, including among children.

#### Will vaccinating my child lead to herd-immunity?

Given the millions of Americans who are still unvaccinated, immunizing younger children is unlikely to bring the country to the "herd immunity" threshold — the point at which virus transmission stalls. Still, vaccinating children may help to curtail virus spread by giving the virus fewer entryways into the community.

#### Will Camp require boosters?

Currently, boosters have not been recommended for children younger than 15, but there are ongoing trials. There is no guidance presently regarding requiring a third dose if eligible. It is unknown if a booster dose will be recommended come the spring (6 months post vaccination), but this should not prompt anyone to delay their child from receiving the vaccine now.

#### Is the COVID vaccine dose for children different from the one for adults?

The dosage of Pfizer vaccine authorized for 12- to 17-year-olds is identical to the dosage given to adults: two doses of 30 micrograms given three weeks apart.

Younger children will receive one-third of the dose authorized for those 12 and older, delivered with smaller needles and stored in smaller vials to avoid mix-ups with adult doses. Like older kids and adults, young children will return three weeks after the first dose for a second shot. To note, in a clinical trial of the vaccine in children, Pfizer initially tested the full adult dose and two smaller doses. The company settled on the smallest — one-third of the adult dose — because it had the fewest side effects and yet produced at least as many antibodies as observed in young adults who had been given the larger dose.

#### Is the lower dose in children as effective as the larger dose in adults?

Children given the lower dose produced a response comparable to the levels seen in the earlier trials of participants ages 16 to 25. The vaccine had an efficacy of more than 90 percent in children ages 5 through 11.

#### What are common side effects from COVID-19 vaccines?

Children who've gotten a COVID-19 vaccine have the same common side effects as adults. They are signs that the vaccine is working and that your child's body is building protection against the virus. These side effects are normal and typically last for a couple days after vaccination.

Common side effects include:

- Pain, redness, or swelling where you got your shot
- Tiredness
- Headache
- Muscle pain
- Chills
- Fever
- Nausea

#### Are the side effects in children different from those in adults?

For children ages 5 to 11, trial participants experienced only mild side effects, which were typically more frequent after the second dose, the FDA reported; the most common were pain at the injection site, fatigue and headache.

In studies of 12- to 15-year-olds, fevers were slightly more common in children compared with adults. But in general, the side effects in this group also have been similar to those seen in older people.

The FDA said that the most commonly reported side effects in the adolescent clinical trial participants were pain at the injection site, tiredness, headache, chills, muscle pain,

fever and joint pain. Side effects typically lasted one to three days. Although pain at the injection site was common after both shots, more adolescents reported side effects after the second dose.

#### What if my child has allergies (e.g, egg, etc.)?

Allergies to the vaccine ingredients are rare. Children should not get the Pfizer vaccine if they have a history of severe allergic reaction to any ingredient (such as polyethylene glycol) in the vaccine. The vaccine does not contain eggs, preservatives, or latex. Please contact your pediatrician to discuss your children's allergies and eligibility for the vaccine. You can also be in touch with Dr. Phil Levy (philtlevy@gmail.com) if you have additional questions about your child's allergies and how to handle this in relation to camp.

#### What is the risk of heart problems after the COVID vaccine?

The number of cases linking the Pfizer-BioNTech and Moderna vaccines to rare heart issues called myocarditis, an inflammation of the heart muscle, and pericarditis, an inflammation of the heart's lining remains exceedingly small, and the conditions appear to be temporary. Studies have shown that coronavirus itself, which can infect the heart, is much more likely to cause heart problems compared with vaccination. The incidence of myocarditis following vaccination varies with age, sex and dose — and across studies. The risk is highest in males ages 16 to 29, but even in that group, a majority recover quickly. But the trend so far suggests that the chances are highest after the second dose of an mRNA vaccine in males aged 16 to 29. There are roughly 11 cases of myocarditis for every 100,000 vaccinated males in this age group, one study estimated. The odds of myocarditis decrease with age. There were not any cases of heart problems in the 5 to 11 age group.

Experts agree that COVID-19 was much more likely to cause heart problems than the vaccine because the virus can infect and damage the lining of the heart. The CDC has not definitively linked any deaths from myocarditis to vaccination. Bottom line: You're actually more likely to get heart inflammation if you're unvaccinated and get sick with COVID-19. And heart inflammation from COVID-19 tends to be worse than the heart inflammation people have had after vaccination.

#### If my child has had COVID, do they need to get vaccinated?

Yes. You should get your child vaccinated against COVID-19 even if they've already had COVID-19. Having had COVID-19 doesn't necessarily protect someone against getting infected again. In fact, a recent study found that unvaccinated individuals are more than twice as likely to be re-infected with COVID-19 than those who had COVID-19 and then got vaccinated.

#### Can a child who recently received other vaccinations receive the COVID shot?

The CDC said COVID vaccines and other vaccines could be given during the same visit, without regard to timing. If multiple vaccines are administered during a single visit, the injections may be given in different parts of the body.

### What do we know about the long-term effects of the COVID vaccine on growing bodies?

Scientists have only a few months of data on young children. But given that the mRNA molecule in the Pfizer and Moderna vaccines mimics a natural human process, experts say they are confident that the vaccines are safe for growing bodies. There is enough information to conclude that the benefits of the vaccine outweigh the risks, even without more long-term safety data.

## Does the vaccine affect puberty or reproduction? For girls who are going through puberty, can they get the vaccine?

There is not a biologically plausible reason the vaccine would affect these areas. There's no reason to put off getting vaccinated while someone is menstruating, according to CDC and the American College of Obstetricians and Gynecologists. CDC and the FDA have been closely monitoring safety data and haven't seen any patterns of concern.

#### Does the vaccine affect brain development?

The body had a blood-brain barrier that prevents most proteins from entering the brain and there is no known evidence to suggest negative impact on brain development.

#### Has this type of vaccine ever been used in children before?

The Pfizer and Moderna vaccines use something called mRNA technology — the "m" stands for messenger. Although mRNA technology has been studied for about 15 years, this is the first time it has been used in a vaccine. It is also being studied to treat cancer, muscular dystrophy, and other diseases. mRNA vaccines are new, but mRNA molecules occur naturally throughout the human body.

#### How are mRNA vaccine from other vaccines?

The mRNA molecule is like a set of instructions. While a traditional vaccine uses a weakened or inactivated germ to trigger an immune response in our bodies, the mRNA

vaccines carry a set of instructions to teach our cells how to make a protein that will trigger an immune response and produce antibodies to the virus.

## Given the low risk of COVID in children, why not wait for more data to have my child vaccinated?

While children are less likely to develop severe illness from COVID-19, they are still at risk, and also can spread the virus to vulnerable adults. While children face a much lower risk of severe outcomes from COVID, they should be vaccinated to protect against possible long-lasting COVID symptoms and hospitalizations.

#### Is the vaccine mandated in schools?

Schools in all 50 states already require certain vaccines, but those have full approvals from the FDA. COVID vaccines for children have only been given emergency authorizations thus far, but will likely have full FDA approval by the spring. To note, California is the first state to say it would require children who attend public and private schools in the state to be immunized as early as next fall — but only after the vaccine is fully approved by the FDA.

#### Can my child get the vaccine if she is sick?

Talk with your child's doctor, but children can usually get vaccinated even if they have a mild illness like a cold, earache, mild fever, or diarrhea. If the doctor says it is okay, your child can still get vaccinated.

# If you have any questions, please do not hesitate to be in touch with Dr. Phil Levy at philtlevy@gmail.com.

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