

# Splitting the MMR Vaccine Adds Burdens, Not Benefits

Measles, mumps and rubella (MMR) are three serious diseases. The MMR vaccine is a highly effective, decades old combination vaccine that provides proven protection against three serious diseases.

For decades, children have routinely received the MMR shot in two doses with the first occurring between 12-15 months and second dose between four and six years old.

Separating the vaccine would add confusion and burdens for patients, providers and the health system – with no demonstrated patient or public health benefit.

## THE ISSUE AT A GLANCE:



### The MMR vaccine provides proven, lifesaving protection

It has effectively protected against measles, mumps and rubella through a well-established and evidence-based two-dose series. The combined MMR vaccine was licensed in 1971; the two-dose recommendation followed in 1989.<sup>1,2,3</sup>



### Splitting the MMR vaccine creates more burdens

Splitting the current MMR vaccine into separate shots could mean up to six injections, more appointments, higher costs and more time away from work and school.



### Gaps in protection could be exacerbated by splitting the MMR vaccine

More appointments, costs and time away from work or school would create greater barriers especially for families with limited access to care such as those living in rural communities. These barriers increase the risk that vaccinations are delayed, missed or left incomplete – leaving vulnerable children and communities more likely to fall through the cracks and susceptible to preventable disease.



### Implementation could take up to a decade

Today, there are no separate vaccines for measles, mumps or rubella licensed or available in the United States, and the existing MMR vaccine cannot simply be divided into three separate shots.

#### Separate vaccines would require:

- New research and development
- Data from new clinical trials for regulatory review
- Manufacturing and supply chain changes that could in total take up to a decade to implement

*To date, no manufacturer has stated they intend to move forward on such a program, because there is no evidence it would benefit patients.*



**There is no evidence that separate measles, mumps and rubella vaccines would improve safety, effectiveness or patient outcomes.**

## COMBINATION VACCINES SUPPORT TIMELY PROTECTION

### 1 dose of MMR =



effective in  
measles prevention

### 2 doses of MMR =



effective in  
measles prevention

- One dose of MMR is 93% effective in preventing measles, and the full two-dose series offers 97% protection.<sup>4</sup> One dose is also 72% effective against mumps and 97% effective against rubella, and the full two-dose series offers 86% protection against mumps.
- Due to widespread MMR vaccination, measles was officially declared eliminated from the U.S. in 2000 and rubella was officially declared eliminated in the U.S. in 2004 – an achievement that is recognized as one of the U.S.'s greatest public health success stories.<sup>5,6</sup>
- Each additional injection or visit creates more chances for missed shots, potentially leaving disease-specific gaps in protection.

***“Combination vaccines reduce the number of shots your child needs while protecting against the same number of serious diseases.”***

***–The Centers for Disease Control and Prevention***

## WHAT SPLITTING MMR MEANS

### TODAY: COMBINED MMR VACCINES

Two MMR injections across the routine childhood series

Effective and timely protection against three diseases

Fewer trips to the doctor, lower costs and less time away from work and school

One vaccine series for pediatric providers to manage inventory, counsel and follow-up

Licensed combination vaccines with well-established manufacturing and supply chains that protect against all three diseases

### IF SPLIT INTO THREE SEPARATE VACCINES

Up to 6 injections and appointments across the series

Staggered and separate disease specific shots would leave children vulnerable to disease before all shots are completed

Greater transportation and childcare burdens, more time away from work and school and higher overall costs

Three separate vaccine series for providers to manage inventory; increased counseling time and additional documentation, tracking and follow-up for providers to ensure patients complete all three vaccine series

Developing three separate vaccines would require new U.S. licensure, as well as significantly greater manufacturing capacity, infrastructure and supply-chain logistics

# WHY IT MATTERS

## Three Serious Diseases That Carry Real Risk

| MEASLES <sup>8,9</sup>                                                                                                                                                                                                                                                                                                                                                                                     | MUMPS <sup>10,11</sup>                                                                                                                                                                                                                                                                 | RUBELLA <sup>12,13</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• One of the world's most contagious infectious diseases – living in the air for up to two hours after an infected person leaves a room</li><li>• Can cause pneumonia and encephalitis (inflammation of the brain), leading to seizures, hospitalization, and death</li><li>• Can erase immune memory and weaken immune defenses for years after infection</li></ul> | <ul style="list-style-type: none"><li>• Can cause encephalitis and meningitis (inflammation of the brain and its lining), as well as inflammation of the pancreas, ovaries and testicles</li><li>• Complications include hearing loss, infertility, paralysis and even death</li></ul> | <ul style="list-style-type: none"><li>• Pink or red rash with fever and swollen lymph nodes</li><li>• Particularly dangerous during pregnancy</li><li>• Can cause miscarriage, stillbirth.</li><li>• Early-pregnancy infection can carry up to a 90% chance of passing the virus to the fetus, which may cause congenital rubella syndrome (CRS) – CRS can cause children to be born with hearing and vision loss, heart defects, and intellectual disabilities</li></ul> |

## MEASLES SPOTLIGHT

### Protection is Under Pressure Because of Decreasing Coverage Rates

Before measles vaccines were available, the disease infected an estimated 3-4 million Americans and caused nearly 50,000 hospitalizations each year; most people contracted the disease as children.<sup>14,15</sup> Today, falling vaccination rates are fueling a resurgence of measles and increasing the risk of sustained outbreaks. The consequences are significant: outbreaks can cost nearly \$60,000 per case and lead to serious illness, hospitalization, lasting disability and even death.<sup>16,17</sup>

>3,659

confirmed U.S. measles cases in 2026<sup>18</sup>

92.4%

of U.S. kindergartners completed the MMR series in 2025-26<sup>19</sup>

35+ years

highest annual U.S. case total in more than three decades

~95%

Vaccination rate required to prevent sustained community spread<sup>20</sup>

## RUBELLA AND PREGNANCY

### Widespread Rubella Vaccination Provides Protection Today and for Future Generations

Rubella causes rash, fever and lymph node swelling in children. Rubella is particularly devastating to the fetus if it is contracted by an unvaccinated woman during early pregnancy. Infection during pregnancy can cause miscarriage, stillbirth or congenital rubella syndrome (CRS), which can lead to heart defects, cataracts, hearing impairment and developmental disabilities in the infant.<sup>21</sup>

Because MMR is a live-attenuated vaccine and is not recommended to be administered during pregnancy, routine childhood vaccination is critical. It protects children early in life, establishes long-lasting immunity before childbearing age and reduces the circulation of rubella in the community, helping protect future pregnancies from exposure.

### Changes to the MMR Schedule Would Impact Manufacturing and Delivery

Manufacturing MMR vaccines into separate shots would be a complex process requiring many steps and taking up to a decade to execute.<sup>22</sup>



### *The bottom line: Keep Vaccination Policy Grounded in Evidence*

#### *Policymakers should:*

- *Ensure preserved access and coverage of the combined MMR vaccine*
- *Avoid policy changes that create confusion or undermine confidence in safe, effective vaccines*
- *Encourage programs that support children receiving complete and timely protection against deadly diseases*

<sup>1</sup> <https://www.cdc.gov/measles/vaccines/index.html>

<sup>2</sup> <https://www.healthaffairs.org/content/forefront/one-shot-three-understanding-measles-mumps-rubella-mmr-vaccine>

<sup>3</sup> <https://www.cdc.gov/measles/about/history.html>

<sup>4</sup> <https://www.cdc.gov/measles/vaccines/index.html>

<sup>5</sup> [https://www.cdc.gov/rubella/vaccine-impact/index.html#cdc\\_generic\\_section\\_2-before-the-vaccine](https://www.cdc.gov/rubella/vaccine-impact/index.html#cdc_generic_section_2-before-the-vaccine)

<sup>6</sup> <https://www.cdc.gov/measles/about/history.html>

<sup>7</sup> <https://www.cdc.gov/vaccines-children/about/combination-vaccines.html>

<sup>8</sup> <https://www.cdc.gov/measles/causes/index.html>

<sup>9</sup> <https://asm.org/articles/2019/may/measles-and-immune-amnesia>

<sup>10</sup> <https://www.cdc.gov/mumps/about/index.html>

<sup>11</sup> <https://my.clevelandclinic.org/health/diseases/15007-mumps>

<sup>12</sup> <https://my.clevelandclinic.org/health/diseases/17798-rubella>

<sup>13</sup> <https://www.who.int/news-room/fact-sheets/detail/rubella>

<sup>14</sup> <https://www.cdc.gov/measles/about/history.html>

<sup>15</sup> <https://www.sciencedirect.com/science/article/abs/pii/S0264410X25011272>

<sup>16</sup> <https://phrma.org/blog/new-study-measles-setbacks-harm-health-and-america-s-economy>

<sup>17</sup> <https://www.nytimes.com/2026/08/25/well/measles-deaths-pennsylvania-outbreak.html>

<sup>18</sup> <https://www.cdc.gov/measles/data-research/index.html>

<sup>19</sup> <https://thehill.com/policy/healthcare/6033790-mmr-vaccine-coverage-falls-below-target/>

<sup>20</sup> <https://publications.aap.org/aapnews/news/35827/AAP-president-As-kindergarten-measles-vaccination>

<sup>21</sup> <https://my.clevelandclinic.org/health/diseases/congenital-rubella-syndrome>

<sup>22</sup> <https://www.reuters.com/legal/litigation/trumps-goal-split-mmr-vaccine-could-take-decade-experts-say-2026-08-12/>