

VALUING VACCINATIONS ACROSS **generations**

Intergenerational Discussion Guide



Introduction

Do you know that people of all ages should get vaccinations? Vaccinations are important to your health and the health of your family and friends throughout your life.

Vaccinations are one of the best defenses we have against serious, preventable, and sometimes deadly contagious diseases. They also help prevent chronic diseases and certain cancers. When you get a vaccination, you always get a bandage. That is your “bandage of honor.” Wear it proudly to show that you care about your health and the health of your family and friends.

Vaccines keep people of all ages healthy. They even save lives. It is important for people of all ages to understand why they matter and how to take action to ensure their family is healthy and protected. One key way to make this happen is simple: talk about it. Children, youth, teenagers, young parents, and older adults should engage in conversations and activities around vaccinations. You don’t need to be an expert on vaccinations to discuss it. This guide provides a series of conversation starters, discussion questions, and activities to help you

have meaningful exchanges, share your convictions, and learn more about the value of vaccinations for your family. There are a number of Web sites included in this guide that provide valuable information and can answer some questions, but for specific questions or concerns about your situation, talk with a health care professional.

For new parents, decisions around vaccinating their children can be emotional. The opinions and experiences of family and friends are valuable in helping parents make these decisions. For adults, vaccines may not seem critical, but understanding that protecting themselves means protecting those around them, like their children or grandchildren, can help motivate them to get vaccinated. Young adults may question the value and necessity of vaccinations and boosters, yet appreciate their parents’ and grandparents’ advice and stories.

More than **1,000** years ago people in China were using a form of vaccination to prevent small pox.



About This Guide

Generations United developed this guide to help older and younger people have conversations around the important role vaccinations play in protecting your health and the health of your family, friends, and community. This guide includes information on recommended vaccinations across the life span, the important role grandparents and grandchildren play in each

other’s lives, generational perspectives and experiences with vaccinations, sample conversation starters and activities for intergenerational discussions around vaccinations, and resources for additional information. This guide is a springboard for talking about vaccinations. For questions about specific vaccinations, please talk with a health care professional.

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Vaccinations: An Intergenerational Conversation

Vaccinations are important across the life span. There are vaccines recommended for infants and children, teenagers, adults, and older adults. The image on page 5 and 6 lists the vaccines that are recommended for all ages in the United States.

While all vaccine-preventable diseases can spread among generations, there are some that are more likely to spread between younger and older people, including the flu, pneumonia, and whooping cough. Other diseases are less likely to spread, like measles and mumps, because most older adults have been vaccinated against those diseases and have immunity.

In a recent study in which researchers were able to identify how a baby caught whooping cough, they determined that in approximately 83% of the cases studied, someone in the baby's immediate or extended family—including parents, siblings, grandparents, cousins, aunts, and uncles—exposed the baby to the disease. It is recommended that women get vaccinated during pregnancy and everyone who is in close contact with a newborn be up-to-date with his or her flu and whooping cough vaccinations.¹

Vaccines can prevent children from spreading illness to grandparents and other older adults too. Researchers found that when children in the community were vaccinated against pneumococcal disease, the number of older adults with pneumococcal disease declined significantly.² The vaccine not only protects children from pneumococcal infection, but it also reduces the likelihood that an immunized child will transmit

the infection to another child or adult in the community. It is recommended that all children, adults older than 65 years, and adults older than 19 years with certain medical conditions receive the pneumococcal vaccination.

While vaccination rates for children remain steadily high, the numbers for older adults trail national vaccination goals. According to the 2014 National Health Interview Survey

- Only about **1 out of 5 (20%)** adults 19 years and older had received a Tdap vaccination to provide protection from tetanus, diphtheria, and acellular pertussis (whooping cough).
- Only about **1 out of 5 (20%)** adults between 19 and 64 years of age with certain high-risk medical conditions had received a pneumococcal vaccination.
- Only about **1 out of 4 (28%)** adults 60 years and older had received a shingles vaccination.³

Intergenerational conversations around vaccinations allow older adults to share experiences that most younger people have not even heard of, much less experienced. Many older adults and grandparents have seen firsthand the effect of various vaccine-preventable diseases and the introduction of vaccines that save lives. This unique perspective provides wonderful insight for the rest of the family. These conversations can also focus on new scientific advancements in vaccines and the importance of adults keeping up-to-date with their vaccinations.





Edward Jenner, an English physician, created the first vaccine in 1796. The vaccine was for smallpox.

Grandparent and Grandchild Relationships

The unique relationship between grandparents and grandchildren has always been an integral part of the American family. Grandparents make tremendous investments in grandchildren to ensure their families remain strong and resilient. Grandchildren bring happiness to the lives of their grandparents. Research also shows there are health benefits for strong grandparent-grandchild relationships.⁴

Grandparents believe it is important to share their values and beliefs, such as the importance of being engaged in civic matters, volunteering, and exhibiting good character.⁵ In addition, grandparents believe in spending time with their grandchildren and talking together. Most grandparents also see themselves as counselors on sensitive issues. Grandparents take their role as teacher and advisor very seriously.⁶

Grandchildren also want to spend time with their grandparents. Teenagers seek the knowledge that grandparents can teach them. Teens are especially interested in learning about family history, hearing about their grandparents' personal experiences,

and taking part in philosophical discussions about life. In some cases, young people will talk with their grandparents when they may not want to talk with their parents.

Grandparents are a positive force for all families and play a significant role in families undergoing difficulties. Research found that children and adolescents whose parents have separated or divorced see their grandparents as confidants and sources of comfort. Spending time with a grandparent was found to equip adolescents with better social skills and fewer behavior problems, especially among those children living in single-parent or stepfamily households.⁷

Many grandparents do not see their grandchildren regularly and must communicate with their grandchildren through other means. Forty-three percent of grandparents live more than 200 miles from their grandchildren.⁸ While intergenerational discussions are always best to have in person, you can implement many of the activities presented in this guide via phone or virtual connections.

Protect Your Family — Get

Infancy and Childhood Vaccines

Tetanus–diphtheria–whooping cough (DTaP)

Influenza (annually)

Hepatitis A

Hepatitis B

Rotavirus

*Hib**

Pneumococcal

Polio

Mumps–measles–rubella

Chickenpox



Adolescence/Early to Mid Adulthood Vaccines

Tetanus–diphtheria–whooping cough (Td/Tdap)

Influenza (annually)

Meningococcal

*HPV**

Pneumococcal

(for those with certain conditions)



Valuing Vaccinations

Childhood immunization reduces the chance of disease.

Vaccines work!
Rubella cases have plummeted in the Americas since 1996. The disease is now considered “eliminated” in this region.

YEAR

CASES

2010	3
2009	6
2008	0
2007	0
2006	1
2005	12
2004	121
2003	898
2002	1,331
2001	1,707
2000	5,790
1996	10,066

Three illnesses most likely to be passed between older and younger generations – **flu, pneumonia** and **whooping cough** – are preventable with immunizations.

*Hib, *Haemophilus influenzae* type b; HPV, human papillomavirus vaccine

Everyone Vaccinated Today!

Older Adulthood Vaccines

Tetanus–diphtheria–whooping cough (Td/Tdap)

Influenza (annually)

Shingles

Pneumococcal



Across Generations



Meningitis vaccine is recommended at aged 11 or 12 with a booster at 16 — just in time for adolescents who go to college or into the military in preparation for living in places like dormitories or barracks.



The shingles vaccine can be given anytime after a person turns 50. The CDC recommends administration after 60.

Learn more about vaccines at
www.bandAGEofhonor.org



#bandAGEofhonor



As a result of vaccines in the U.S., many diseases are a thing of the past. If you care, talk to your family.



Timeline



BEFORE 1920

GREATEST GENERATION

- 1914** Rabies and typhoid vaccines licensed
- 1915** Pertussis vaccine licensed
- 1918** The Spanish flu pandemic responsible for 25-50 million deaths worldwide and more than one-half million in the United States. This virus was unusual because it spread so quickly, was so deadly, and exacted its worst toll among the young and healthy.
- 1921** FDR contracts polio at age 39. His example has a major impact on public perceptions of individuals with disabilities.
- 1923** Diphtheria vaccine licensed



1928–1945

SILENT GENERATION

- 1937** Tetanus vaccine licensed
- 1938** FDR creates the National Foundation for Infantile Paralysis, known today as the March of Dimes.
- 1943** Penicillin mass-produced
- 1945** Influenza vaccine licensed



1946–1964

BABY BOOMERS

- 1949** Combination DTP vaccine licensed
- 1949** Last case of smallpox reported in the United States
- 1952** The worst recorded polio epidemic in US History occurs, with 57,628 reported cases
- 1953** Yellow fever vaccine licensed
- 1955** Polio vaccine licensed
- 1955-57** Incidence of polio in United States falls by 85-90%
- 1957-58** The Asian flu pandemic results in an estimated 70,000 deaths in the United States
- 1958** More than 750,000 measles cases reported
- 1963** First licensed measles vaccine
- 1963** Federal Immunization Grant Program established to provide grants to states to purchase vaccines and support basic functions of an immunization program
- 1964** A massive rubella outbreak in the United States with approximately 12.5 million reported cases and more than 2,000 deaths. Resulting medical costs reach the billions.
- 1964** The ACIP formed to review vaccination recommendations

Experiences with Vaccinations Across Generations

While younger and older generations have more in common than not, they do have different experiences that can shape their values and actions. We have included a timeline of different milestones in the history of vaccines and vaccine-preventable diseases as they relate to the experiences of current, living generations.

Recent research on mandating vaccines for children found varying opinions that fell along generational lines. Older Americans are strong supporters of requiring childhood vaccinations, with 79% holding that view. Young adults are more likely to say vaccinating children should be a parental choice, with 41% of 18- to 29-year-olds saying parents should be able to decide whether their child gets vaccinated.⁹

Looking at the timeline, one possible reason that older groups might be more supportive of mandatory vaccinations is that many among them remember when vaccine-preventable diseases, like measles and rubella, were common.¹⁰ Young adults have grown up in a time when many diseases have been eradicated and have never witnessed the effect of these illnesses.

The timeline also shows how the number of vaccines recommended for children and adults has increased dramatically in the past few decades. Parents may be worried about the number of vaccines recommended for their children. Children today may be receiving more vaccinations than their parents or grandparents, but they are also receiving safer and smarter vaccinations.¹¹

Thirty years ago, children received vaccinations that protected against 8 diseases, and the total number of bacterial and viral proteins contained in these vaccines was about 3,000. Today, children receive vaccinations that protect against 14 diseases, but the total number of proteins in these vaccines is only about 150.¹²

Intergenerational conversations, when people of different generations can share their stories and experiences and learn from each other, are effective vehicles for expanding viewpoints and opinions.

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1965–1980

GENERATION X

- 1966** CDC announces the first national measles eradication campaign.
- 1967** Mumps vaccine licensed
- 1968** The number of reported measles cases falls to about 22,000 annually.
- 1968–69** The Hong Kong flu pandemic, caused by an H3N2 influenza virus, results in roughly 34,000 deaths in the United States.
- 1969** Rubella vaccine licensed
- 1971** Smallpox vaccine no longer recommended
- 1971** Measles, mumps, and rubella vaccines combined into MMR vaccine.
- 1977** First pneumococcal vaccine licensed
- 1977** National Childhood Immunization Initiative launches
- 1979** Last reported case of natural polio in the United States
- 1980** The World Health Assembly certifies the world free of naturally-occurring smallpox.



1981–1997

MILLENNIALS

- 1981** Hepatitis B vaccine licensed
- 1981** Costs of pneumococcal vaccine become a covered benefit under Medicare Part B.
- 1984** Costs of hepatitis B vaccine become a covered benefit under Medicare Part B.
- 1985** Introduction of the Hib vaccine. Prior to this, Hib meningitis affected more than 12,000 American children annually, killing 600 and leaving many others with seizures, deafness, and developmental disabilities. After introduction of the vaccine, the number of deaths from Hib dropped to fewer than 10 per year.
- 1986** National Childhood Vaccine Injury Act enacted, establishing VAERS to monitor the safety of vaccines
- 1989–91** Measles resurgence with 55,000 cases reported, recommend two doses of the vaccine
- 1990** Hepatitis B vaccine recommended for all children.
- 1993** Vaccines for Children Program established to provide vaccines for children enrolled in Medicaid, without health insurance, American Indian or Alaskan native, as well as children whose health insurance do not cover costs of immunization.
- 1993** Costs of influenza vaccine become a covered benefit under Medicare Part B.
- 1993** National Immunization Program created at CDC to provide leadership and services to local public health departments around immunization
- 1994** The entire Western Hemisphere certified as polio-free by the World Health Organization
- 1995** Introduction of chicken pox (varicella) and hepatitis A vaccinations



1998+

POST-MILLENNIALS

- 1998** First rotavirus vaccine licensed and withdrawn from market in 1999 following VAERS findings and ACIP review
- 1999** FDA recommends removing mercury from all vaccines
- 2000** Measles eliminated in the United States
- 2000** Oral polio vaccine discontinued in the United States due to risk of rare occurrence of vaccine-associated paralytic polio caused by oral polio vaccine.
- 2001** Pneumococcal vaccine licensed for children
- 2003** First live attenuated influenza vaccine approved for people between ages 5 and 49
- 2004** Inactivated influenza vaccine recommended for children between 6 and 23 months of age
- 2005** Rubella no longer endemic in United States
- 2005** Meningococcal conjugate vaccine licensed
- 2005** New Medicare rule that requires all long-term care facilities to offer annual flu vaccinations and one-time pneumococcal vaccinations to all residents
- 2006** Human papillomavirus and rotavirus vaccines licensed
- 2006** Improved Tdap vaccine licensed for people between ages 11 and 64
- 2008** Shingles vaccine licensed for people older than 60
- 2008** CDC issues health advisory in response to widespread measles outbreaks in the United States
- 2009** Vaccine Court rules that MMR vaccine does not cause autism.
- 2009** Influenza vaccine approved for people older than 65
- 2011** Institute of Medicine issues report that few health problems are caused by or clearly associated with vaccines.
- 2012** Pneumococcal conjugate vaccine licensed for adults older than 50
- 2013** Tdap vaccine recommended during each pregnancy

Abbreviations:

ACIP, Advisory Committee on Immunization Practices;

CDC, Centers for Disease Control and Prevention;

DTP, diphtheria, tetanus, and pertussis;

FDA, US Food and Drug Administration;

FDR, Franklin Delano Roosevelt;

Hib, *Haemophilus influenzae* type b;

MMR, measles, mumps, and rubella;

Tdap, tetanus, diphtheria, and acellular pertussis;

VAERS, Vaccine Adverse Event Reporting System.

Conversation Starters

There are a number of ways to start conversations about vaccinations with your family and friends. One way to begin is by encouraging all your family members to talk with their health care professional, like a doctor, nurse, or pharmacist, about what vaccinations may be right for them. The following suggestions are springboards for discussion with your family. These cultural touchstones and different media present an opportunity to learn about and discuss the value of vaccines and vaccine-preventable diseases. Each section includes activities and sample questions for older people to ask young people and for young people to ask older people. There are topics and activities for all ages. While we focus on conversations between older and younger generations, the topics in the conversation starters and the activities at the end of this guide can and should be used to involve family members of all ages, including parents and other adults—especially because parents are often the gatekeepers and bridge-builders for grandparent-grandchild interactions. Additionally, with increases in longevity, many older adults are

witnessing their grandchildren becoming parents for the first time and connecting with their great-grandchildren. The special relationship between grandparents and grandchildren can grow and strengthen as the grandchildren become adults and remains ripe for intergenerational dialogue.

The first vaccine
created in a laboratory was Louis Pasteur's 1879 vaccine for chicken cholera.



Let's TALK ELVIS AND POLIO

In 1956, Elvis Presley received his polio vaccination in front of the cameras. The March of Dimes photo shows Elvis Presley receiving his vaccination, right before his appearance on The Ed Sullivan Show, from Dr Harold Fuerst on October 28, 1956, with New York City Health Commissioner Leona Baumgartner attending. Elvis was an active supporter of the March of Dimes and its Teens Against Polio efforts. The March of Dimes distributed the photo to Elvis fan clubs across the nation to encourage teenage polio immunization.¹⁷

Polio is a disease that can cause lifelong paralysis and even death. Polio was once one of the most feared diseases in the United States. In the early 1950s, polio outbreaks caused more than 15,000 cases of paralysis each year in the United States. Following the introduction of vaccines, the number of polio cases fell rapidly.¹⁸

Polio has been eliminated from the United States thanks to widespread polio vaccination. However, the disease still exists in some parts of the world. The best way to keep the United States free of polio is through vaccination.¹⁹



photo courtesy of: March of Dimes

Conversation Starters for Talking With Adults:

- What do you remember about Elvis Presley?
- Why would Elvis have been a good spokesperson?
- Did you know anyone who had polio?
- Were you ever worried that you would catch polio?
- Do you know anyone who is fully or partially paralyzed?
- Do you think it is a good idea to get a shot if it can keep you and your friends from getting sick?
- Are you ever scared of getting shots?

Conversation Starters for Talking With Kids:

- Do you know who Elvis Presley was?
- Who are the famous people that you and your friends look up to?
- Would you feel different about shots if you saw a picture of them getting a shot?
- Do you think it is a good idea to get a shot if it can keep you and your friends from getting sick?
- Are you ever scared of getting shots?

Activity: Research

Go online together and learn more about the polio epidemic and the creation of the polio vaccines. The Smithsonian National Museum of American History has an interactive Web page on polio at <http://goo.gl/Upljpx>

Activity: Start a Family Book Club

Starting a book club with your family members is a great way to learn about a topic and talk about it. Read the book *Small Steps: The Year I Got Polio* by Peg Kehret.²⁰ In a riveting story of courage and hope, Ms Kehret writes of months spent in a hospital when she was 12 years old, first struggling to survive a severe case of polio, and then slowly learning to walk again. This book is recommended for ages 9 through 12 years. More information on this book is available from the publisher at <http://goo.gl/V4LEnE>.

Tips on Starting Your Family Book Club:

1. Set a time frame for reading the book. Consider the schedules of your family members, especially school schedules of young people. It might make sense to complete the book during a time-limited period like 2 months. Set a time that works for your family.
2. Make plans for when family members will come together and discuss what they have read—in person or via phone or video chat. Consider weekly or biweekly targets.
3. During the gatherings, you can discuss what people learned from the chapters they read. Was there anything that surprised them? Anything that made them sad? Ask if there were things that happened that they didn't understand.

Let's TALK TRUE STORY OF BALTO

In 1925, a diphtheria outbreak threatened the children of Nome, AK. The only medicine to save the children was in Anchorage. There were no planes or trains to deliver the medicine, so health officials decided to use teams of sled dogs. While more than 20 teams took part in the trek, it was Gunner Kaassen who drove his heroic dog team into the streets of Nome 6 days after the serum left Anchorage. The lead of his team was a husky named Balto, who soon became known around the world. A year later, admirers erected a statue of Balto in New York City's Central Park. The Iditarod dogsled race is based on this epic trek.²¹ There are a number of children's books, as well as an animated film, retelling this tale.

Diphtheria is an infection that affects the back of your throat and can cause trouble breathing, heart failure, paralysis, and even death. Diphtheria once was a major cause of illness and death among children. The United States recorded 206,000 cases of diphtheria in 1921 and 15,520 deaths. Before there was treatment for diphtheria, up to half of the people who got the disease died from it.²²

Starting in the 1920s, diphtheria rates dropped quickly in the United States with the widespread use of vaccines. While there have been only 5 reported cases of diphtheria in the United States in the past 10 years, the disease continues to cause illness elsewhere around the world. Vaccines are recommended for infants, children, teens, and adults to prevent diphtheria.²³ The vaccine that protects against diphtheria is a combination vaccination that can also protect you from tetanus and pertussis (whooping cough).



Activity: Read Together

One children's book for early readers is *The Bravest Dog Ever: The True Story of Balto* by Natalie Standiford and Donald Cook.²⁴ This book is recommended for K-3 readers and retells the tale of the journey. This book can easily be read together in person, over the phone, or via video chat. Grandparents may want to read this story to younger children or have older children read it to them. It is also fun to take turns reading. Pause during the reading and use the conversation starters that follow to talk about what is happening in the story. Look at a map of Alaska and see how far Nome is from Anchorage. After finishing the book, look together at a map of where you live and find 2 or 3 towns or cities that are 700 miles away.

Activity: Watch a Movie

The animated film *Balto* is loosely based on the true story. In the movie, a deadly diphtheria epidemic strikes the remote town of Nome, AK. With the lifesaving medicine located hundreds of miles away, the residents decide to send out a sled-dog team. Balto—a half-wolf dog ignored by all except a goose, Boris, and 2 polar bears—is chosen to run but is disqualified by lead dog Steele. When the other dogs get lost in the snow, Balto risks his life to rescue them and deliver the medicine.²⁵ The movie is recommended for ages 6 years and older. After watching the movie, talk about how you could learn more about the dog that inspired the story.

Conversation Starters for Talking With Adults:

- Have you ever been to Alaska?
- Have you ever heard of the story of Balto?
- Did you know there was a statue of Balto in Central Park? Have you ever been to Central Park?
- Have you or someone you love ever been really sick?
- Have you ever had trouble breathing?

Conversation Starters for Talking With Kids:

- Do you know where Alaska is?
- Have you ever heard about dogsleds and the dogsled races in Alaska?
- How do you think the people of Nome felt when the children got sick?
- Do you know that there is a vaccine that helps children from getting sick from diphtheria?
- Have you ever had trouble breathing?
- Why did they have to use teams of sled dogs to deliver the medicine?
- What will happen if the medicine doesn't make it to the people on time?
- Why is Balto considered a hero?

Let's TALK THE FLU SHOT

Influenza (flu) is a contagious respiratory illness. Serious outcomes of the flu can be hospitalization or death. Some people, such as older people, young children, and people with certain health conditions, are at high risk for serious flu complications. The flu is bad enough, but the effect on anyone with a chronic condition, like cancer, diabetes, or asthma, is much worse. The best way to prevent the flu is by getting vaccinated each year. Flu seasons are unpredictable and can be severe. Over a period of 30 years, between 1976 and 2006, estimates of flu-associated deaths in the United States range from a low of about 3,000 to a high of about 49,000 people annually.²⁶



Activity: Watch a Show

Sid the Science Kid is an educational animated PBS television series that uses comedy and music to promote exploration, discovery, and science readiness among preschoolers. It features a practical in-school science curriculum and celebrates children's natural curiosity about science in everyday life. In a special episode called "Getting a Shot," Sid and his friends learn about vaccines and get their shots from Sid's grandmother, who happens to be a nurse. You and your preschooler can watch the full episode at <https://goo.gl/v4js5k>.

The PBS Web site has a number of activities, coloring sheets, and even a game to play to support the theme of this episode available at <http://goo.gl/HKglgr>.

Activity: Learn About Creating a Vaccine

The creation of the annual flu shot is a huge, complex, and fascinating worldwide project. While there are many different flu viruses, each year, scientists identify 3 or 4 types of flu viruses to include in vaccines based on which viruses are circulating, how they are spreading, and how well current vaccine components protect against identified viruses. There are influenza centers all over the world that study the flu year-round. These laboratories send information to the World Health Organization (WHO) for additional analyses. Based on this research, the WHO recommends specific vaccines for inclusion in the seasonal influenza vaccines. The US Food and Drug Administration (FDA) determines which vaccine viruses will be used in US vaccines. As soon as a recommendation has been issued, manufacturers begin the process of producing vaccines. It takes at least 6 months to produce large quantities of the flu vaccine.²⁷

Learn more about the annual process of creating flu vaccines by conducting research on the Internet or in your local library. The Centers for Disease Control and Prevention²⁸ and the FDA²⁹ have helpful information on this process. There are a number of videos online that explain the annual process, including The Khan Academy's video at <https://goo.gl/796FJQ>; for details on the manufacturing process, visit <http://goo.gl/h9QnOA>.

Conversation Starters for Talking With Adults:

- Do you get a flu shot every year?
- Do you have any health conditions that could be made worse if you get the flu?
- What other shots do you get?
- Are you ever scared when getting a shot?
- What do you do when you are scared?

Conversation Starters for Talking With Kids:

- Do you get a flu shot every year?
- Why is it important to get a flu shot?
- Do you have any friends who have asthma or allergies?
- How do you think the flu could affect them?
- Would you like to get a shot with your friends and family?
- What can kids do to encourage adults to get their flu shots?

Vaccines are the most **effective** tool we have to prevent infectious diseases.

Let's TALK COMMUNITY IMMUNITY

While vaccines can help families stay healthy, they can also protect your community. *Community immunity* is a term used when a critical portion of a community is immunized against a contagious disease. Most members of that community are protected against that disease because there is little opportunity for an outbreak. Even those who are not eligible for certain vaccinations, such as infants, pregnant women, or immunocompromised individuals, get some protection because the spread of contagious disease is contained. Community immunity can help control outbreaks of influenza, measles, mumps, rotavirus, and pneumococcal disease.³⁰



Activity: Learn How Vaccinations Help the Community

Use the illustration on page 14 to discuss how community immunity works. The image in the top left corner (a) shows a community where no one is immunized and a contagious disease can spread to everyone. In the top right image (b), some community members get immunized but a contagious disease can still spread to some of the people. In the bottom image (c), most of the community members are immunized and the spread of a contagious disease is controlled.

Activity: Play a Game

Pandemic is a cooperative board game based on the premise that 4 diseases have broken out in the world, each threatening to wipe out a region. The game is recommended for ages 8 years and older and accommodates between 2 and 4 players, each playing 1 of 5 possible specialists. The game is unlike most board games in that the gameplay is cooperative, rather than competitive. Through the combined effort of all the players, the goal is to discover all 4 cures before any of several game-losing conditions is reached. If one or more diseases spread beyond recovery or if too much time elapses, the players all lose. If they cure the 4 diseases, they all win. The game is a fun multigenerational experience with family members working together to cure the diseases.³¹

In the case of a real pandemic, the national government works with manufacturers, state health departments, and others to have a stockpile of medicines available.

Activity: Learn About the Return of Measles

Measles is a highly contagious virus that starts with fever, runny nose, cough, red eyes, and sore throat, followed by a rash that spreads over the body. Measles spreads through the air via coughing and sneezing. Measles can cause serious health complications, especially in children younger than 5 years, including hospitalization; brain swelling,

which could lead to brain damage; and even death.³² In the decades before 1963, when a vaccine became available, nearly all children got measles by the time they were 15 years old. It is estimated that between 3 and 4 million people in the United States were infected each year. Also each year, between 400 and 500 people were estimated to have died, 48,000 were hospitalized, and 4,000 suffered swelling of the brain from measles.³³

Thanks to the vaccine, measles was declared eliminated from the United States in 2000. But in recent years, the number of measles cases in the United States has increased. Measles is still common in many parts of the world. Every year, measles is brought into the United States by people who get measles while they are in other countries. Even if your family does not travel internationally, you could come into contact with measles anywhere in your community. Anyone who is not protected against measles is at risk. The best protection against measles is vaccination.³⁴

Read Account of the Rare but Very Serious Complications From Measles:

- Beloved children's author Roald Dahl (*Matilda*, *The BFG*, *James and the Giant Peach*, *Charlie and the Chocolate Factory*) lost his daughter, Olivia, to complications from measles. He wrote a letter in 1962 encouraging British parents to vaccinate their children. Read his story at <http://goo.gl/4VePEH>.
- Alice Callahan, author and blogger, retells her grandmother's story about measles and the death of one of her sons in her blog, *The Science of Mom* at <http://goo.gl/49aY11>.

Conversation Starters for Talking With Adults:

- What causes diseases to break out?
- Do you know someone who had complications from measles or another disease?
- Do you remember getting vaccinations when you were a kid?
- Do you still get vaccinations that could protect you from getting sick? If not, why?
- If so, why would some people not get vaccinations?
- Why do some parents choose not to give their children the measles vaccine or other vaccines?
- Do you know anyone who has or had a job that helped prevent the outbreak of diseases?

Conversation Starters for Talking With Kids:

- What happens when no one in the community has had the vaccination and a disease breaks out?
- What happens when only a few people have the vaccination and a disease breaks out?
- What happens when most of the people have the vaccination and a disease breaks out?
- What could happen if you are one of the people who has not had the vaccination?
- Why would some people not be able to get a vaccination?
- What jobs help to prevent outbreaks of diseases?



Measles Outbreak
No one is immunized.

a.



Community Immunity
Most of the population gets immunized.

c.



Some of the population
gets immunized.

b.

Intergenerational Family and Community Activities

Family Health History

Create your family health tree and identify health conditions of your blood relatives. Be sure to do both sides of the family. Try to go back as far as you can. Look to see if any experienced vaccine-preventable illnesses. The US Surgeon General has created an online tool called *"My Family Health Portrait"* for collecting family health history available at <https://goo.gl/0wOuL9>. *"Make a Family Tree,"* available online from PBS at <http://goo.gl/6gtUAX>, is a useful tool for creating your family health tree.

Vaccination Celebration

Make getting flu shots a fun outing for family members of all ages. Such an outing could be a great end-of-summer activity, followed by a picnic or ice cream.

#BandageofHonor

Take a photo of the bandage on your arm after you get a vaccination to share with your family and friends. Also share your photo on social media if age-appropriate. Remember, children younger than 13 years should not be using social media, and teens need support and guidance in using social media safely and appropriately. You can protect your privacy and the privacy of your family and friends by just showing the bandage. Make sure to use the hashtag **#BandageofHonor**.

Vaccines can
prevent outbreaks
of disease and save lives.



Intergenerational Programs

Childhood Immunization Project

The Seniors/Volunteers for Childhood Immunization program (www.pacs.unt.edu/svci) trains volunteers who are members of an established volunteer organization in a community to educate new mothers in hospitals or birthing centers about preschool immunization; enroll consenting mothers into a community-based immunization reminder program; call or send cards reminding mothers of their children's 2-, 4-, 6-, and 12-month immunizations; and evaluate their success based on official immunization records.

Intergenerational Public Service Announcements

A project in Alaska paired high school students with older adults who shared stories about their experiences with vaccine-preventable diseases. The group then created public service announcements encouraging vaccinations, which aired before the Iditarod Race (<http://goo.gl/LTb8J2>).

Oral History Project

Oral history is a method of gathering and preserving historical information through interviews. It is also a wonderful tool for learning more about vaccine-preventable illnesses and vaccinations. Oral history interviews and conversations can occur among family members or groups of older and younger people not related to each other. In fact, oral history is a great intergenerational activity for schools and community elders. Sharing stories through oral history is also fun, but preparation is needed to make sure it is successful. There are a number of online resources on oral history. Visit www.oralhistory.org, www.historymatters.gmu.edu, and www.readingrockets.org/article/oral-history for more information.

Oral History Tips:

- Make sure to take time to prepare, plan questions in advance, and respect the schedules and privacy of older adults.
- Write down questions that you want to ask. Make sure they cannot be answered by a simple “yes” or “no.” Some suggested questions are included here.
- If possible, record your sessions. If you can’t, write down each answer before going on to the next question. It is often helpful to work with a partner. One person can write down the answers so the interviewer can be planning the next question. Write down all the answers, even the ones you might already know.
- Try to ask brief questions that don’t have too many parts. Listen to the answers and ask follow-up questions requesting more details. You may need to ask interviewees to describe how something or someone looked or how they felt.
- Help the older adults feel comfortable talking about the past. Periods of silence are good. It allows people to collect their thoughts and add more details. Let the older people know how happy you are to learn their stories.
- Maintain eye contact. Facial expressions are good indicators of interest and are very important in keeping a conversation going.
- Older children and youth should take notes and, following the interview, write down the stories they learned from their older partners.
- Younger children can draw pictures or make collages illustrating the stories they heard.
- Young people can tap into their creativity by composing poems, songs, or skits based on their conversations with older adults.
- The whole community can get involved by performing the song, skit, or play that portrays the older adults’ stories.

Sample Oral History Questions About Vaccinations:

- What major illnesses or health problems do you remember having?
- What major illnesses or health problems do you remember your family members or friends having?
- What do you remember about your grandparents, parents, or other family members talking about outbreaks of diseases or illness?
- What do you remember of the polio epidemic and the polio vaccine?
- What was the experience like for anyone you knew who had measles, mumps, rubella, or polio?
- What do you remember about getting vaccinations when you were a child? What vaccinations do you remember getting?
- What do you remember about the decision to get your children vaccinated (if you had children)? What vaccinations did you make sure your children received?

Thanks to **advancements** in science and technology, there are now vaccinations for 17 diseases in the United States. There are other vaccinations available for people travelling outside of the United States.



Conclusion

Vaccinations play an important role in the health of people of all ages and are important for strong, healthy intergenerational communities. This is an important topic for intergenerational discussions. We know that new parents value the opinions and experiences of family and friends, older adults want to protect their grandchildren, and young adults appreciate their grandparents' advice and stories. Talking and learning together about vaccinations and vaccine-preventable diseases can help strengthen relationships across generations.

- *Use the wide range of tools in this guide to engage children, youth, teenagers, young parents, and older adults in conversations and activities around the importance of vaccinations.*
- *Talk with your health care professional for more information.*
- *Wear your bandage of honor to show you care about your health and the health of your family and friends.*

Resources

- The National Vaccine Program Office in the U.S. Department of Health and Human Services
www.vaccines.gov
- Centers for Disease Control
www.cdc.gov
- World Health Organization
www.who.int/topics/vaccines/en/
- American Academy of Pediatrics
www.aap.org/immunization
- National Adult Vaccination Program
www.navp.org/
- The Children's Hospital of Philadelphia Vaccine Education Center
www.chop.edu/centers-programs/vaccine-education-center

About

Valuing Vaccinations Across Generations (www.bandageofhonor.org) is an awareness campaign launched by **Generations United** in partnership with **The Gerontological Society of America** and the **American Academy of Pediatrics**. This campaign bridges the importance of immunizations within segmented groups into an intergenerational conversation within families and among generations. It is an international effort that promotes vaccinations through a life span approach by providing tools and resources to encourage intergenerational conversations. Beginning in the United States, the campaign will expand to other countries in late 2016. The campaign is supported by Pfizer.

GENERATIONS UNITED'S mission (www.gu.org) is to improve the lives of children, youth, and older adults through intergenerational collaboration, public policies, and programs for the enduring benefit of all. For 3 decades, Generations United has been the catalyst for policies and practices stimulating cooperation and collaboration among generations, evoking the vibrancy, energy, and sheer productivity that result when people of all ages come together. We believe that we can only be successful in the face of our complex future if generational diversity is regarded as a national asset and fully leveraged.

THE GERONTOLOGICAL SOCIETY OF AMERICA (www.geron.org) is the nation's oldest and largest interdisciplinary organization devoted to research, education, and practice in the field of aging. The principal mission of the society—and its 5,500+ members—is to advance the study of aging and disseminate information among scientists, decision makers, and the general public.

The **AMERICAN ACADEMY OF PEDIATRICS** (www.aap.org) is an organization of 64,000 primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists dedicated to the health, safety, and well-being of infants, children, adolescents, and young adults. To accomplish this, the American Academy of Pediatrics supports the professional needs of its members.

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