**Introduction**

Vaccines are part of our world. This is why we created this booklet. We studied vaccines for about seven weeks and decided that other people should know what we learned. In this brochure you will find the basic information about vaccines. There is information about how a vaccine works, herd immunity, and your responsibility as parents. We hope that this information will come in handy in your life.

*The Exhibition 2015 Vaccines Group*

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**More Information**

This is only basic information. If you want to know more please contact:

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**Washington International School**

**PYP Exhibition**

For more information contact us at:

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This brochure was made by Quinn, Hanga, Rauf, Marina, and Camila, the IB PYP Exhibition group studying vaccines at the Washington International School.
How Do Vaccines Work?

Many parents don’t know how vaccines work. Many people don’t like vaccines because of what they think they are made of.

So how do vaccines work?

Let’s take an example disease, influenza. When you get the flu vaccine (or mist), the doctor or nurse injects a weakened, dead, deactivated, or altered version of the flu. When this “invading force” travels through the bloodstream, the white blood cells battle it as usual. They will have an easier time fighting it off (since it’s “dead”). When the white cells are fighting, there is a special cell, called the memory cell, that memorizes the strategy used to fight off the germ. If you actually get the flu, then your body will recognize the germ and fight it off. This is the reason why kids who get chicken pox, almost never get it again. So you can say a vaccine is like a training session for your immune system.

Herd Immunity

When a lot of people vaccinate, something called herd immunity takes place. For example, when 16 out of 17 people in a class get vaccinated for something, that one person is unlikely to get sick. If people don’t get diseases, then the diseases can’t spread. Whole countries can eradicate diseases with herd immunity, but the government can’t control if people get vaccinated or not.

Kids Who Need Herd Immunity

There are some people in the world who can’t get vaccinated, even if they wanted to. These people have lymphoma, leukemia, or another disease that would disable them from having vaccines. These adults and kids depend on you to get vaccinated.

One example is a boy in California with leukemia. If he got a vaccine, he would get very sick. So, his “vaccine” is people like us getting vaccinated.

Our Responsibility

Our responsibility is to vaccinate. This way we can immunize and protect our community. We can make herd immunity a reality.

Also our responsibility is to know about vaccines. We should know about how they work among other things. We should care about vaccines and respect that they can eradicate diseases.

Anti-Vaxxers

Lately there has been an anti-vaccination movement. The people supporting the movement have been nicknamed “anti-vaxxers”. They’re not mad or bad, but they’re dangerous. Now the anti-vaccine movement is very popular. If they don’t vaccinate, diseases like whooping cough, polio, and smallpox can make a comeback. These diseases could be as common as they were when there was no such thing as a vaccine.

Our Message

People should vaccinate to protect the community, our country, and maybe even our world.