# Summary of the Flu Vaccine

# What is it?

- A vaccine to prevent the seasonal flu.
- The vaccine injects a small amount of influenza viruses for the body to create antibodies against. It takes about 2 weeks for these antibodies, or immunity, to form.
- A "good match" is when the antibodies in the vaccine are similar to the virus that is circulating during the current flu season

# When should a child receive this vaccine?

- Anyone over 6 months old should receive the flu vaccine yearly.
- This vaccine is required yearly because our body's immunity to the virus declines over time as well as the strain of virus can change from year to year.

# How effective is it?

- The effectiveness of this vaccine differs every year, yet in 2017-2018, the vaccine prevented an estimated 6.2 million cases of influenza.

# Side Effects:

- Soreness, redness at the sight
- Headache
- Fever
- Fatigue
- Muscle aches
- Nausea

# Does my school require this?

- This can vary from institution to institution. The attached link is one resource to see if your child's school or daycare requires this.
- https://www.cdc.gov/vaccines/imz-managers/laws/state-reqs.html
- <u>https://www.cdc.gov/flu/prevent/keyfacts.htm</u>

# Summary of MMR Vaccine

# What is it?

- A vaccine to prevent measles, mumps, and rubella.
- It is a weakened live virus vaccine, meaning that when it is injected, the virus causes a harmless infection that the body fights off to create immunity (a defense system) against the virus.
- There are typically little to no side effects.

# When should a child receive this vaccine?

- The MMR vaccine includes 2 doses. The first dose should be received between 12-15 months of age. The second should be between 4-6 years of age.

# How effective is it?

- One dose of MMR is 93% effective against measles, 78% effective against mumps, and 97% effective against rubella.
- Two doses of MMR are 97% effective against measles and 88% effective against mumps.

# Does my school require this?

- All 50 states including the District of Columbia have state laws requiring this vaccination before entry into childcare or public schools. There are no federal laws requiring this vaccine.

# The Impact of Vaccination on Grand Rapids Public Schools' Students Kirkhof College of Nursing Jeremy Abreo, GVSN; Kayeleigh Eder, GVSN; and Jordyn Francis, GVSN Project Mentor: Kelli Damstra, DNP. MSN, RN

# Abstract

The focus of our project was to analyze the amount of children vaccinated in Grand Rapids Public Schools. After determining the percentage of vaccinated children, we planned to implement an intervention to promote vaccination education to parents in the Grand Rapids area as well as increase awareness of the detrimental complications of refusing vaccinations.



As one of the focuses of our project, we decided to create a set of pamphlets. We focused on two main vaccines: the MMR vaccine and the Influenza Vaccine. After we gathered information about the two different vaccines, we compiled this information into an organized manner on two separate brochures. Being that our population focused on the Grand Rapids Public Schools, we recognized that there was a large population of spanish speaking families. Since this was the case, we decided to translate both the Influenza Vaccine brochure and the MMR vaccine brochure into Spanish. We reached out to a medical employee who works at MED-1 Occupational Health Services, in which her first language was Spanish. This helped us to ensure that our translation pamphlets were both accurate and presented in a manner that would make

sense to this specific population.

# **Original Goal:**

We would have interviewed the school principals and the director of health services for GRPS and analyzed their concerns regarding vaccination rates among their student population. With this information, we would have created and hosted an intervention that would address the disparities in vaccination rates and educate parents on the benefits of vaccinating their children. Also, due to the demographics of GRPS information would be provided in both English and Spanish. . However, due to unforeseen circumstances related to COVID-19 and unexpected closing of schools, we were unable to conduct any interviews with the key informants, and therefore unable to host any events that would address these disparities .



https://www.inguirer.com/philly/health/kids-families/blue-cross-study-finds-childhood-vaccination-rates-up-in-philly-20180118.htm

What is the MMR Vaccine?	<ul> <li>How can you learn more?</li> <li>Ask your healthcare provider</li> <li>Call your local state health department</li> </ul>	MMR VACCINE
This vaccine helps to prevent against measles, mumps, and rubella. It is a weakened live virus vaccine, meaning that when it is injected, the virus causes a harmless infection that the body fights off to create immunity (a defense system) against the virus. <b>What is herd</b> <b>immunity?</b> This is a concept that occurs when a sufficient portion of a population is immune to a specific disease, therefore, they protect individuals who have not developed immunity.	<ul> <li>Contact the Centers for Disease Control and Prevention (CDC)</li> <li>Contact one of the Grand Valley Student nurses who provided this information at <u>francjor@mail.gvsu.edu</u></li> <li>This information throughout the brochure was provided by the following nursing students: Kayeleigh Eder, Jeremy Abreo, and Jordyn Francis</li> </ul>	Measles. Mumps. Rubella. Learn         more on how to take the right         steps to protecting your child from         these diseases today!
Measles: Can cause high fever (104 F), cough, runny nose, and red, watery eyes, commonly followed by a rash that covers the entire body.	1 or 2 out of 1000 people with measles will die, even with the best care	<b>Risks of a vaccine reaction</b> Soreness, redness, or rash where the shot was given. Fever or swelling of the glands in the cheeks or neck.
It can lead to seizures, pneumonia, ear infections, diarrhea, brain damage, and sometimes even death.	When should my child receive this vaccine? The MMR vaccine includes 2 doses.	More serious reactions happen very rarely. These can include seizures, temporary pain and stiffness in joints, pneumonia, or unusual blooding or bruicing
Mumps: Can cause fever, headache, muscle aches, fatigue, and a decreased appetite.	First dose is at 12 through 15 months of age. Second dose at 4 through 6 years of age.	Autism controversy More than 25 science-based research articles refute a connection between
Can lead to deafness, swelling of brain and/or spinal cord, painful swelling of testes or ovaries, and, very rarely, death.	How effective is it? One dose of MMR is 93% effective against measles, 78% effective against mumps, and 97% effective against rubella.	MMR vaccine and the development of autism
Rubella: Can cause fever, sore throat, rash, headache, arthritis, and eye irritation.	Two doses of MMR are 97% effective against measles and 88% effective against mumps.	1 in 5 children's lives saved since 1990 due to the MMR vaccine

Does my school require

childcare or public schools.

All 50 states have state laws requiring this vaccination before entry inte

How do you catch these

These diseases are spread person-

person through the air. They are

diseases?:

extremely contagious

# Cesar E. Chavez Elementary School (2017):





# Vaccination Rates

### United States (2018):

- % of Children ages 19-35 months receiving MMR Vaccine: 91.5%

- % of Children ages 6 months -17 years receiving Influenza Vaccine in past 12 months: 50. 4%
  - Center for Disease Control and Prevention. (2017). Faststats immunization. Retrieved from https://www.cdc.gov/nchs/fastats/immunize.htm

### Michigan (2017):

- % of Children ages 19-35 months receiving MMR Vaccine: 92.2%

- % of Children ages 6 months and older receiving Influenza Vaccine in past 12 months: 39.5%
  - Center for Disease Control and Prevention. (2017). Archived interactive reports by survey year (1995-2017). Retrieved from
  - https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/data-reports/index.hTml

### Kent County (2017):

- % Completely Vaccinated: 93%

- % Partially Vaccinated: 4.5%
- % with waiver exemption from vaccination: 2.4%
  - Mack, J. (2019). Look up vaccination rates at any Michigan school or daycare. Retrieved from https://www.mlive.com/news/2019/02/look-up-vaccination-rates-at-any-michigan-school-O r-day-care.html

### Martin Luther King Leadership Academy (2017):

- % Completely Vaccinated: 96.8%
- % Partially Vaccinated: 0%
- % with waiver exemption from vaccination: 3.2%
  - Mack, J. (2019). Look up vaccination rates at any Michigan school or daycare. Retrieved from https://www.mlive.com/news/2019/02/look-up-vaccination-rates-at-any-michigan-school-O r-day-care.html

### **Burton Elementary School (2017):**

- % Completely Vaccinated: 98.1%
- % Partially Vaccinated: 1.9%

### - % with waiver exemption from vaccination: 0%

- Mack, J. (2019). Look up vaccination rates at any Michigan school or daycare. Retrieved from https://www.mlive.com/news/2019/02/look-up-vaccination-rates-at-any-michigan-school-O r-day-care.html
- % Completely Vaccinated: 96.8%
- % Partially Vaccinated: 2.4%
- % with waiver exemption from vaccination: 0.8%
  - Mack, J. (2019). Look up vaccination rates at any Michigan school or daycare. Retrieved from https://www.mlive.com/news/2019/02/look-up-vaccination-rates-at-any-michigan-school-O r-day-care.html

# Demographic Data of Grand Rapids Public Schools

- 59% White - 18% Hispanic - 17% Black - 1% Asian https://censusreporter.org/profiles/97000US2616440-grand-rapids-public-schools-mi/