

Don't be Afraid of the Measles

I write this article today in response to the recent reports and much media hype about the resurgence of the childhood viral illness known as “the measles” to help you to better understand the illness and its risks and hopefully to alleviate any fear you might have with its presence in our community. There are two types of measles: “Red measles” (*Morbillivirus*, sometimes called Rubeola) and “German measles” (*Rubella*)¹. It is the red measles that are more frequently known simply as measles.

Measles is a highly contagious viral disease that is spread through respiratory droplets, usually in the late winter-early spring. The period of incubation of the virus after exposure is about 10-14 days. The first symptoms are cough, fatigue, sore throat, runny nose and conjunctivitis (aka “pink eye”: note that pink eye may be caused by various different viruses or bacteria so pink eye alone does not suggest measles. Symptoms of pink eye: redness and swelling of the inner eyelids with or without discharge that accompany the other symptoms may point to measles). The back of the throat is very red and the tongue and tonsils often have a thick coating. Spots appear inside the mouth (Koplik’s spots) and are followed a couple of days later by a rash. The rash is itchy, red and bumpy and starts on the neck and face, gradually spreading to the trunk, arms and legs (not on the hands or feet). The bumps can form blotchy areas. Eyes can be very light sensitive. The entire illness from fever to end of rash lasts about 1-2 weeks. Signs of secondary infection due to lowered immunity need to be watched for but are not common if the body is supported and allowed to rest as the virus is self-limiting and the antibody response of the immune system is mounted.²

When exposed to “wild type” measles the body produces a complete recovery and a permanent or lifelong immunity into the virus. Anyone born prior to 1970 has likely been exposed to the measles, suffered through the symptoms and survived without complications and developed *lifelong natural immunity*. So anyone you know over the age of 45 has likely had the measles and is now at 0 risk of acquiring it again.

There is little question that in an unvaccinated population that a child or person exposed to the measles will get sick from the virus however the likelihood of severe complications is exceedingly rare. Complications include laryngitis/ Croup, ear infections and in very rare cases pneumonia or encephalitis. In searching for statistics on the death rate from the measles prior to mass vaccinations I found that information varies considerably depending on the source consulted and also which period of time and global location is referenced. The most consistent statistic I was able to find showed a death rate of 1 in 1000 (0.1%).³ Now this may seem high, however one must consider that this incidence considers eras and locations when hygiene and sanitation were lower, due to poverty when individuals didn’t have the

¹ Rubella: an infectious but very mild viral illness that causes a slight fever, sore throat, conjunctivitis and a day or two later the development of a light rash. The biggest concern is Congenital Rubella Syndrome: if a pregnant mother that does not have immunity to rubella is infected during her first trimester of pregnancy there is a high risk of CRS which can lead to birth defects.

² <http://www.mayoclinic.org/diseases-conditions/measles/basics/symptoms/con-20019675>

³ <http://www.mayoclinic.org/diseases-conditions/measles/basics/complications/con-20019675>

nutrition, clothing, warmth and medication required to prevent and treat the secondary pneumonia or encephalitis that resulted. This is not a statistic reflective of the death rate in our modern industrialized nations. Children in developed nations were most likely to develop ear infections as a complication of the illness. According to the World Health Organization “more than 95% of measles deaths occur in low-income countries with weak health infrastructures.”⁴ I had my husband read this article over for me and in so doing he checked for some statistics of his own and found measles to be number 10 on the top 10 causes of death in the developing world, according to a Wikipedia version of a WHO chart from 2001⁵. Number 4 on this list was *diarrhea* – and as he put it: “if everyone I know has had measles and is fine, and no one we know has died from diarrhea, then the chance of anything serious happening as a result of the kids getting measles is pretty much insignificant.”

It is true that the virus is highly contagious and causes an impact in productivity. If the virus enters a workplace or school then most certainly close to 100% of people infected will develop some severity of the illness and the productivity of the system (the school for e.g.) will be compromised.

The question remains whether or not that is a big deal and that is an individual decision.

No one likes getting ill and no parent enjoys having to see their child suffer from a fever or the discomfort of a rash or sore throat. Illnesses are a disruption to our lives and in this day and age we are more resistant than ever to disruption of our very busy schedules. We seem to be in a mindset that we would rather take a quick fix solution to suppress a fever or avoid an infection then take a few days off, make some homemade soup, do some hot baths, cold compresses, apply essential oils and get some extra sleep. Just the other night my son had a fever and of course it was the middle of the night. I will admit I was tempted by the idea of using some kids Advil to get the fever down and get him back to sleep so I could get my rest too. Luckily a conversation I had had earlier that day with my colleague, Dr. Geis, was ringing loud in my head. We were discussing the valuable benefits to a fever in helping to strengthen a child’s immunity and even to help them progress developmentally. Whenever we undergo a stress (be it a life challenge, an infection, travel, etc.) this leads to a lying down of new neural (brain) networks that propel us towards greater resiliency – be it physical, mental or emotional. With this conversation in my mind I got out of bed, rubbed him with some oils and did a warming socks treatment and applied cool compresses to his forehead. Within an hour his fever had broken and he was again comfortable and ready to sleep. The virus had been fought, his immune system grew stronger and the next morning he was on the mend.

As parents one has to be willing to make some different choices if deciding not to vaccinate: To understand the need to boost the children’s immune systems through healthy nutrition and exercise and understand that they may still get sick when exposed to viruses. To be willing to take time off work to care for them and keep them out of their activities where other children may be exposed and where children may just get more run down and not be able to recover as quickly.

⁴ <http://www.who.int/mediacentre/factsheets/fs286/en/>

⁵ http://en.wikipedia.org/wiki/List_of_causes_of_death_by_rate NOTE: When I checked the actual WHO website they had only a chart for 2007 and measles was no longer on it.

So why not just vaccinate?

In 1963 a vaccine to measles was developed and by 1970 this was widely administered. In 1971 the vaccine was combined with two other vaccines: mumps and German measles/ rubella into the triple shot known today as “MMR” (measles-mumps⁶-rubella). The vaccine was developed to reduce the incidence of the virus due to its contagious nature. The same rationale behind the “V” vaccine now given: *Varicella* better known as chicken pox⁷. It is offered alone but has also been made into an MMRV vaccination, in combination with the MMR shot. Now if that isn’t a lot for our little twelve-month old bodies to handle at once!

When it was first introduced, children were administered a single dose of the MMR vaccine around 12 months. For children born between 1970 and the late 1980s who received only a single dose of the vaccine only partial artificial immunity was acquired. So for those of us born in 1975 (me) we did typically receive a single dose of the vaccine. By the late 80s/ 1990s the trend was to give multiple doses of the shot, the first one at 12 months and the second somewhere between 18-24 months and/or 4-6 years.

It cannot be refuted that with the 1970s mass vaccination programs the incidents of measles, mumps and rubella declined drastically in the following decades though in the first two decades the vaccine schedule for the MMR shots was much more “lax” than it is now, in that generally only one shot was administered. This resulted in an atypical reaction to measles in those individuals who have had the single dose of the vaccine. The symptoms of atypical measles are often more serious and include an abnormal rash, persistent fever, and increased risk of pneumonia and higher mortality rates. *The cases of measles we are currently hearing about in the news mainly cases of atypical measles in people with only partial immunity due to a single vaccination.* So it would seem that we are better off to have either no shots or both shots.

However it was with the introduction of the second booster that we began to hear anecdotal reports from parents that their “once perfectly healthy child” started showing the signs of autism. Unfortunately though we have no proof of this link, the number of claims from parents that have seen this is staggering. And in fact when looking at the rise in autism cases and the introduction of multiple MMR shots we do see a potential positive correlation (autism rates began soaring in the 90s and diagnosed cases of the condition and related neurological disorders in children keep increasing). But since this is still only observation and not yet proven, I only mention this but I will instead mention some more proven vaccine risks.

⁶ Mumps: a contagious viral (caused by a *Paramyxovirus*) infection of the parotid salivary glands (the ones in the cheeks, on the jaw below the ear) and results in swelling of these glands making the face look bumpy. It is spread through saliva and respiratory droplets. Symptoms include traditional flu-symptoms: chills, fever, head and muscle ache and loss of appetite. In 30% of cases there are no symptoms. It is generally harmless and natural infection results in lifelong immunity. The occasional very rare complication led to the use of the vaccine. These rare complications include meningitis and encephalitis (less than 0.001%). If a male contracts mumps after puberty he has a 20% chance of developing orchitis (inflammation of the testes) which generally has no long term consequences.

⁷ Chicken pox: a disease likely every one of you reading this has had and now there is a vaccine against it because it is highly contagious! If you were like me at 5 years old actually felt pretty special to get sent home from kindergarten for a few days for some TLC and calamine applications from my mom.

The MMR vaccine, generally, has the potential side effects of the development of a low grade measles infection. Other more serious reported side effects include encephalitis, Stephen-Johnson syndrome, Guillain-Barre syndrome, ITP (Immune Thrombocytopenic Purpura) and febrile seizures.⁸

The mechanism of action of a vaccination is to stimulate a branch of our immune systems. A very detailed, referenced and scientific explanation of the immunological response to vaccinations can be found on my website in [an article by Dr. David Lescheid Ph.D. N.D⁹](#). In more simple language we have 2 main branches of our immune system: Th1 and Th2. Th1 immunity is gained when our bodies have to fight off certain pathogens on their own. Any time we come into contact with bacteria or virus, our body is forced to respond and this builds Th1 immunity. Vaccinations tend to reinforce the development of Th2 immunity which has been shown, when over-active relative to Th1, to lead to chronic allergic conditions like asthma, eczema and allergies and a variety of auto-immune disorders.

Beyond the scope of this article is the potential risk of reaction to the various preservatives and stabilizers in vaccinations. I will address this at a later date in a future article when I discuss vaccinations, in general, however for the purposes of this article one has to determine if they would prefer their body to be exposed to a pathogen (virus) or various chemical toxins. Again it is an individual decision and unfortunately there is no evidence to show with certainty which exposure is safer than another. It is important we make the decisions that feel best for ourselves and our families and respect the decisions of others.

It is my feeling that should one choose to receive vaccinations that they follow some basic guidelines before and after getting the shots. First, be sure the child or adult is free of cold or flu. For the two weeks before the vaccination date begin to take an immune supportive supplement such as vitamin C, astragalus, reishi or larch arabinogalactans to boost the immunity. Continue taking the immune support for at least 2 weeks after vaccinations. For at least 2 weeks after vaccinations it is important to rid the body of any toxic materials (such as formaldehyde or aluminum that may be used as preservative agents) present in the vaccines that may interfere with immune or neurological function and lead to complications. Consult with a Naturopathic Doctor to determine which post-vaccine supports might be right for your family. If you are choosing to vaccinate your children then please lay off people that aren't! the vaccines should confer protection to you and your children and therefore you do not need to concern yourself with unvaccinated children putting your children in danger.

If you choose to forego vaccinations, please do not feel guilty and don't let anyone else make you feel this way. Use your own good sense and keep your children at home if they are showing signs of illness-keeping them away especially from higher risk individuals (immune-compromised and/ or pregnant women that do not have immunity either through natural means or prior vaccination), support their bodies and your own through healthy nutrition, immune boosting foods and supplements, such as onions, garlic, vitamin C rich fruits and berries and vitamin A rich brightly colored squash, yams and carrots. Use herbs like elderberry, licorice root, astragalus and reishi in syrups, teas or pill form, vitamin D and the mineral Zinc to act as natural anti-virals. Vitamin A in food or in supplementation has been

⁸ <http://www.phac-aspc.gc.ca/publicat/cig-gci/p04-meas-roug-eng.php#locadv>

⁹ http://www.drzepp.com/uploads/3/2/4/8/3248684/childhood_vaccination_info- dave_leisheid.pdf

shown to reduce the chance of and severity of a measles infection (Vitamin A deficiency is considered a risk factor of severe measles)¹⁰¹¹. Consult with your Naturopathic Doctor for suitable preventative treatment should you choose not to vaccinate.

Know that contracting the measles, though not a fun process, is not something to be overly concerned about. Yes, you will get sick, you will need to take time out to heal, to take oatmeal baths to stop the itch and to use hydrotherapy to help with the fever. Going through the challenge, however, will result in a stronger immune system and lifelong protection against the measles and no risk of atypical measles infection.

The question remains, at least with respect to the MMR vaccine (and the chicken pox vaccine in the case of it as a stand alone or in the MMRV), whether it is better to have the body deal with the known challenges that the viral infection creates in the body – rather than the unknown challenges to our complex and sophisticated immunological, detoxification and neurological systems brought about by introduction of the vaccine. Given the devastating effects of the illness in countries that are impoverished and do not have the health systems and quality and standard of living that we do here in Canada, by all means mass vaccination programs will save lives in these countries. Here at home the measles itself does not have to be so frightening but if you choose not to vaccinate and decide to travel with your family to places where measles may be endemic, perhaps reconsideration of the measles vaccine for the purposes of travel would be warranted – given that access to the same comforts of home that allow for a healthy recovery would not be possible.

As with everything in life, the answer to the questions I briefly presented here (is the measles dangerous? Do we need to be vaccinated? Are vaccinations harmful?) There are no 100% straightforward answers and the true answer to most questions: “It depends.”

Take home messages:

- Measles (like pink eye or chicken pox) is highly contagious among unvaccinated people.
- People born before 1970 have likely all had the measles and are now naturally immune.
- People born between 1970 and 1990 may only have partial immunity to the virus.
- Measles is only life threatening in populations with poor hygiene, sanitation or nutritional status. Getting sick with the measles in Canada is not a life-threatening situation.
- Severe cases of measles are more common in those with vitamin deficiencies.
- Getting sick with the measles and recovering strengthens the immune system and results in lifelong natural immunity.
- Vaccinations have their own risk profile and the decision to expose our bodies to the vaccine vs. the virus is a personal one.
- Support should be given to the body regardless of whether the decision is to vaccinate or allow natural immunity due to viral exposure.
- Individual decisions must be respected.♥

¹⁰ <http://emedicine.medscape.com/article/966220-overview>

¹¹ <http://www.who.int/mediacentre/factsheets/fs286/en/>