

Public & Global Health Spotlight

December 2023 Issue 5

Dear Readers

In this edition of "Public & Global Health Spotlight," we turn our focus to a topic that resonates deeply within our community: the crucial importance of vaccination coverage. Over the past three and a half years, during the Covid-19 pandemic, the subject of national immunization coverage has become increasingly important to all of us and has become the focus of our attention.

As we navigate through the pages of this issue, we embark on a journey to explore not only the familiar but also the often underestimated realms of preventable diseases such as measles, shingles or Covid-19.

What probably catches your eye when reading the table of contents is "Rabies: This virus bites". This article serves as a stark reminder that threats can emerge even in unexpected places. Though Switzerland may not be a hotspot for rabies, the recent detection of the virus in a bat here demands our attention. It underscores the importance of awareness and, crucially, the role vaccinations play in preventing the spread of such diseases, even here in our serene Swiss landscape.

This issue carries an important message: Vaccination is a shared responsibility, a communal shield that safeguards us all. When we come together, we are able to protect the health and well-being of each member.

Enjoy the reading!

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Dr. med. Dominik Menges is an epidemiologist and specialist in prevention and public health and works as a Postdoc researcher at the Institute of Epidemiology, Biostatistics and Prevention at the University of Zurich, where he co-coordinates the Zurich SARS-CoV-2 Cohort and the Zurich SARS-CoV-2 Vaccine Cohort Study, among others.

Rabies: This Virus Bites!

Mosquitos, and the diseases they carry, aren't the only biters to be aware of when traveling; rabies remains one of the most dangerous diseases for those infected by it, but there are steps you can take to protect yourself. Read on to find out more!

Seasonal Flu Shot: The Best Prevention Against the Flu

The flu shot is a valuable tool for our public health that offers protection against the four most common strains of the influenza virus. Not only does this protect those who are vaccinated, but it also protects those who are unable to be vaccinated themselfs.









Keep those who matter close by keeping the Flu away.

SO SCHÜT WIR UNS.

Measles: Well-Known, Yet Far from Eliminated. Why Is That?

With a place alongside other highly contagious viruses such as influenza and the smallpox, measles has been around for centuries and is no less dangerous now than it was when first recorded. Even more, although we have had a measles vaccine available for decades, the disease remains far from eliminated.



A lack of vaccination contributes to the persistent cases of measles seen in Switzerland, but we can all do our part to eradicate this disease once and for all.

What is Measles?

Measles is a highly contagious disease resulting from a viral infection. It can spread when someone coughs, sneezes, or even breathes, which is why it so easily spreads from one person to another. Not only that, but the viral particles can linger in the air for up to 2 hours. To put the contagiousness of measles into perspective, one infected person can spread the virus to up to 90% of the non-immune people close to them. The basic reproductive number is 12-18, that means that one infected person normally infects 12-18 other non-immune persons. The only way to decrease these odds is by becoming vaccinated

Symptoms and Complications of Measles

Those infected by measles generally experience symptoms within 10-14 days of exposure, with a prominent rash which is the most visible sign of measles infection. Early symptoms of measles include a cough, running nose, inflammation of the oral mucosaw with typical red spots, and red and watery eyes. These symptoms typically last 4-7 days. The rash that is characteristic of measles typically begins 7-18 days after exposure and appears on the face and upper neck. Over the next few days, it will spread across the body until it reaches the hands and feet. At this point, the rash will stay for 5-6 days before fading. In severe cases, measles may result in death. This is generally due to complications of the disease, which can include encephalitis (an infection of the brain causing inflammation and swelling with potential brain damage), blindness, ear infections, severe diarrhea and dehydration, and severe breathing problems. Complications are more common in children under the age of five, which is also why the death risk from measles is greatest among young children. During pregnancy, measles can put both, the mother and her baby, in danger with increasing the risk of premature birth or low birth weight.

The History of Measles

The history of measles is long and devastating. Back in the 9th century, one of the first written accounts of measles was published by a Persian doctor named Rhazes, in which he described the clinical appearance of measles and distinguished it from smallpox. In 1757, Francis Home, a Scottish physician, showed that measles results from an infectious agent in the blood. As the years went by, measles continued to spread and in the 1950s, every child was all but guaranteed to get measles by the time they were 15.

An Ongoing Battle Against Measles

It's estimated that in 2021, around 128,000 people died from measles, with most of these deaths being children under the age of five. Harrowing statistics such as this emphasize that the fight against measles is far from over. Additionally, these numbers may only continue to grow if the measles vaccination rate stays low.

Developed in 1963 and improved in 1971 (when it was combined with mumps and rubella), the measles vaccine is your best protection against measles. Before its widespread administration starting in 1963, major measles epidemics occurred every two or three years and resulted in an estimated 2.6 million deaths each year. Since then, the vaccine has been revolutionary, significantly curbing the number of measles infections per year and averting 56 million deaths from 2000 to 2021. However, even though this vaccine exists, its benefits won't be seen unless people choose to vaccinate themselves and, more importantly, their kids. Statistics show that in 2022, only 83% of the children in the world received a dose of the measles vaccine by their first birthday, a percentage that is the lowest since 2008. The consequences of low vaccination are reflected in numbers specifically for Switzerland, where measles cases doubled in 2008 (a year of historically low vaccination rates) compared to 2007 and 2009, and were almost 50 times higher than numbers from the turn of the century. These numbers clearly show that vaccination is crucial for keeping down the number of measles cases.

Childhood Vaccination

Children can receive their first dose of the measles vaccine with 9 months and the second dose when they're 12 months old. Just one dose is 93% effective at preventing measles, and two doses increase the effectiveness to 97%. The measles vaccine is truly the best way to protect you and your child from infection and to play your role in preventing another measles outbreak. The increasing resistance to vaccination is often related to concerns regarding a connection between vaccination and autism. However, numerous scientists have found no link between the two. As such, there is no need to refrain from vaccinating your children, especially when you consider how devastating measles can be if your child were to contract it. In Switzerland, 95% of children were vaccinated against measles in 2021, which, while not the highest percentage (that belongs to 97.1% in 2020), is still a great deal more than the lows of 2008. Still, the more children vaccinated against measles, and the more teenagers and young adults vaccinated if they weren't as children, the better off everyone is. Unfortunately, since measles results from a virus, no medical treatment is available for it beyond treating the symptoms and allowing the virus to run its course. This is yet another reason why vaccination is essential, as it can help prevent this disease before it has a chance to set it. Even if you still contract measles, if you're fully vaccinated, the illness appears to be milder and less contagious, so you're still safer than if you hadn't gotten the vaccine.

Play Your Part: Get Vaccinated

If we want to eliminate these preventable diseases, such as measles, from Switzerland, we must all play our part and get vaccinated. Just one dose of the measles vaccine has an effectiveness of 93%, and children who get both doses increase the effectiveness to 97%. Young children are the most vulnerable to measles, so it is up to their parents to ensure they get the life-saving measles vaccine that will protect them from a highly contagious and life threatening disease and prevent the disease from spreading and amassing more fatalities. If you're ready to support your own health as well as the health of all of Switzerland, book your appointment now to get your (or your child's) measles vaccine and secure a healthier future.

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Shingles: Its Vaccine, And Who Should Get It

Sometimes viruses stay in your body even after the initial infection is gone. Even more, some viruses might reactivate, infecting you all over again. This is the case with shingles, which can occur decades after a chickenpox infection.



Fortunately, there is a vaccine for shingles that prevents its occurrence and lessens its impact. Continue reading to see who benefits from the shingles vaccine and why this is one shot you don't want to miss out on.

What Is Shingles?

Shingles is an infection resulting from the reactivation of the varicella-zoster virus (VZV), which initially causes chickenpox. This means that shingles occurs only in those who have had an infection with the varicella-zoster virus. The clinical manifestation of VZV is called chickenpox. Not all the persons getting the virus for the first time does have chickenpox, they are reacting asymptomatic to the infection. In both situations (symptomatic and asymptomatic infections), the virus is staying inside the body even after the clinical symptoms has disappeared. Instead, the virus remains in the body and can even become active again, which is when shingles occurs. Generally, those who develop shingles only have it once, but it is possible for it to occur more than once.

Someone with active Herpes Zoster lesions can spread the virus to other people, who never had chickenpox or never

got the chickenpox vaccine. This can occur if someone comes in direct contact with the fluid leaking from the rash blisters, or is breathing in the virus particles emitted by the blisters. Someone with active shingles lesions should cover their lesions. Since shingles results from a reactivated virus, someone with shingles can't spread shingles to someone else (they can only spread chickenpox).

The Symptoms of Shingles

Shingles mostly manifest in an itchy and painful rash that develops on one side of your body or one side of your face. The rash is made of blisters that take 7 to 10 days to scab over and 2 to 4 weeks to clear completely. If shingles develops on your face, it can affect the eye and cause vision loss.

Some of the earliest signs of shingles include itching, pain, or tingling in certain areas, which is where the rash will then develop. The early unpleasant and painful symptoms can begin several days before the rash develops and can stay for a longer time, even the skin manifestations have already disappeared. Sometimes, you may also have a fever before the rash appears. In rare cases, the rash may resemble chickenpox and develop in a more widespread area of the body, but this usually occurs only in those with weakened immune systems. Unfortunately, that can include those with an illness or those who are older.

Shingles Complications

Long-term nerve pain, called postherpetic neuralgia (PHN), is the most common complication of shingles and occurs in around 10% to 18% of cases. In addition to being extremely painful and causing potential hospitalization, PHN can last for years and limits activity levels in those affected. The risk of PHN increases with age, and older adults often experience more severe and longer-lasting pain than those who are younger.

In rare cases, other complications of shingles may include:

- hearing problems
- pneumonia
- brain inflammation (encephalitis)
- death

The risk of complications is higher in those with a weakened immune system.

Who Should Get the Shingles Vaccine?

While everyone can benefit from the VZV vaccine, there are some groups with risk factors who benefit even more from the vaccine. The first group includes those with medical conditions that suppress their immune system. This can consist for example human immunodeficiency virus (HIV) infection and certain cancers, including lymphoma and leukemia. The other group includes those taking drugs that prevent their immune system from working as it should. These include for example steroids, medications taken because of an autoinflammatory disease or after receiving an organ transplant.

In both cases, the individual is more likely to see shingles development due to VZV reactivation. Or, if they have never gotten chickenpox, they may be more likely to suffer from this infection if they are around someone with shingles.

Treatment For Shingles

If you develop shingles, several antiviral medications are available to treat it. They work best when taken as soon as possible after your notice the rash, and they help lessen the severity of the illness and the length that it persists.

How To Protect Yourself from Shingles

The best way to protect yourself from shingles, especially if you have not had chickenpox before, is by receiving the VZV vaccine.

Two doses of the shingles vaccine (Shingrix) are recommended for anyone over the age of 65. The goal of this vaccine is to prevent shingles and its complications. In addition to older adults, anyone over the age of 18 with a weakened immune system, whether because of therapy or disease, should also receive two doses of Shingrix. Even though Shingles often occurs only once, it can come back again. Because of this, it is wise to get Shingrix even if you have had shingles before or received the varicella (chickenpox) vaccine. Furthermore, everyone can receive the Shingrix vaccine, even if you don't remember having chickenpox before.

Not only does Shingrix protect against shingles, but it also protects against PHN, which can last for years after shingles develops and goes away.

If you're interested in protecting yourself from shingles and its potential complications, book an appointment at our clinic to receive your vaccination.

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der Universität Zürich



Spotlight

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The Zurich SARS-CoV-2 Vaccine Cohort Study (ZVAC)

Dr. med. Dominik Menges is an epidemiologist and specialist in prevention and public health and works as a Postdoc researcher at the Institute of Epidemiology, Biostatistics and Prevention at the University of Zurich, where he co-coordinates the Zurich SARS-CoV-2 Cohort and the Zurich SARS-CoV-2 Vaccine Cohort Study.





Dr. med. Dominik Menges

University of Zurich

Dear Dominik, thank you very much for taking the time for this interview.

Would you like to tell us briefly what your background is and where your current research focus lies?

Gladly. I am an epidemiologist and a specialist in prevention and public health. I specialize in public health issues, which of course became particularly important during the pandemic. In my research here at the institute, I deal with various topics. On the one hand, these include the treatment and early detection of cancer. On the other hand, the consequences of the coronavirus pandemic - for example, Long Covid - and the coronavirus vaccinations are also important topics for me. Currently you are involved in the Zurich SARS-CoV-2 Vaccine Cohort Study (ZVAC), which is investigating the immune response of vaccinated individuals. Could you give us a brief overview and explain what the goals of this study are?

The Zurich SARS-CoV-2 Vaccine Cohort Study is an observational study of individuals who have received a coronavirus vaccination at the reference vaccination center. A total of 575 individuals, who have received either the Moderna, Pfizer/BioNTech or Janssen/Johnson & Johnson vaccine, are participating. We had three main objectives with the study: First, we wanted to investigate how common and severe the side effects of the vaccines were. Second, we wanted to find out how the immune response develops after vaccination and in the longer term. And finally, we wanted to investigate how good the protection of the vaccinations against coronavirus infections is.

What were the most important insights you found? What surprised you personally the most?

I think it was very important to study how common side effects actually are after coronavirus vaccination and how severe they are. To do this, we used symptom diaries. We were able to show that mild symptoms such as pain at the injection site or flu-like symptoms are common. In contrast, severe side effects such as allergic reactions or those that resulted in hospitalization were rare. These are important data because they are otherwise rarely available in this form - only very few side effects are publicly reported, so their frequency may be underestimated. In addition, our studies on the immune response were also very important. What amazed me, however, was the great commitment of the study participants, who were willing to support us in our research.

Since January 2021, the Institute of Epidemiology, Biostatistics and Prevention (EBPI) has acted as the reference vaccination center for the canton of Zurich and is "the home" of the ZVAC study. Since then, various vaccines have been licensed, with ongoing changes in vaccination recommendations. How did you experience working on the study during this dynamic time?

It was an intensive but also very exciting time. There were many uncertainties and the recommendations were constantly adapted to the latest state of knowledge. The Zurich Coronavirus Vaccination Study provided an ideal basis to address the scientific and health policy issues. This allowed us to provide the health authorities - i.e. the Department of Health of the Canton of Zurich and the Federal Office of Public Health - with exactly the information they needed. In this way, the findings of the study were incorporated directly and quickly into the recommendations. For us, it was of course very interesting to be directly involved in this and to make a contribution - and at the same time to be in contact with our study participants and to answer their questions.

Previous results of the study have already been published. It shows that almost all study participants (99.1%) developed an immune response against the virus within three months. Was such a high number to be expected?

We saw early on in the study that the immune response to the vaccines was very strong. In our other study with people who had been infected with coronavirus, after 3 months, antibodies were only detectable in about 85% of the participants. So it showed us that the immune response was much stronger after vaccination than after infection. That was the hope, of course, and it was good to see that confirmed. Thus, vaccination was able to achieve good protection against severe disease in the vast majority of people.

It was found that the two mRNA vaccines from Pfizer/BioNTech and Moderna elicited a slightly stronger immune response on average than the vector vaccine from Janssen/Johnson&Johnson. Were there differences in the immune response in the different age groups?

It was known early on that the mRNA vaccines had a stronger effect than the vector vaccines. We were able to observe that in our study as well. We also found some difference between age groups. Younger individuals often had a more pronounced antibody response. However, this was to be expected, and protection against severe disease was good across all age groups.

Can comparisons already be made between the immune response of individuals with COVID-19 infection and individuals who have received COVID-19 vaccination?

We are currently in the process of conducting these studies. We know that the more severe someone got COVID-19, the stronger the immune response was. The mRNA vaccines triggered even stronger immune responses. In part, this is related to the fact that people received two doses of the mRNA vaccines. Meanwhile, the immune response after the Janssen/Johnson&Johnson single vector vaccination was about the same as we observed for coronavirus infections.

How do you think this study contributes to our understanding of vaccine-induced immunity?

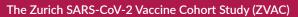
With the pandemic, there was a very high level of public interest in immunity and the effect - but also the side effects - of vaccines. Overall, this has brought many insights that are very valuable for our understanding of vaccines and the immune system. We have already gained many important insights and have been able to publish them or pass them on to the health authorities. Of course, we hope that our study will continue to make a contribution in the years to come.

What do you think are possible implications of the study findings for policies or approaches in public & global health?

I think we were certainly able to show how important population-based studies and research projects can be in supporting health policy decisions and informing the population. In a pandemic, there are always many uncertainties and fears. It is important to communicate these uncertainties transparently and to establish a good basis as quickly as possible to scientifically clarify the important questions. Although we naturally hope that something like this will not happen again so soon, the expertise gained will be very valuable for future crises in the field of public and global health.

Thank you so much for this interview and our work here at EBPI!

Interview: Sofia Ricar



Would you like to find out more about this study?

Here you can find the results of the study so far:

https://www.corona-immunitas.ch/aktuell/bisherige-ergebnisse-der-zurcher-co-

ronavirus-impfstudie/



Here you can find the protocol of the study: https://www.isrctn.com/ISRCTN15499304



Rabies: This Virus Bites

Mosquitos, and the diseases they carry, aren't the only biters to be aware of when traveling; rabies remains one of the most dangerous diseases for those infected by it, but there are steps you can take to protect yourself.



What Is Rabies?

Rabies is a viral disease that is most commonly transmitted through a bite or a scratch from an infected animal. Once the rabies virus finds its way inside the body, it infects the central nervous system, causing disease in the brain and then ultimately death. There are two forms of rabies: furious rabies and paralytic rabies. These forms differ in what symptoms the animal/individual affected presents. Furious rabies is characterized by hallucinations and hyperactivity, whereas paralytic rabies causes paralysis or a coma. The first type of rabies, furious rabies, is most common and occurs in 80% of human cases. Rabies occurs worldwide, separating it from mosquito-borne illnesses, which are mainly present in the warm and humid climates favorable to mosquitos.

How Does Rabies Spread?

Rabies spreads when an animal with rabies, bites or scratches a person. Most rabies cases occur in wild animals, such as raccoons, bats, foxes, and skunks, although any mammal, including humans, can get this virus.

The most common cause of rabies in humans is the bite of an infected dog. Along those same lines, children are at a higher risk of rabies since they are more likely to play with dogs and are thus more likely to receive a bite. Rabid animals are more likely to bite someone because they often have furious rabies, which makes them more aggressive. Unfortunately, these bites do more than tear the skin; they can also transmit and spread the virus. Since the rabies virus is in the saliva of infected animals, any bites, which pierce the skin, can introduce the virus with the saliva into the wound. And not only bites, but literally any contact with an infected animal's saliva can potentially transmit rabies. For instance, having infected saliva touch an open wound can also introduce the virus into the body.

How To Prevent Rabies

There is no effective treatment for rabies once clinical signs have appeared, the disease is almost always fatal. But there are important ways to prevent rabies. First and foremost it is important to be aware of the disease and what it may look like in animals. However, not all infected animals display symptoms, which is why it is best to avoid unknown animals. Otherwise, if you have a pet, the best way to prevent rabies is by vaccinating them against it and keeping these vaccines up to date.

A Fear of Water?

Rabies has historically been known as hydrophobia, also known as a fear of water. As we now know, there's a lot more to rabies than just a sudden fear of getting wet, but it is interesting how it manifests in this way.

The rabies infection causes intense spasms in the throat whenever someone tries to swallow. Even just the thought of swallowing water can cause these spasms, making it appear like someone is afraid of water. In reality, rabies causes a fear of swallowing anything, not just water. This is because rabies thrives in saliva, which is also the best way to spread the infection. However, swallowing reduces the amount of saliva in the mouth and therefore the spread of the virus. Because of this, rabies causes a fear of swallowing, making saliva build up in the mouth and increasing the virus's ability to spread.

I've Been Bitten, Now What?

There are five distinct stages of rabies:

- Incubation
- Prodrome
- Acute Neurologic Period
- Coma
- Death

Incubation is the time before symptoms appear and usually lasts between 2-3 months. This is when you can intervene in rabies development before symptoms begin appearing in prodrome. If you've been bitten or scratched by an animal, wash the bite site immediately with soap and water. Through this intervention, the potential viral load in the bite wound can be decreased. Then contact a healthcare provider about postexposure prophylaxis, which is a series of rabies vaccines. Important is to be able to start the postexposure vaccinations within 24 hours of the bite or scratch. By taking action as soon as the bite occurs, you can disrupt the infection of rabies in your body and save your life. In this case, time truly is of the essence. Those with rabies who enter prodrome may experience the following signs and symptoms:

- pain, discomfort, itching, or prickling at the bite site
- intolerance of bright life, noise, or drafts
- fear of water
- difficulty swallowing, vomiting, nausea
- neurological dysfunction that progresses within days (e.g., confusion, anxiety, agitation)
- localized weakness
- coma

Death from rabies results from cardiac or respiratory failure and generally occurs within 7-10 days of the first signs if no intensive care and supportive measures are begun.

Protect Yourself from Rabies

When it comes to rabies, the most important tool you have for protection is remaining aware. By this, we mean staying aware of the animals around you and if they are exhibiting off behavior.

For instance, if you are traveling and see a dog, it's best to avoid petting it, no matter how cute it may be. If the dog is snarling and looks agitated, it's even more important to steer clear entirely to ensure you don't get bitten. Even if the dog does not have rabies, a bite can easily send you to the hospital for stitches, tetanus shot or bacterial wound infection if you aren't careful.

Above all else, if you get bitten by an animal, quickly clean the cut and head to the doctor as fast as possible. This way, if you are exposed to rabies, you can quickly get a vaccine and interfere with the virus before the infections spreads in your body.

To keep yourself safe when traveling, make sure that you and your kids adopt a "look, don't touch" policy when it comes to animals, and leave them be. Rabies can be a severe disease if you get it, but remaining aware can go a long way in keeping this "biting" virus away.

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Seasonal Flu Shot: The Best Prevention Against the Flu

The flu shot is a valuable tool for our public health that offers protection against the four most common strains of the influenza virus. Not only does this protect those who are vaccinated; it also protects those who are unable to be vaccinated themselfs.

Keep those who matter close by keeping the Flu away.



If there is one thing that you can count on every year, it's seeing the signs reminding you to get a flu shot as we approach flu season. This can be confusing to some, as we receive most of the vaccines only once with an additional booster. Before the emergence of Covid-19, no other shot requirs an annual dose, so why does the flu shot? The reason for this lies in the quickly evolving nature of the influenza virus, and its many strains.

Seasonal Flu Shot: What Is It?

The influenza vaccine, also known as the flu shot, is a vaccine that protects against the four influenza viruses that are expected to be the most common during the upcoming flu season. These four viruses are predicted based on research.

Flu shots are most often given through a needle, but there are nasal spray vaccine options.

There are also different flu vaccines available intended for certain demographic groups. For example flu vaccines authorized for use in children who are only six months old or for those over the age of 65.

A Brief History of The Flu Shot

In the 1930s, influenza viruses were first isolated from people, showing that avirus was the cause of influenza, not bacteria.

Creating the Flu Shot

The flu shot research began with the support of the U.S. Army, due to their significant loss of troops from the flu during WWI. This is because soldiers shared closed quarters, which maked it easier for illnesses to spread. The very first flu vaccine utilized fertilized chicken eggs, a method that is still common for producing most flu vaccines today. In 1940 the influenza B viruses were also discovered, and just two years later, a vaccine that offered protection against both the influenza A and influenza B viruses was produced.

Influenza Strains

In 1947 there was a seasonal flu epidemic, which caused scientists to realize that the influenza viruses undergo changes in the antigens they produce, resulting in unsufficent protection of the flu shot. Antigens are the parts of the virus that trigger your body to create an immune response. When the body detects an antigen, it creates antibodies that mark this specific antigen for elimination by other immun cells. Vaccines work in a similar way; by causing the body to produce antibodies for a specific antigen. However, since the influenza virus constantly changes itself along with its antigens, antibodies for one strain will not provide sufficent protection against another strain. This was the first discovery that led to seasonal flu vaccines based on the most common strains.

Monitoring Strains

In 1952 the World Health Organization (WHO) created the Global Influenza Surveillance and Response System (GISRS), which monitors the influenza virus evolution. Since then, there has been a long history with the influenza virus, including finding avian and swine variants and working through multiple pandemics.

Who Should Get a Seasonal Flu Shot?

Everyone over the age of 6 months can get an annual flu shot. However, as some groups are more susceptible to contracting the flu and becoming sicker when infected with it. Therefore the flu shot is highly recommended to the following patient groups:

- pregnant women
- those over the age of 65
- those with chronic debilitating diseases

It is especially recommended for those who fit the above categories to receive a flu shot, although everyone can benefit from it. There are some rare instances in which someone should not receive a flu shot because of their health, age, or allergies. For example, those younger than six months, or those with allergies to any component of the flu vaccine, should not receive a flu shot. Your doctor can provide more information on if the flu shot is safe for you.

The Importance of Flu Prevention

There are many strains of the influenza virus, but the flu shot protects mainly against the four viruses that are predicted to be the most common.

Can you be unlucky enough to get the flu shot and then still get the flu? Unfortunately, yes, that is possible. If you contract a strain of the virus that was not covered in the flu shot, then you can still get the flu. However, by receiving protection against the four most common strains, you significantly reduce those chances. Additionally, if you do end up getting the flu, multiple studies have shown that being vaccinated reduces illness severity. So, even though there is still a chance of you getting the flu, it won't be as severe. However, getting the flu shot once is not enough for upcoming flu seasons. To truly protect yourself and others, you need to get the flu shot each year. This is because the influenza viruses adapt constantly, and so last years flu shot offers different and most likely insufficent protection the year after.

Additional Benefits

The flu shot has also been associated with lower rates of certain cardiac events in people with heart disease. This is especially true for those who have had a cardiac event in the past year. Getting your flu shot can also help reduce the risk of worsening preexisting chronic lung diseases due to the flu, which then often lead to hospitalization. The flu vaccine is also recommended for those who are pregnant. Not only to protect the mother during her pregnancy, but also the baby during their first few months of life. This is a time when the baby is otherwise too young to receive a vaccination themselves.

The Flu Shot:

Improving Public Health and Saving Lives

Overall, the flu shot is a valuable tool for public health that offers protection against the four most common strains of the influenza virus. Not only does this protect those who are vaccinated, but it also protects those who are unable to be vaccinated themselves.

There is a chance of still getting the flu, even if you have had a flu shot. This is because there are many different flue strains, and only the four most common can be included in the vaccine. However, the flu shot still offers benefits, such as reducing the severity of symptoms and lessening the risk of hospitalization.

The influenza virus has a long history of causing multiple pandemics, with a high burden on the Swiss health care system, showing the importance of doing your part to protect yourself and those around you from the flu. When it comes to this flu season, be sure to get your flu shot to lessen your chances of getting the flu and reducing the risk of severe infection should you still get infected. We may not be able to get rid of influenza viruses completely, but getting a flu shot every year is your best protection for you and your loved ones.

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Not sure if the flu shot is right for you?

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IMPRESSUM

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