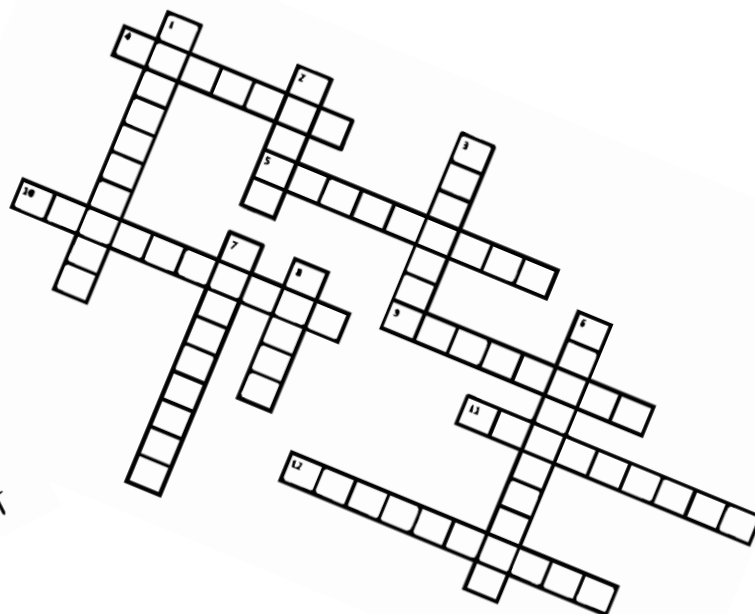
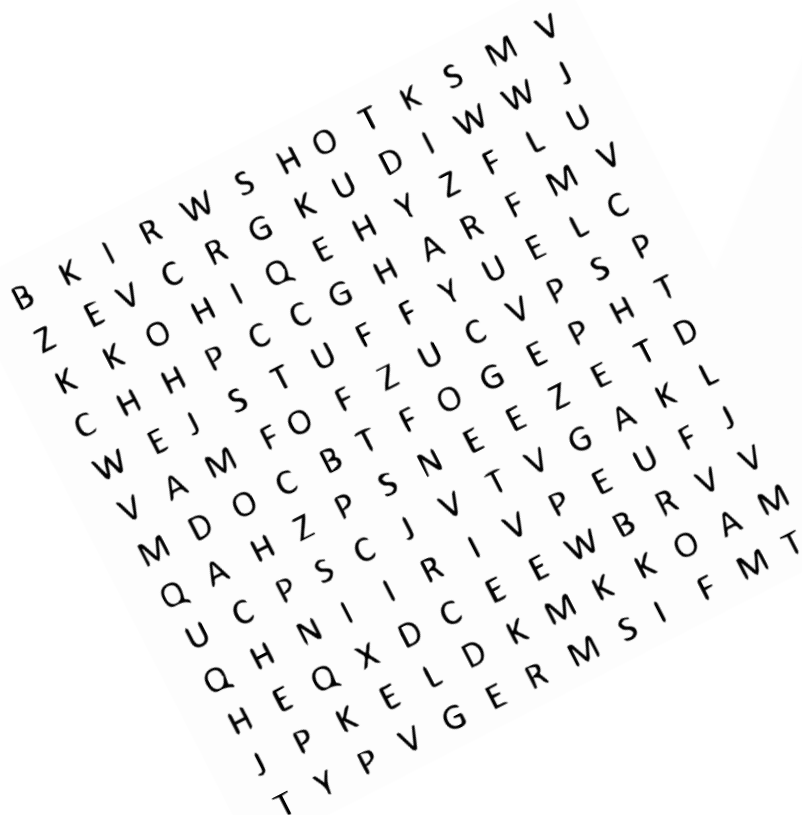


Vaccinate Through Life

Activity Book



TEXAS
Health and Human
Services

Texas Department of State
Health Services

Note to Parents, Guardians, and Teachers

The Texas Department of State Health Services has created this activity book to provide parents, guardians, teachers, and children with an interactive tool to further your education and prevent the spread of vaccine preventable diseases in your community. We hope you will encourage use of this workbook in your schools, communities, and families to help children learn the importance of being prepared and staying healthy.

Immunization Smarts Word Scramble

See if you can unscramble these words about immunizations!

1. This disease usually begins when colder weather starts.

FUILZAENN

--	--	--	--	--	--	--	--	--

2. Benjamin Franklin's son died of this disease.

PXSALMOL

--	--	--	--	--	--	--	--

3. An outbreak of this disease led to the famous dog sled run in Alaska.

TIDPIHAHER

--	--	--	--	--	--	--	--	--

4. The name of this disease means "little red."

UBLARLE

--	--	--	--	--	--	--

5. This virus is extremely contagious.

ESAMLSE

--	--	--	--	--	--	--

6. If you don't get immunized, you might get _____.

IKSC

--	--	--	--

Vaccine-Preventable Diseases Word Find

M P T
 V T B U C T S V S
 X B H Q D J F H K Q A J E
 K X B J Q H I B F Q A N E R O J G
 H D O S E B S P M U M M S I H I B X L
 G L B U Y N L S H H M V G J W J G C E N O
 W Y D V X Z K L T E Q X O Q B V K Q E Z W
 S E Q J N L H U E H C O W I D S Y E Z R L Y J
 K S I T I L A H P E C N E I Q I I X H C J L P
 Y G D Z E O P T G U R O D B B O T S F Q U X R A G
 W J V R U R Z N W N I Y M S U R I V A T O R R T F
 Z E N K F W A G E T A W Q R O G G U C I P M W J J
 O F H H N O G F C Z U Q W N X C A N M V A C W N O D T
 S P B Z X W B W O Y W M I W O A I I L K L D W W Z X C
 O U O O N A M Z C Z V V O D Q O P N H H L O A I R H J
 X N L Q L L X H J M P D N Y J B E U X E O X N J H
 E G A I Q A L R Y A F G L I L P M G Z B M W U D Y
 B D Z T O C M K V S P T S B A E T J J U F O E K Z
 W J I N F L U E N Z A K T D H R L A R W G S V
 A F A B E P G H M N G I D S J K H G I U D E R
 N G I F T J D J F T J X H D B K R W Y Z A
 Z K A O N J N K I X S E L S A E M Q H O J
 W M I N B V S X C P R L T P X K M Y I
 S M S I S S U T R E P T Y Y H C R
 E O M J A P D Y O P O I N
 I C H C D F Z D A
 W J Q

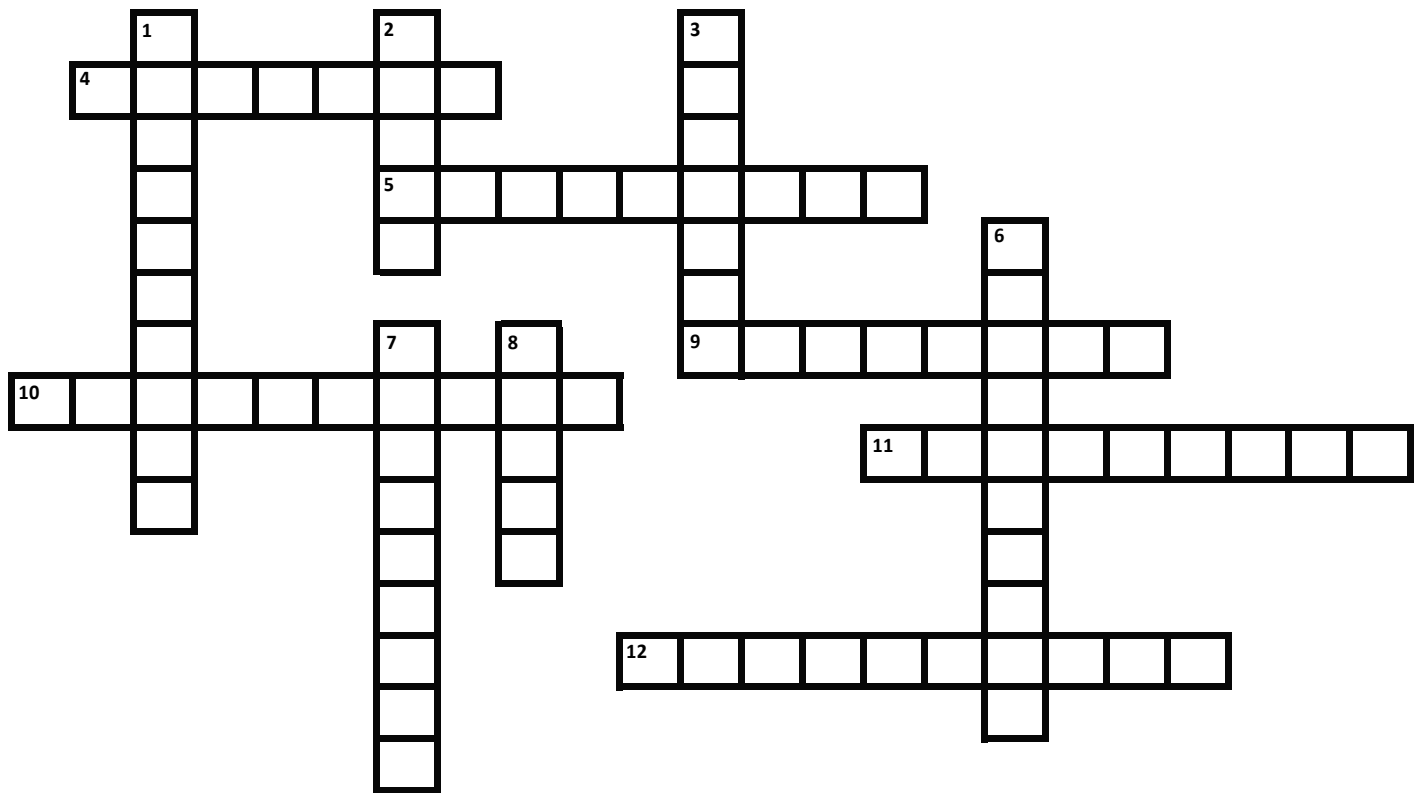
Using the list of words below, find and circle each word in the puzzle. Words can be forward, backward, up, down, or diagonal.

POLIO
 INFLUENZA
 PERTUSSIS
 PNEUMONIA
 DIPHTHERIA

VARICELLA
 ENCEPHALITIS
 HEPATITIS
 MUMPS
 ROTAVIRUS

TETANUS
 MEASLES
 MENINGITIS
 RUBELLA

Immunization Crossword Puzzle



Across Clues:

4. This disease is also known as "lockjaw."
5. This disease causes a cough that sounds like a whoop.
9. Benjamin Franklin's son died of this disease.
10. This disease causes an itchy rash and got its name because the blisters look like chickpeas.
11. This disease causes diarrheal illness in children.
12. This illness can give you a stiff neck and a headache.

Down Clues:

1. This vaccine is often recommended when traveling outside of the country.
2. The disease rhymes with "lumps" and causes swelling of the neck.
3. During the Civil War, more than 4,000 troops died from this rash illness.
6. The "D" stands for _____ in DTaP?
7. Every year, people 6 months or older should be vaccinated against _____.
8. Franklin D. Roosevelt was in a wheelchair because he had this disease.

Word Bank: pertussis, diphtheria, chickenpox, tetanus, mumps, meningitis, hepatitis A, rotavirus, polio, smallpox, measles, influenza

Used by permission from the North Dakota Department of Health.

Unscramble these letters to find the words!

1. AEYHTLH _____

2. EGRSM _____

3. SRIVU _____

4. TBIECRAA _____

5. NUIEMM _____

6. AICCNEV _____

7. ECLL _____

8. IEENSCC _____

9. CIMNIEDE _____

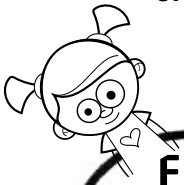
10. ISKC _____

Vaccines give us immunity from some diseases. See what words you can make with the letters from the words:

Vaccines = Immunity

[illegible]

Can you help the little girl get to immunity? Find a path that passess each vaccine along the way!



START

Flu

Polio

Chickenpox

DTaP

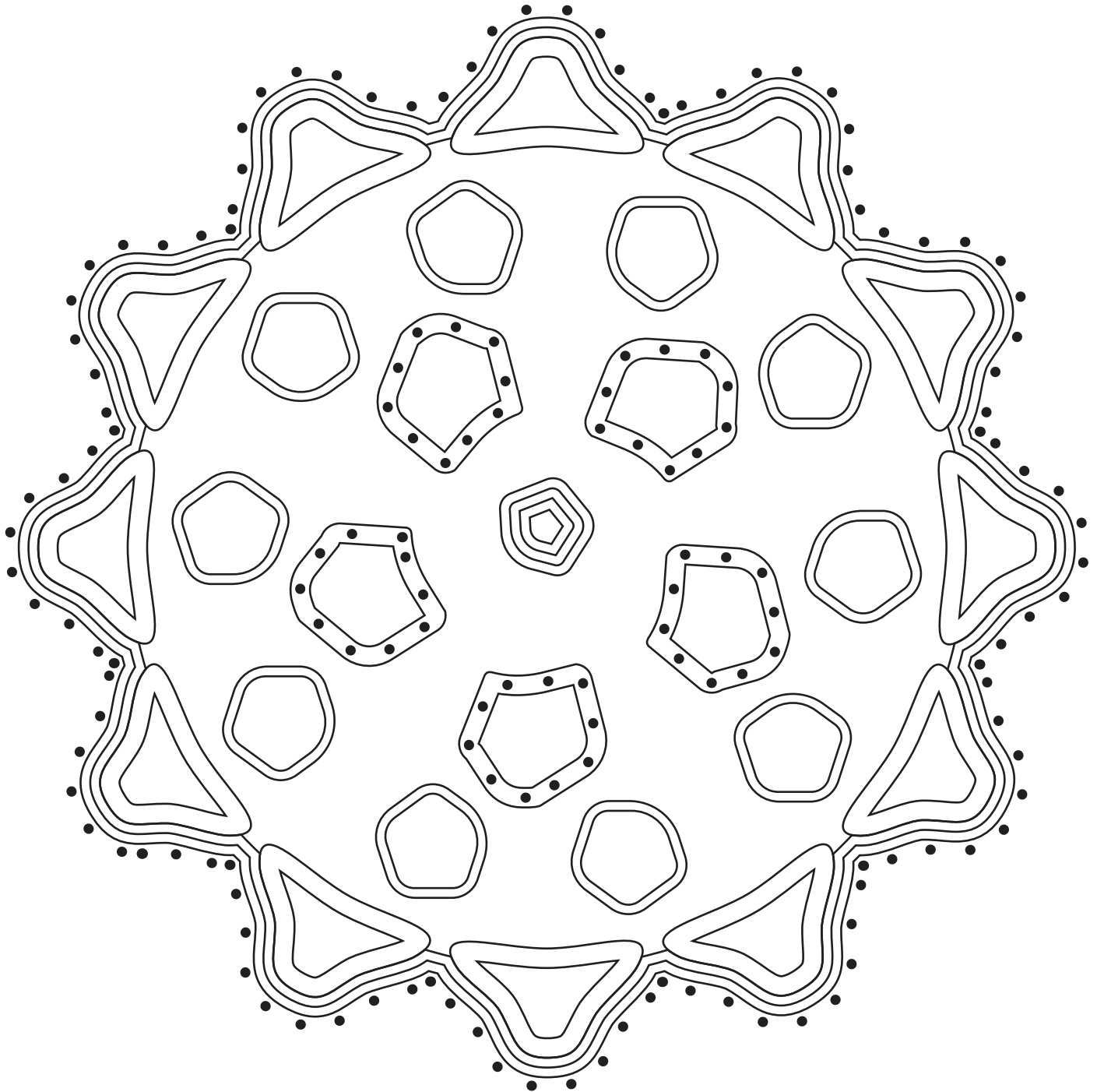
MMR

FINISH - IMMUNITY!

Measles

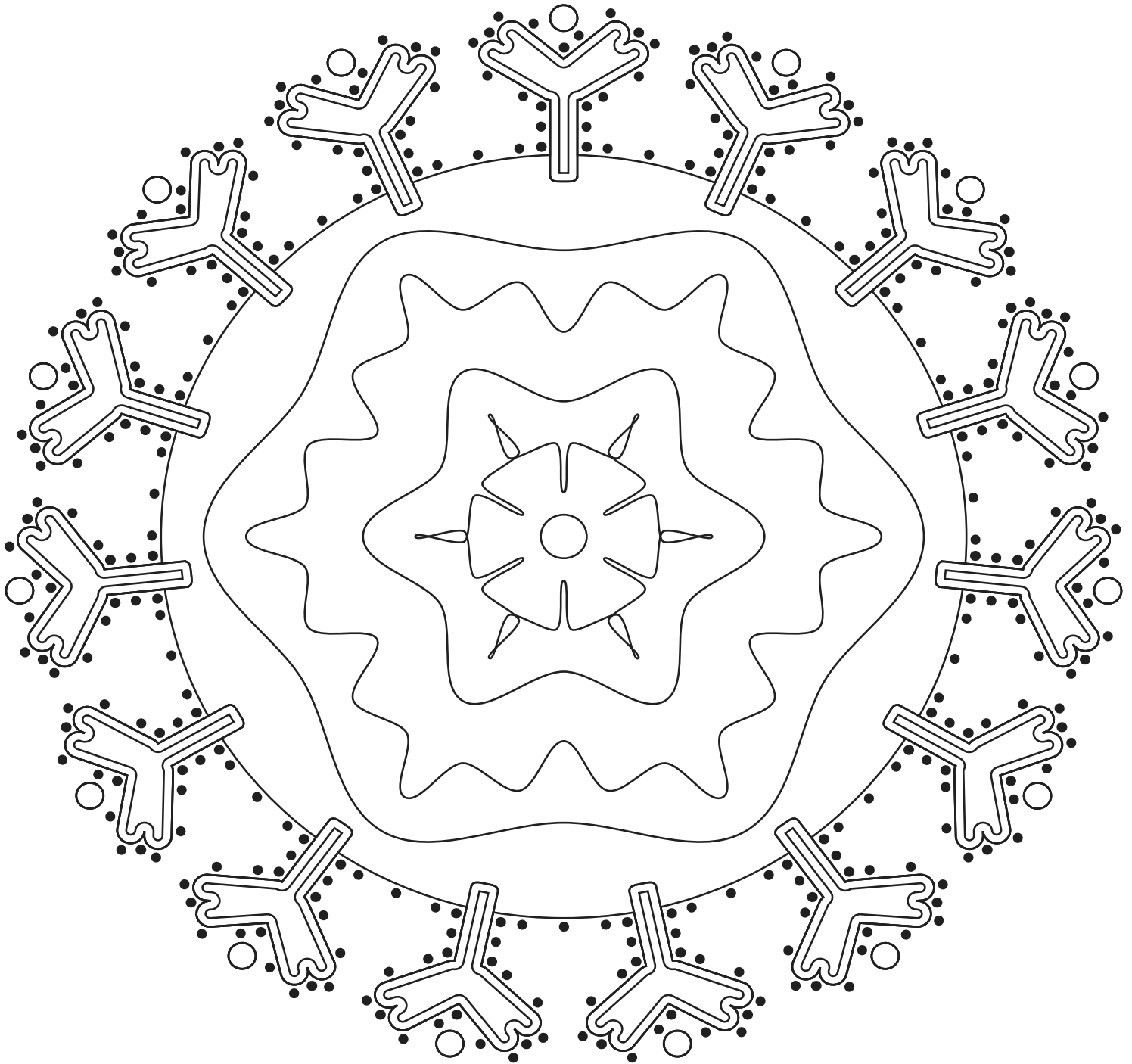
Measles is a very contagious disease caused by a virus. It spreads through the air when an infected person coughs or sneezes. Measles starts with a fever. Soon after, it causes a cough, runny nose, and red eyes. Then a rash of tiny, red spots breaks out. It starts at the head and spreads to the rest of the body.

Measles can be prevented with the MMR vaccine. The vaccine prevents against three diseases: measles, mumps, and rubella.



Illustrations provided by Marin Axtell, Idaho Immunization Program.

Mumps

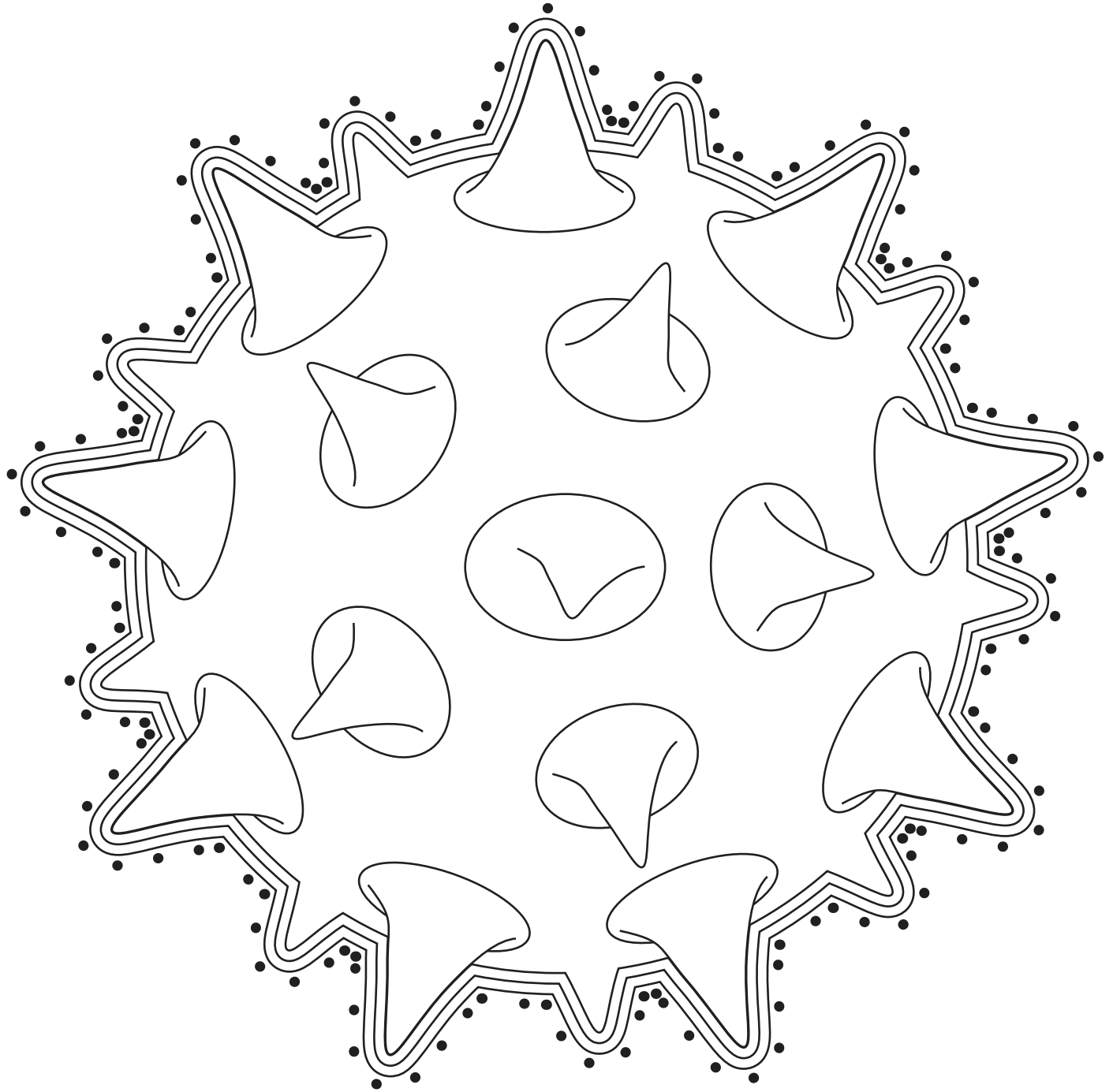


Mumps is a contagious disease that is caused by a virus. Mumps typically starts with fever, headache, muscle aches, tiredness, and loss of appetite. Then, most people will have swelling of their salivary glands. This is what causes the puffy cheeks and a tender, swollen jaw.

Mumps can be prevented with the MMR vaccine. The vaccine prevents against three diseases: measles, mumps, and rubella.

Illustrations provided by Marin Axtell, Idaho Immunization Program.

Rubella



Rubella is a contagious disease caused by a virus. It is also called “German measles,” but it is caused by a different virus than measles. Most people who get rubella usually have mild illness, with symptoms that can include a low-grade fever, sore throat, and a rash that starts on the face and spreads to the rest of the body. Some people may also have a headache, pink eye, and general discomfort before the rash appears. Rubella can cause a miscarriage or serious birth defects in an unborn baby if a woman is infected while she is pregnant.

Rubella can be prevented with the MMR vaccine. The vaccine prevents against three diseases: measles, mumps, and rubella.

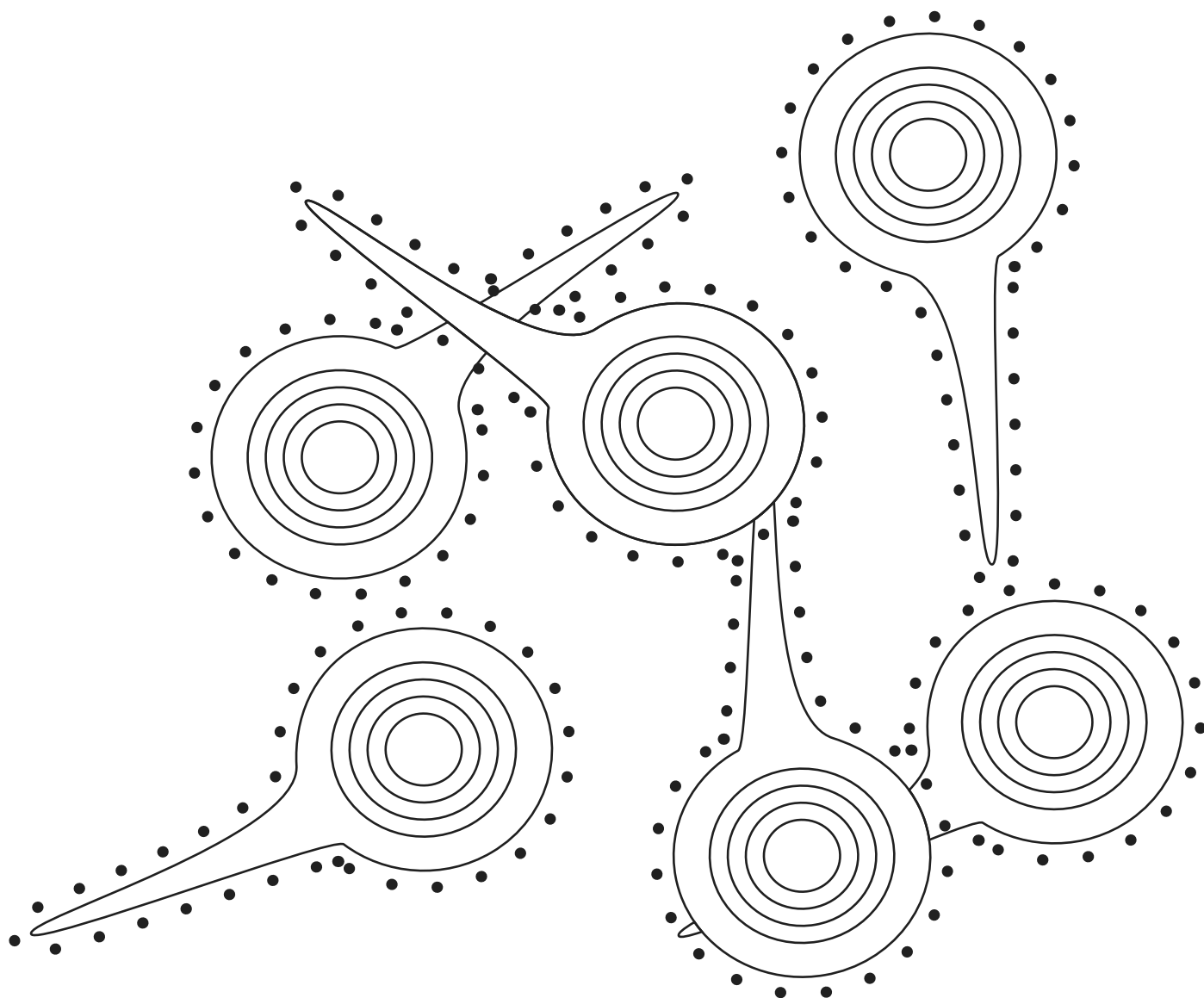
Illustrations provided by Marin Axtell, Idaho Immunization Program.

Tetanus

Tetanus is an infection caused by bacteria. When the bacteria invade the body, they produce a poison that causes painful muscle contractions. Another name for tetanus is “lockjaw”. It often causes a person’s neck and jaw muscles to “lock” making it harder to open your mouth or swallow.

The CDC recommends the vaccine for infants, children, teens, and adults to prevent tetanus.

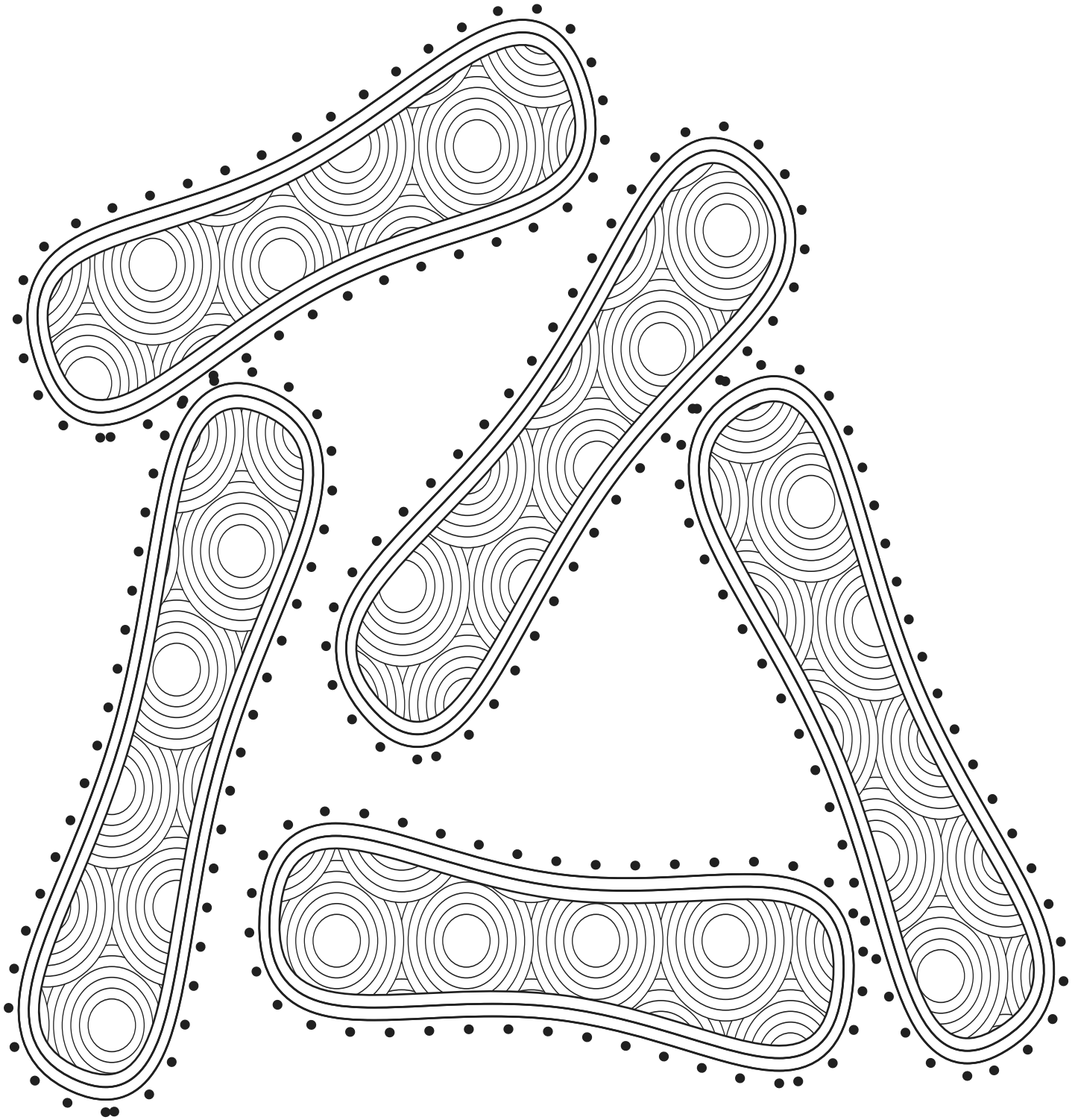
Tetanus is different from other diseases because it does not spread from person to person. The bacteria is found in soil, dust, and manure and enters the body through a cut or puncture wound.



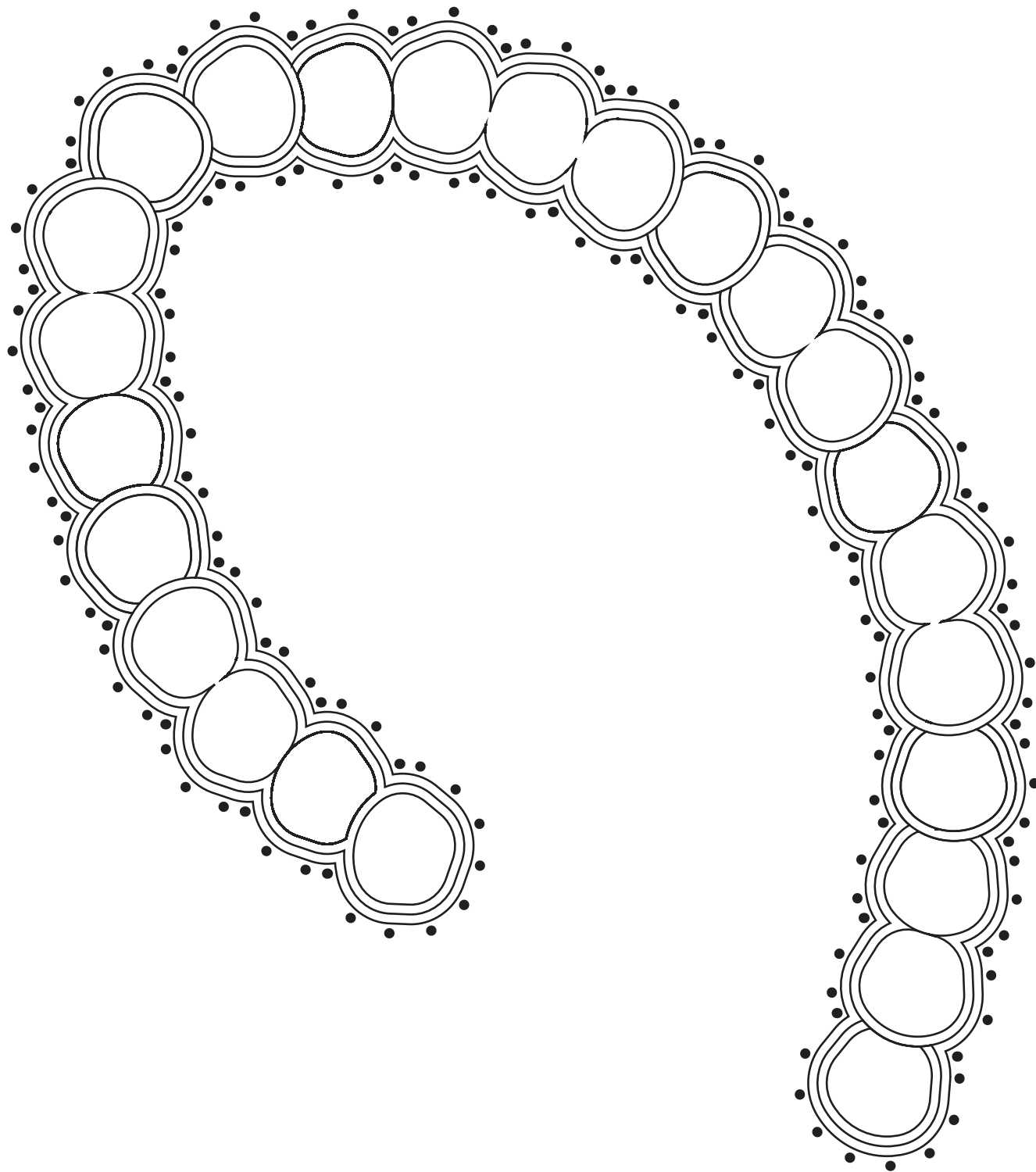
Diphtheria

Diphtheria is an infection caused by bacteria. It causes a thick covering in the back of the throat. It can lead to difficulty breathing, heart failure, paralysis, and even death.

The vaccine is recommended for infants, children, teens, and adults.



Pneumococcal



Streptococcus pneumoniae or pneumococcus is a type of bacterium that causes pneumococcal disease. Pneumococcal infections can range from ear and sinus infections to pneumonia and bloodstream infections.

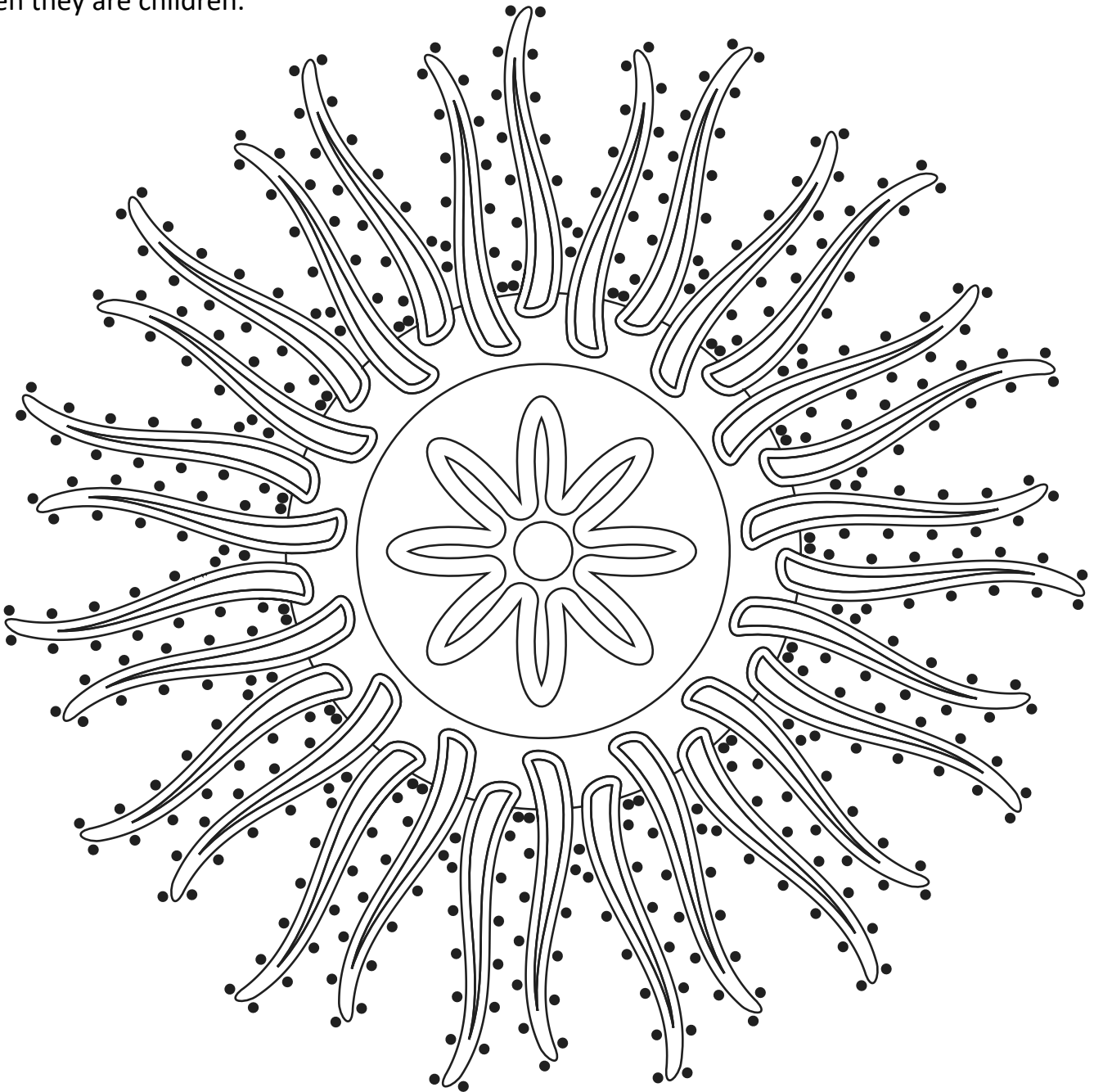
Children younger than 2 years old and adults 65 years or older are among those most at risk for this disease. There are vaccines to prevent pneumococcal disease in children and adults.

Illustrations provided by Marin Axtell, Idaho Immunization Program.

Polio

Polio is an infectious disease caused by a virus that lives in the throat and intestinal tract. It is most often spread through direct contact with the stool of an infected person and may also be spread through oral/nasal secretions. Polio used to be very common in the U.S. and caused severe illness in thousands of people each year before the polio vaccine was introduced in 1955. Most people infected with the polio virus have no symptoms, however for the less than 1% who develop paralysis it may result in permanent disability and even death.

Polio vaccine may be given at the same time as other vaccines. Most people get polio vaccine when they are children.

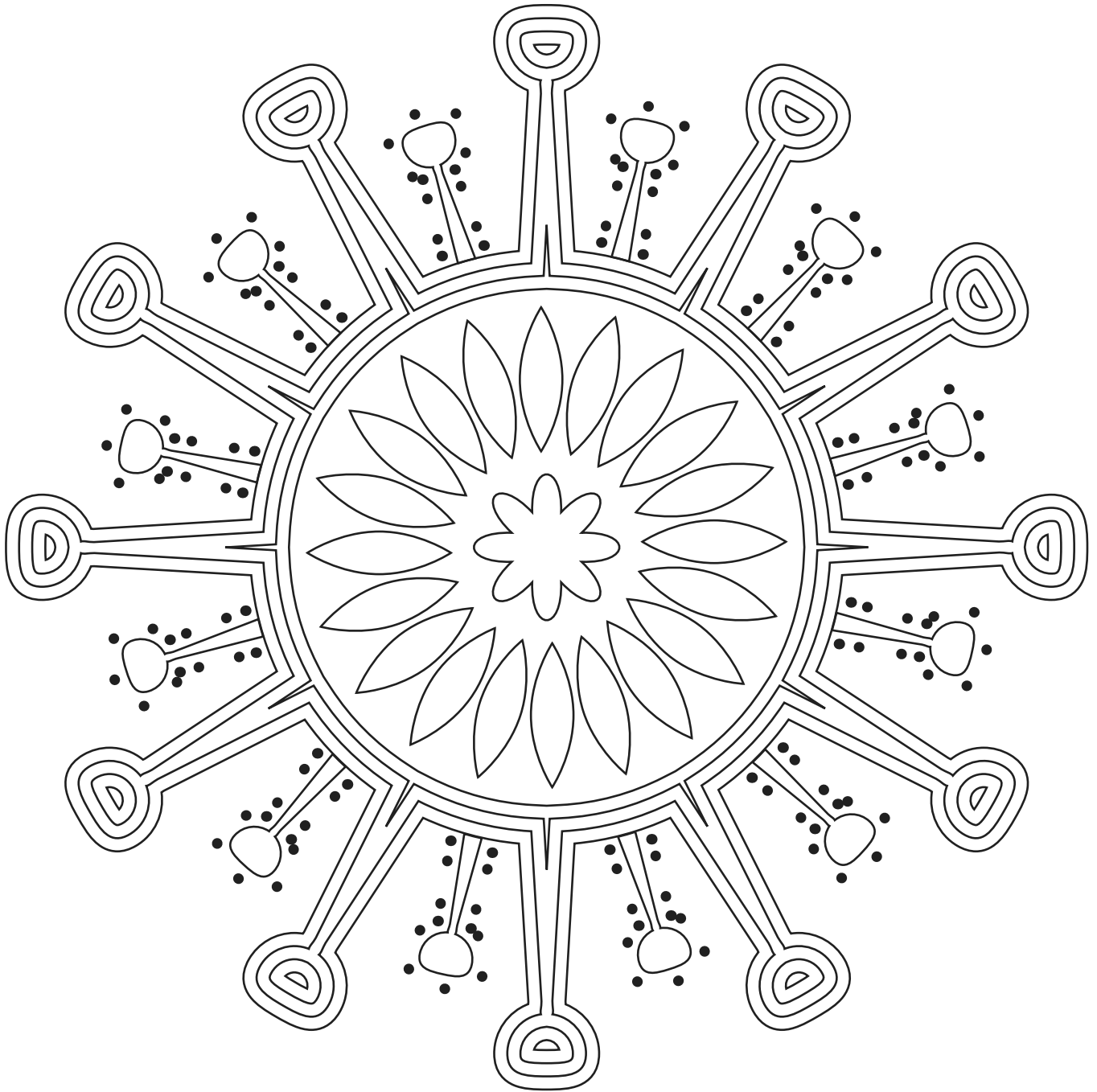


Illustrations provided by Marin Axtell, Idaho Immunization Program.

Influenza (Flu)

Anyone can get the flu. Serious problems from the flu can happen at any age. Some people are at higher risk of developing serious complications if they get sick. This includes people 65 years and older and people with certain chronic medical conditions, pregnant women, and young children.

The best way to prevent the flu is by getting a flu vaccine each year. The CDC recommends everyone six months of age or older get a flu shot each year.



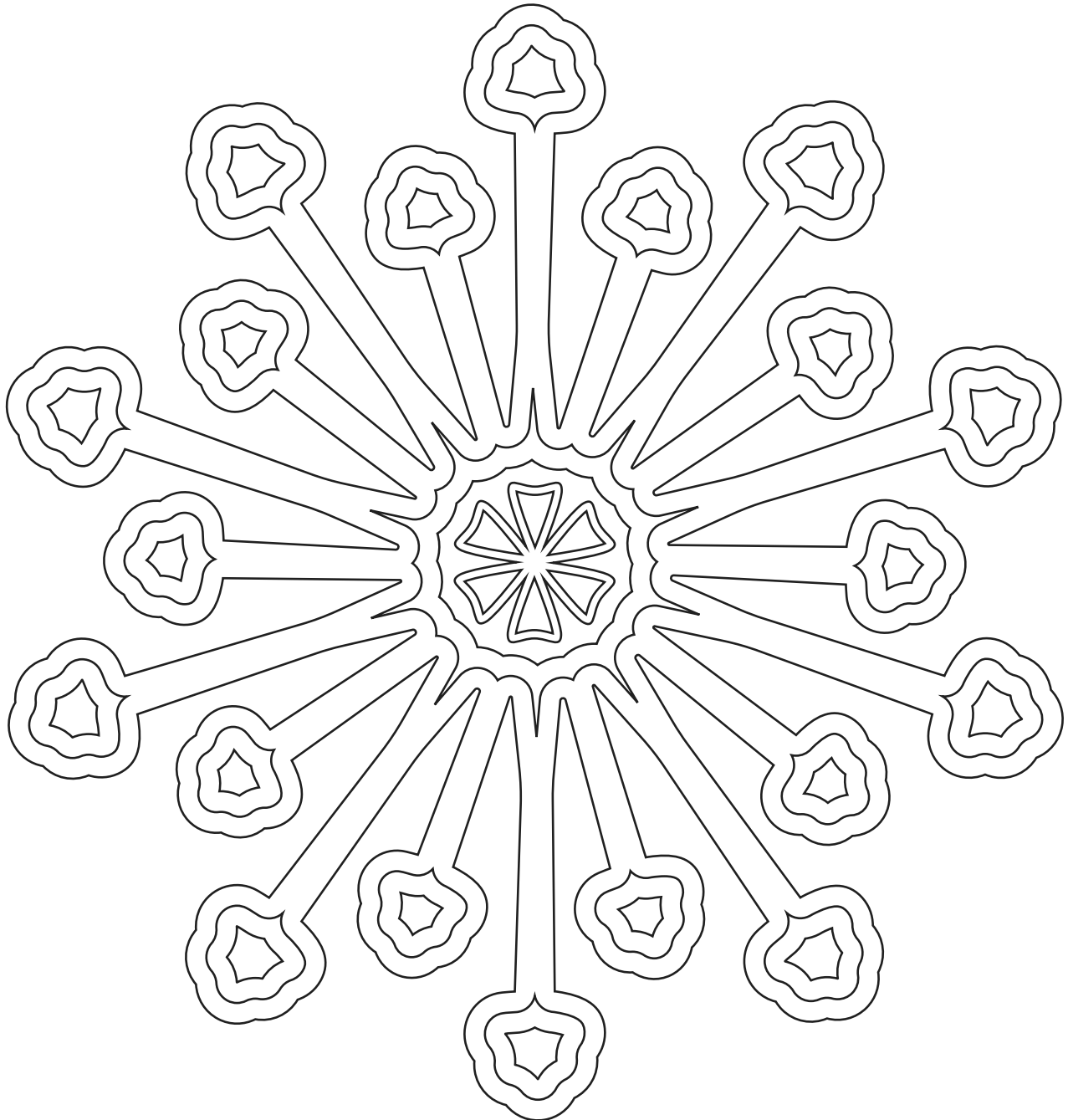
Illustrations provided by Marin Axtell, Idaho Immunization Program.

Varicella (Chickenpox)

Chickenpox is a very contagious disease. It causes a blister-type rash, itching, tiredness, and fever. Chickenpox used to be common in the U.S.

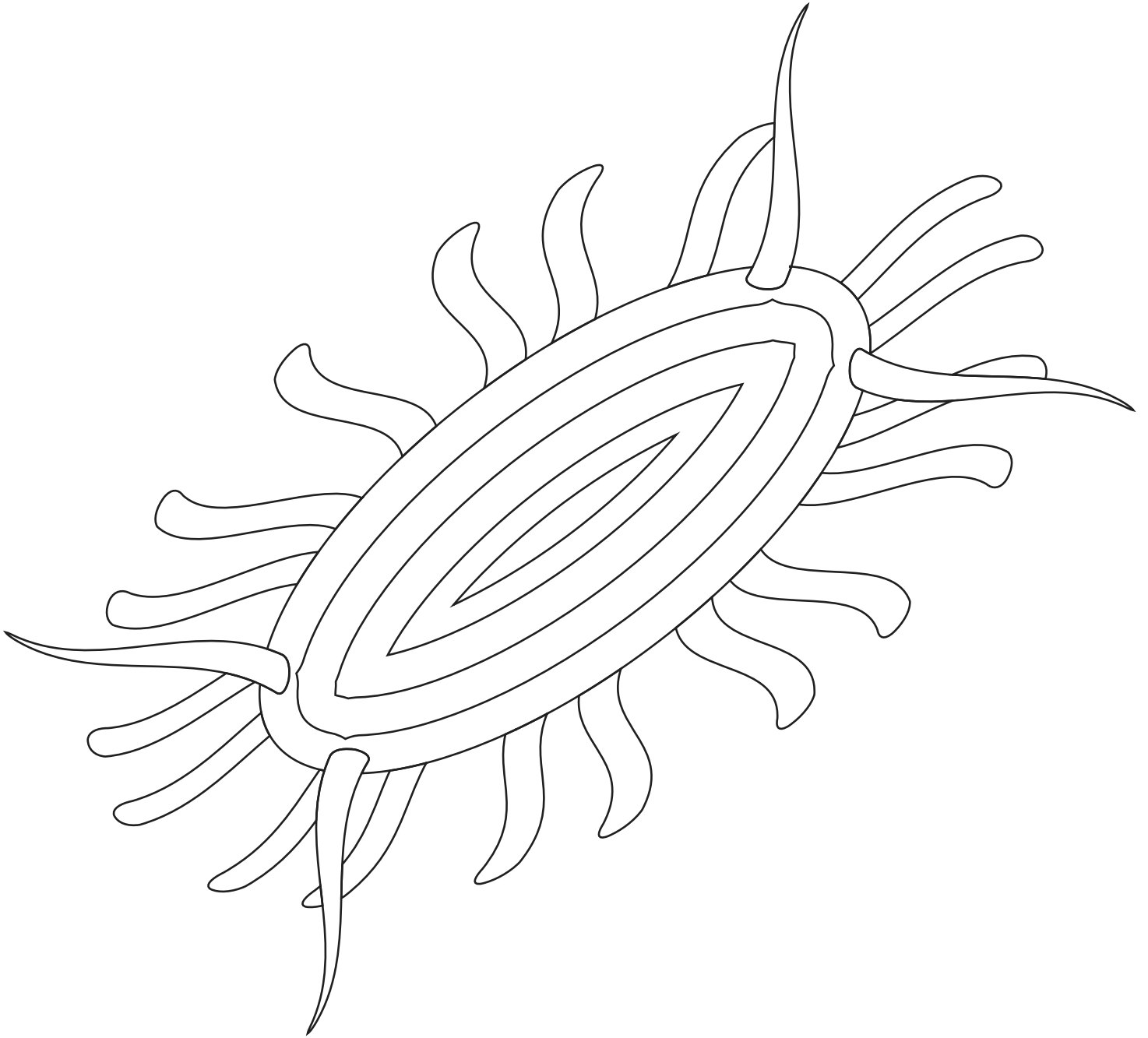
Two doses of the vaccine are about 90% effective at preventing chickenpox. When you get vaccinated, you protect yourself and others in your community. This is very important for people who cannot get vaccinated, such as those with a weakened immune system or pregnant women.

Some people who are vaccinated against chickenpox may still get the disease. However, it is usually milder with fewer blisters and little or no fever.



Illustrations provided by Marin Axtell, Idaho Immunization Program.

Pertussis (Whooping Cough)



Pertussis, also known as whooping cough, is a very contagious respiratory disease.

It is known for uncontrollable, violent coughing which often makes it hard to breathe.

Pertussis can affect people of all ages, but can be very serious, even deadly, for babies younger than a year old.

The best way to protect against pertussis is by getting vaccinated. Pertussis vaccine is recommended for all babies, teens, and pregnant women.

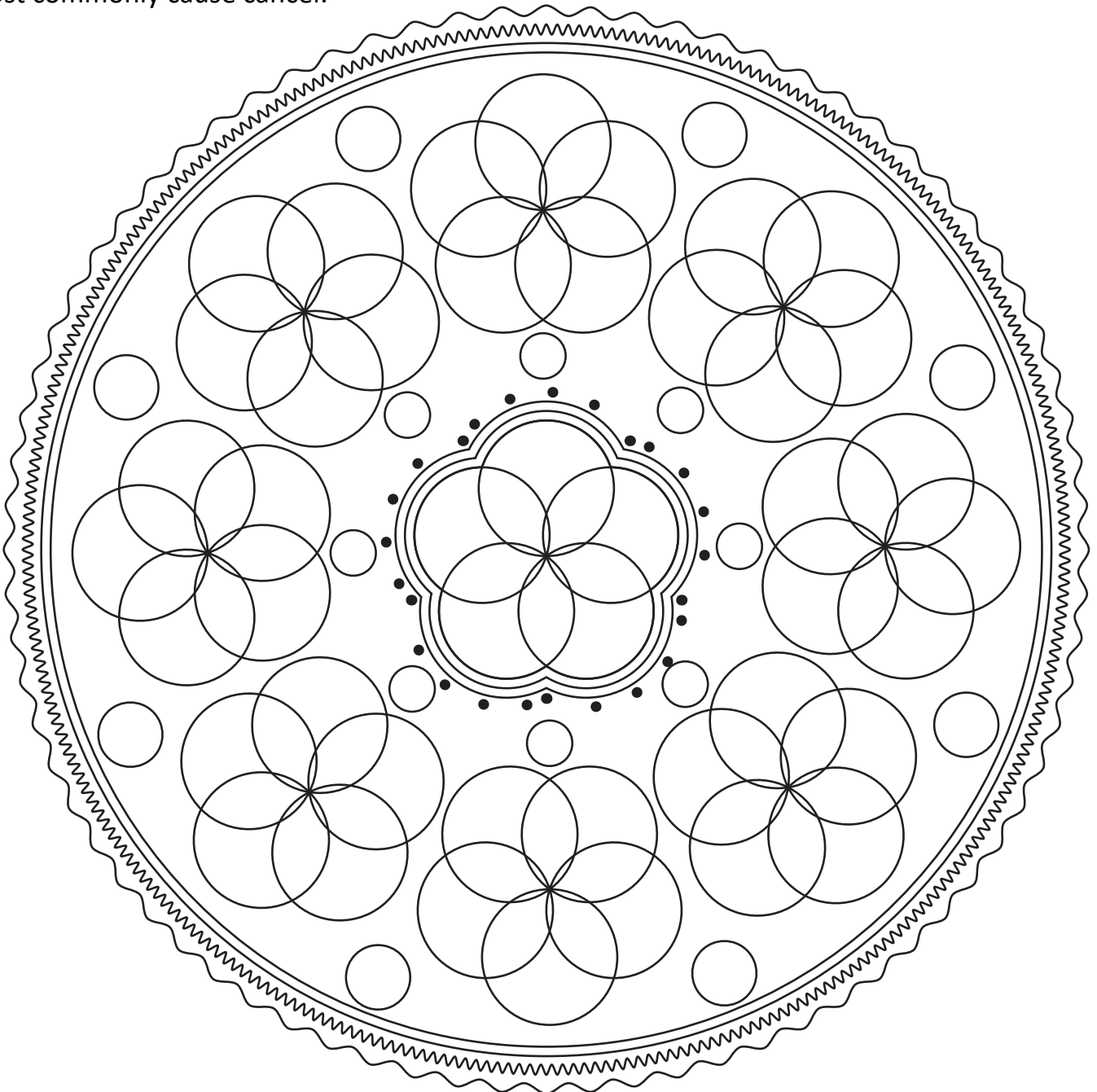
Illustrations provided by Marin Axtell, Idaho Immunization Program.

Human Papillomavirus (HPV)

HPV is a group of more than 150 related viruses. Each HPV virus in this large group is given a number which is called its HPV type. HPV infection can cause warts (papillomas) and many different types of cancer.

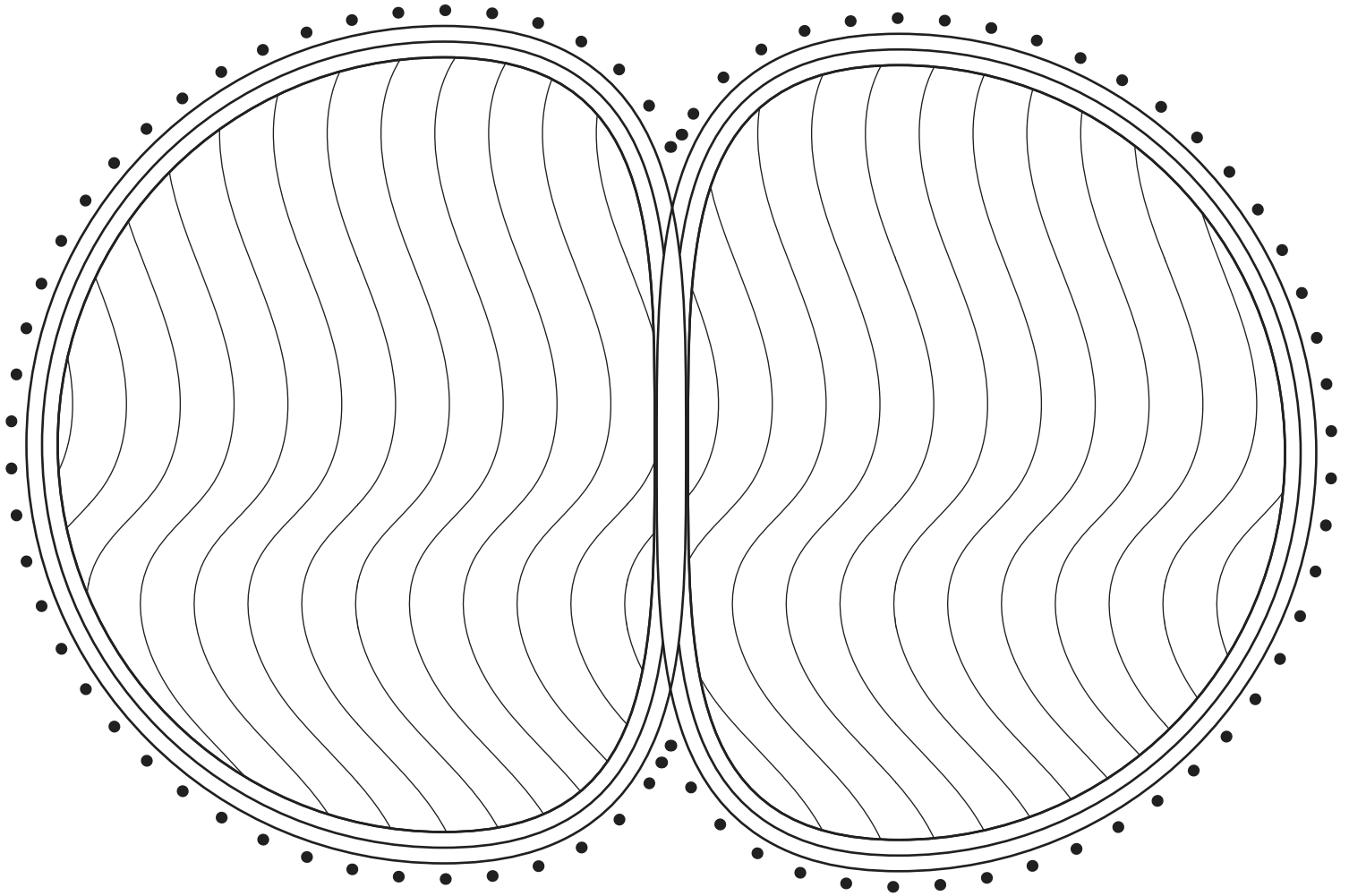
HPV is so common that nearly all men and women get it at some point in their lives. HPV can be passed even when an infected person has no signs or symptoms. You can develop symptoms years after being infected, making it hard to know when you first became infected.

HPV vaccination provides safe, effective, and lasting protection against the HPV infections that most commonly cause cancer.



Illustrations provided by Marin Axtell, Idaho Immunization Program.

Meningococcal



Meningococcal disease can refer to any illness caused by the type of bacteria called *Neisseria meningitidis*, also known as meningococcus. These illnesses are often severe and can be deadly. They include infections of the lining of the brain and spinal cord (meningitis) and bloodstream infections.

These bacteria spread through the exchange of respiratory and throat secretions like spit (e.g., by living in close quarters, kissing, etc.). Doctors treat these diseases with antibiotics, but quick medical attention is very important. Keeping up-to-date with recommended vaccines is the best defense.

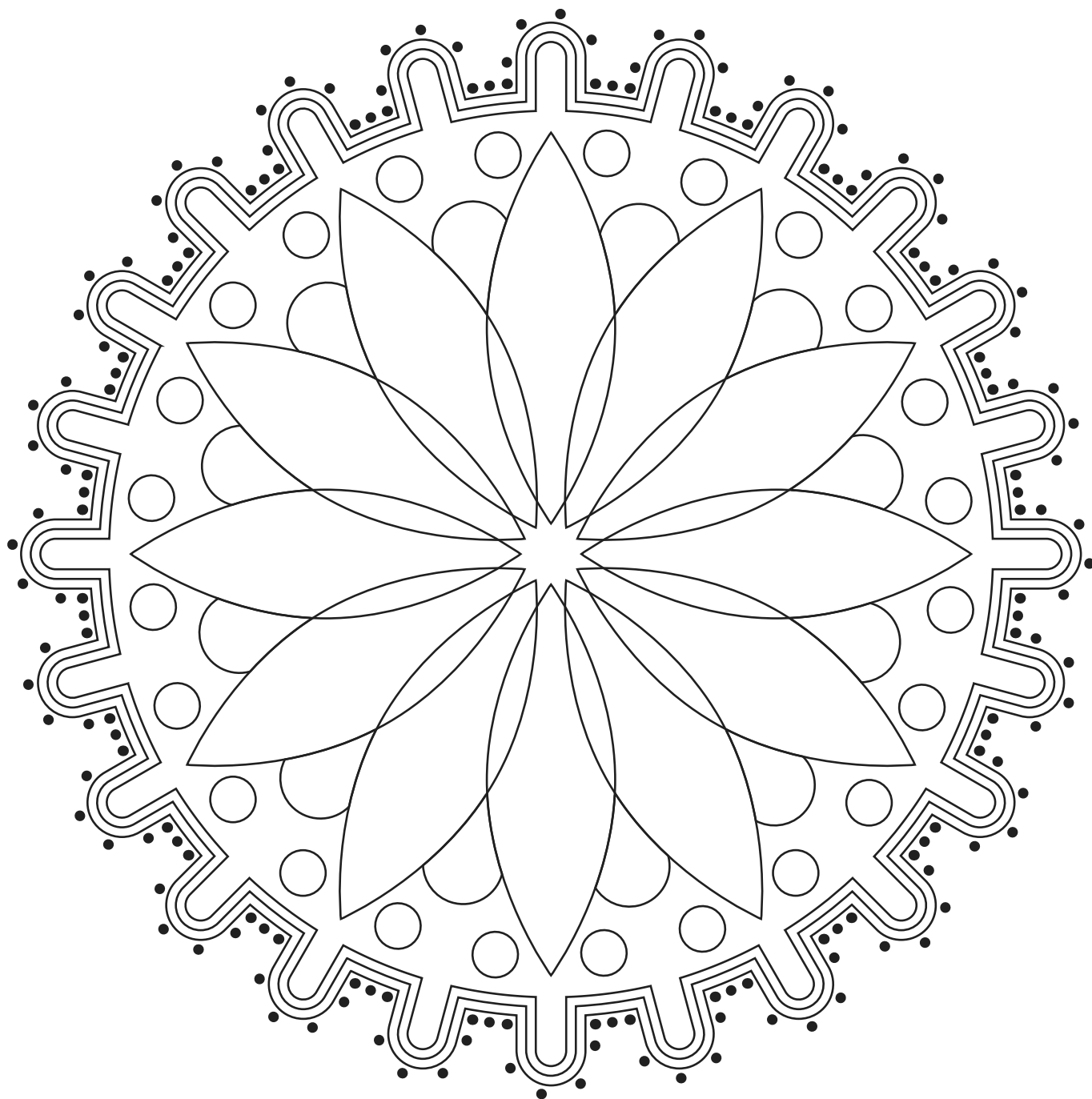
Illustrations provided by Marin Axtell, Idaho Immunization Program.

Rotavirus

Rotavirus is a virus that spreads easily among infants and young children. The virus can cause severe, watery diarrhea, vomiting, fever, and abdominal pain. Children who get rotavirus disease can become dehydrated and may need to be hospitalized.

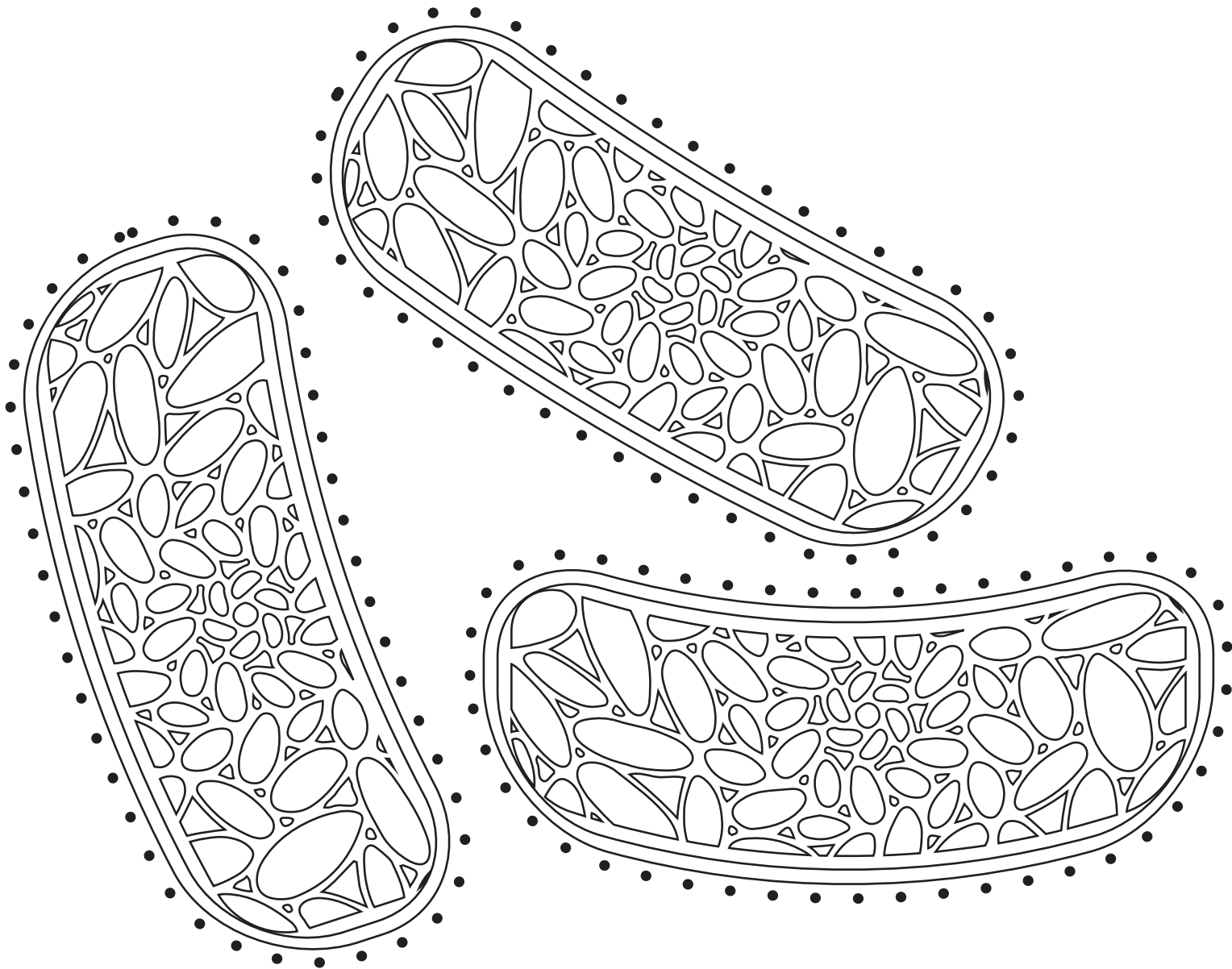
Rotavirus vaccine is the best way to protect your child against this illness.

The vaccine is given by mouth (orally), not by a shot.



Illustrations provided by Marin Axtell, Idaho Immunization Program.

Hib (*Haemophilus influenzae* type b)



Haemophilus influenzae is a type of bacteria that mainly causes illness in babies and young children. These bacteria can cause infections in people of all ages ranging from mild, such as an ear infection, to severe, such as a bloodstream infection. Despite the name, *H. influenzae* does not cause influenza (the flu). There are six identifiable types of *H. influenzae* bacteria (a through f) and other non-identifiable types (called non-typeable). The one people are most familiar with is *H. influenzae* type b or Hib that can be prevented with a vaccine.

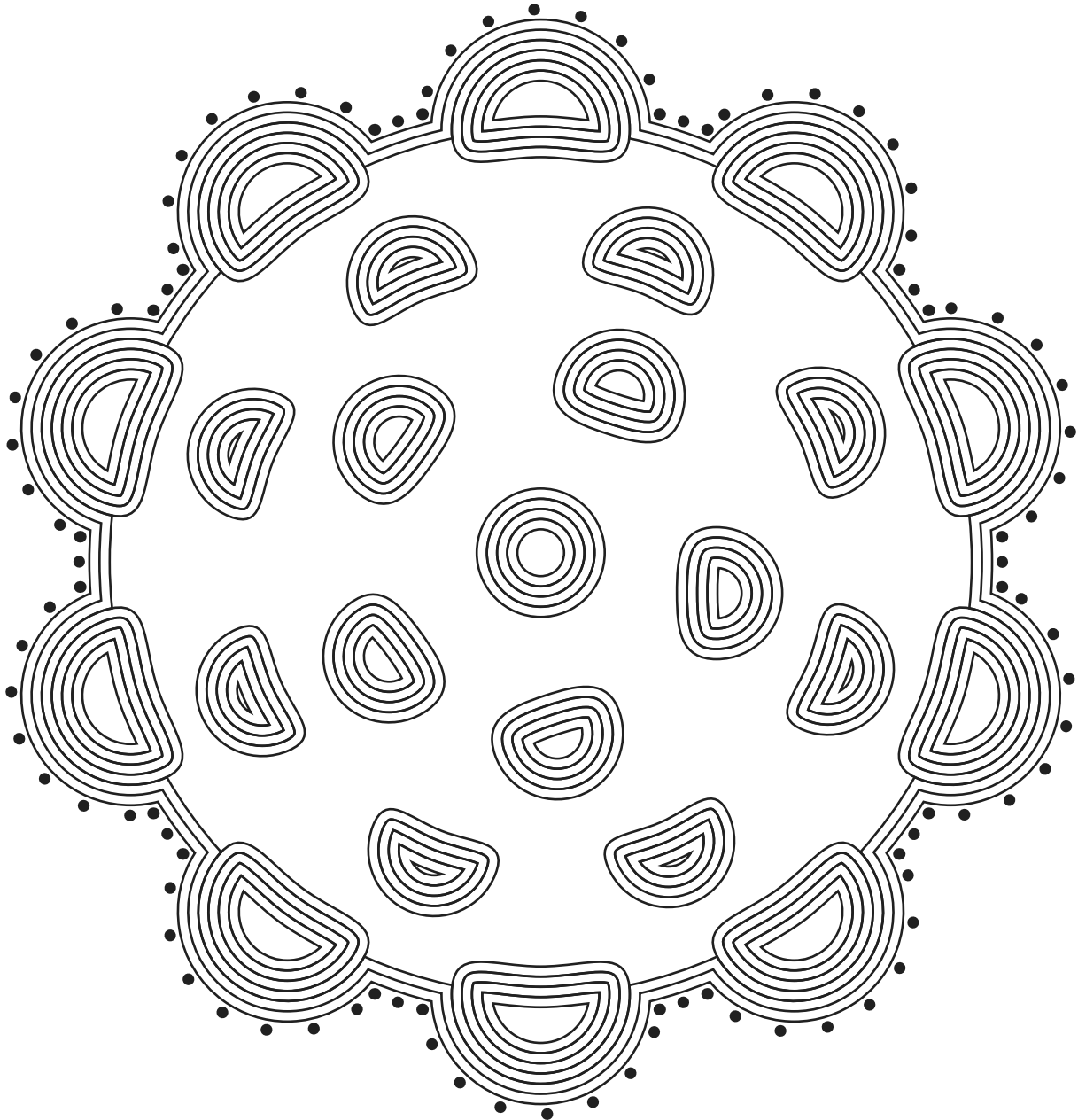
The vaccine is recommended for all children younger than five years old in the U.S. The vaccine is usually given to babies starting at two months old.

Illustrations provided by Marin Axtell, Idaho Immunization Program.

Hepatitis A

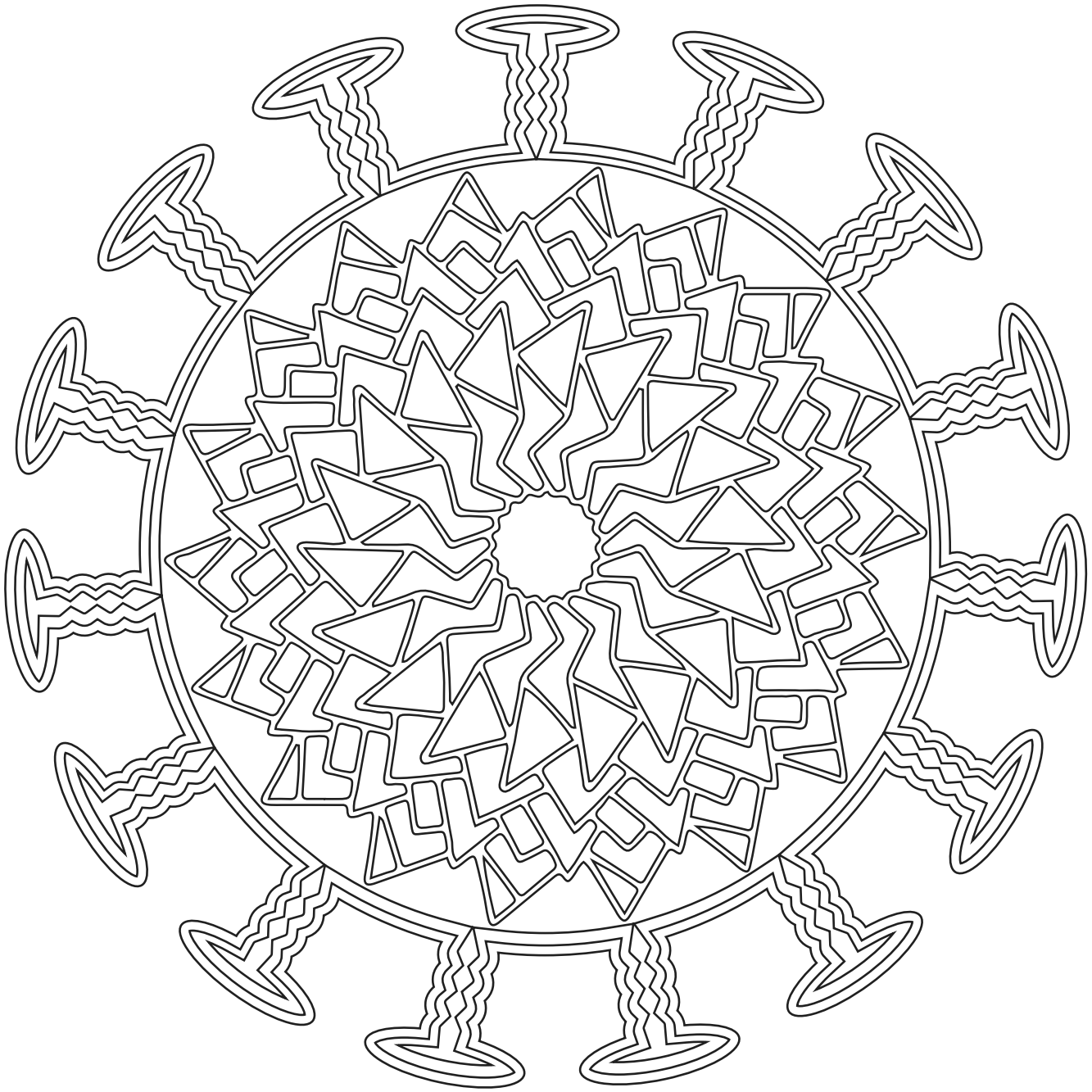
Hepatitis A is a contagious liver disease that results from infection with the Hepatitis A virus. It can range in severity from a mild illness lasting a few weeks to a severe illness lasting several months. Hepatitis A is usually spread when a person ingests the virus from contact with objects, food, or drinks contaminated by feces or stool from an infected person.

The vaccine is available for long-term prevention of Hepatitis A infection in people age one or older. Good personal hygiene and proper sanitation can also help prevent the spread of Hepatitis A.



Illustrations provided by Marin Axtell, Idaho Immunization Program.

Hepatitis B



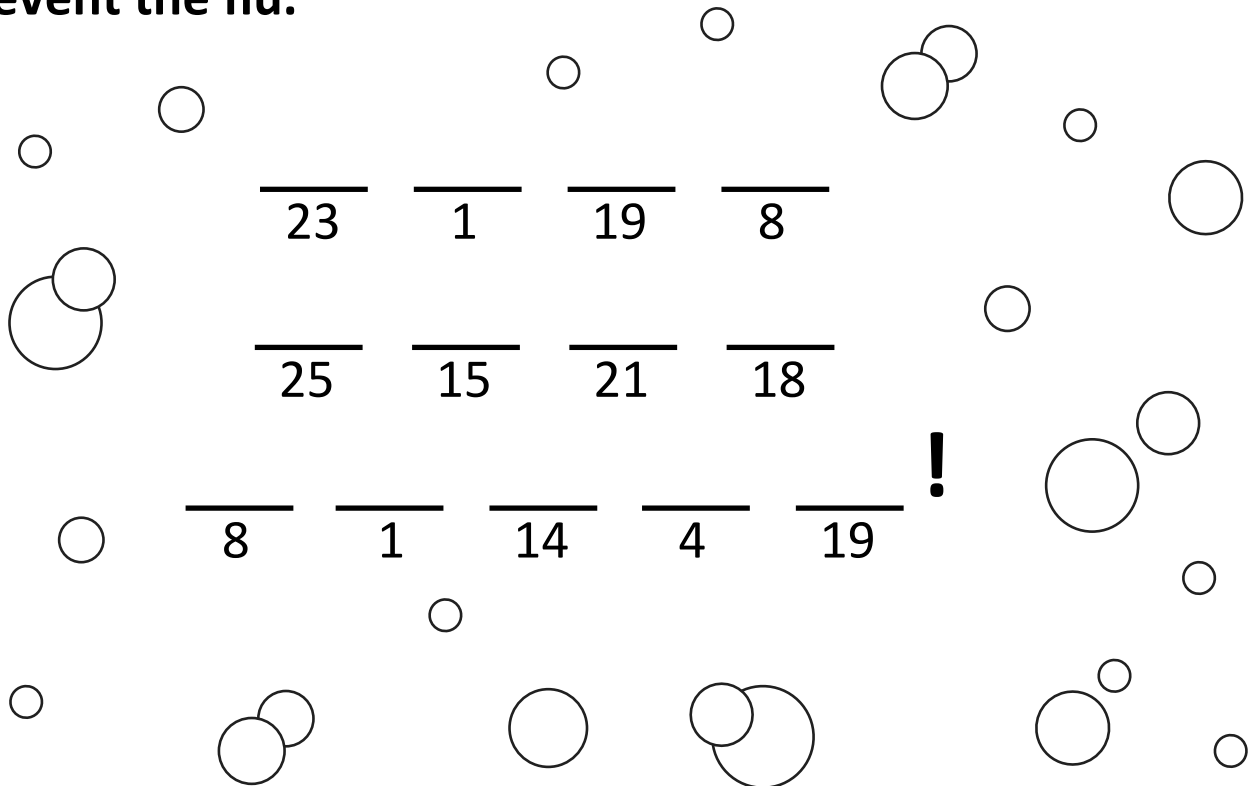
Hepatitis B is a liver infection caused by the Hepatitis B virus. Hepatitis B is transmitted when blood, or another body fluid from a person infected with the virus enters the body of someone who is not infected. This can happen through the exchange of bodily fluids, sharing needles, syringes, or other drug injection equipment, or from mother to baby at birth. For some people, Hepatitis B is an acute or short-term illness, but for others, it can become a long-term chronic infection.

The best way to prevent Hepatitis B is by getting vaccinated.

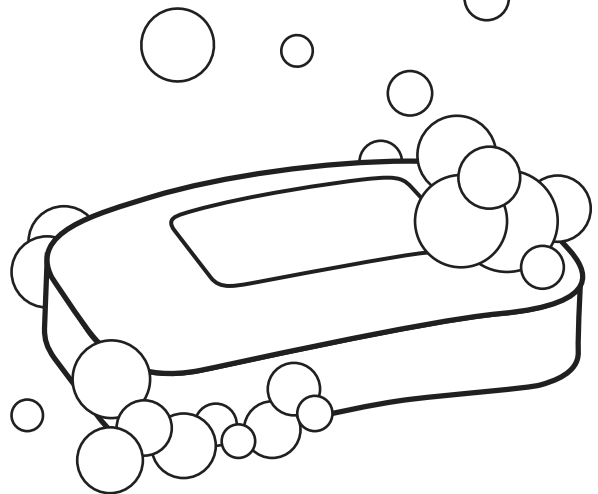
SECRET MESSAGE

Mom is taking care of Dad. Dad covers his mouth when he coughs and his nose when he sneezes to keep Mom from getting sick. She washes her hands right away!

Decode the secret message for one step to take to help prevent the flu.



KEY	7-G	14-N	21-U
1-A	8-H	15-O	22-V
2-B	9-I	16-P	23-W
3-C	10-J	17-Q	24-X
4-D	11-K	18-R	25-Y
5-E	12-L	19-S	26-Z
6-F	13-M	20-T	



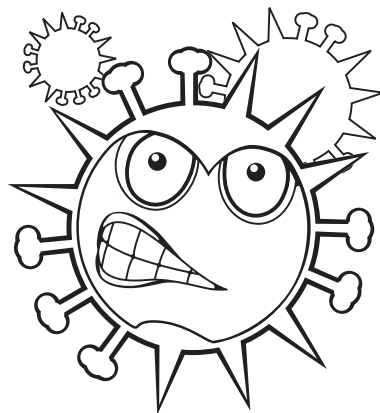
FLU WORD SEARCH

The flu can spread from one person to another and make a lot of people sick.

Find all of the flu words below. The words can be across, down, or even diagonal.

B	K	I	R	W	S	H	O	T	K	S	M	V
Z	E	V	C	R	G	K	U	D	I	W	W	J
K	K	O	H	I	Q	E	H	Y	Z	F	L	U
C	H	H	P	C	C	G	H	A	R	F	M	V
W	E	J	S	T	U	F	F	Y	U	E	L	C
V	A	M	F	O	F	Z	U	C	V	P	S	P
M	D	O	C	B	T	F	O	G	E	P	H	T
Q	A	H	Z	P	S	N	E	E	Z	E	T	D
U	C	P	S	C	J	V	T	V	G	A	K	L
Q	H	N	I	I	R	I	V	P	E	U	F	J
H	E	Q	X	D	C	E	E	W	B	R	V	V
J	P	K	E	L	D	K	M	K	K	O	A	M
T	Y	P	V	G	E	R	M	S	I	F	M	T

COUGH	REST
FEVER	SHOT
FLU	SICK
GERMS	SNEEZE
HEADACHE	STUFFY



Vaccine-Preventable Diseases and the Vaccines that Prevent Them

Disease	Vaccine	Disease Spread By	Disease Symptoms	Disease Complications
Chickenpox	Varicella vaccine protects against chickenpox.	Air, direct contact	Rash, tiredness, headache, fever	Infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia (infection in the lungs)
Diphtheria	Tdap* and Td** vaccines protect against diphtheria.	Air, direct contact	Sore throat, mild fever, weakness, swollen glands in neck	Swelling of the heart muscle, heart failure, coma, paralysis, death
Hepatitis A	HepA vaccine protects against hepatitis A.	Direct contact, contaminated food or water	Can have no symptoms or can have fever, stomach pain, loss of appetite, fatigue, vomiting, jaundice (yellowing of skin and eyes), joint pain	Liver failure, joint pain, kidney, pancreatic and blood disorders
Hepatitis B	HepB vaccine protects against hepatitis B.	Contact with blood or body fluids	Can have no symptoms or can have fever, headache, weakness, vomiting, jaundice (yellowing of skin and eyes), joint pain	Chronic liver infection, liver failure, liver cancer
Human Papillomavirus (HPV)	HPV vaccine protects against human papillomavirus.	Direct skin contact	Can have no symptoms or have genital warts	Cervical, vaginal, vulvar, penile, anal, oropharyngeal cancers
Influenza (Flu)	Flu vaccine protects against influenza.	Air, direct contact	Fever, muscle pain, sore throat, cough, extreme fatigue	Pneumonia (infection in the lungs)
Measles	MMR*** vaccine protects against measles.	Air, direct contact	Rash, fever, cough, runny nose, pink eye	Encephalitis (brain swelling), pneumonia (infection in the lungs), death
Meningococcal Disease	MenACWY and MenB vaccines protect against meningococcal disease.	Air, direct contact	Sudden onset of fever, headache, and stiff neck, dark purple rash	Loss of limb, deafness, nervous system disorders, developmental disabilities, seizure disorder, stroke, death

Vaccine-Preventable Diseases and the Vaccines that Prevent Them (cont.)

Mumps	MMR*** vaccine protects against mumps.	Air, direct contact	Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain	Meningitis (infection of the covering around the brain and spinal cord), encephalitis (brain swelling), inflammation of testicles or ovaries, deafness
Pertussis (Whooping cough)	Tdap* vaccine protects against pertussis.	Air, direct contact	Severe cough, runny nose, apnea (a pause in breathing in infants)	Pneumonia (infection in the lungs), death
Polio	Polio vaccine protects against polio.	Air, direct contact, through the mouth	Can have no symptoms or can have sore throat, fever, nausea, headache	Paralysis, death
Pneumococcal Diseases	Pneumococcal vaccines protect against pneumococcal diseases.	Air, direct contact	Can have no symptoms or can have pneumonia (infection in the lungs)	Bacteremia (blood infection), meningitis (infection of the covering around the brain and spinal cord), death
Rubella (German Measles)	MMR*** vaccine protects against rubella.	Air, direct contact	Sometimes a rash, fever, swollen lymph nodes	Very serious in pregnant women—can lead to miscarriage, stillbirth, premature delivery, birth defects
Tetanus	Tdap* and Td ** vaccines protect against tetanus.	Exposure through cuts on skin	Stiffness in neck and abdominal muscles, difficulty swallowing, muscle spasms, fever	Broken bones, breathing difficulty, death

*Tdap combines protection against diphtheria, tetanus, and pertussis.

**Td combines protection against diphtheria and tetanus.

***MMR combines protection against measles, mumps, and rubella.

DOODLE PAGE

DOODLE PAGE

Answer Key

Page 3: Answers to Word Scramble

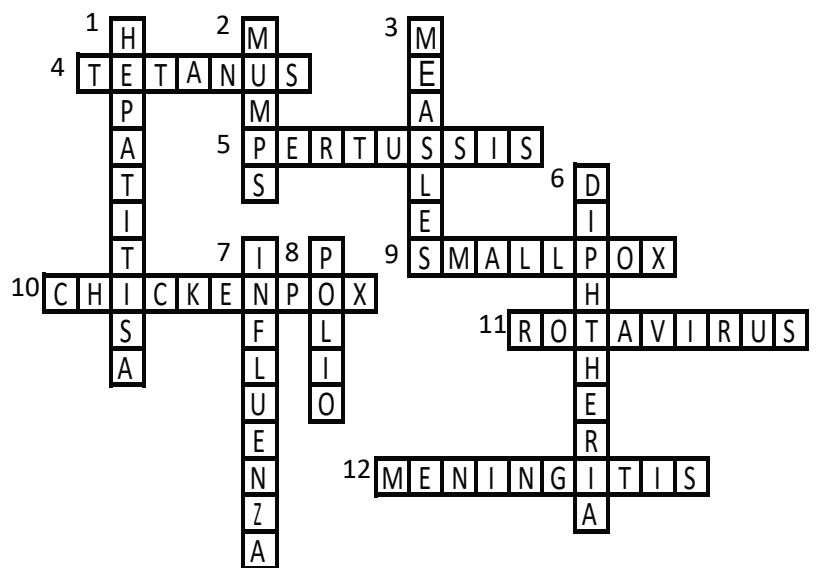
1. influenza 2. smallpox
3. diphtheria 4. rubella
5. measles 6. sick

Page 4: Vaccine-Preventable Diseases Word Find

M P T
V T B U C T S V S
X B H Q D J F H K Q A J E
K X B J Q H I B F Q A N E R O J G
H D O S E B S P M U M M S I H I B X L
G L B U Y N L S H H M V G J W J G C E N O
W Y D V X Z K L T E Q X O Q B V K Q E Z W
S E Q J N L H U E H C O W I D S Y E Z R L Y J
K S I T I L A H P E C N E I Q I I X H C J L P
Y G D Z E O P T G U R O D B B O T S F Q U X R A G
W J V R U R Z N W N I Y M S U R I V A T O R R T F
Z E N K F W A G E T A W Q R O G G U C I P M W J J
O F H H N O G F C Z U Q W N X C A N M V A C W N O D T
S P B Z X W B W O Y W M I W O A I I L K L D W W Z X C
O U O O N A M Z C Z V V O D Q O P N H H L O A I R H J
X N L Q L L X H J M P D N Y J B E U X E O X N J H
E G A I Q A L R Y A F G L I L P M G Z B M W U D Y
B D Z T O C M K V S P T S B A E T J J U F O E K Z
W J I N F L U E N Z A K T D H R L A R W G S V
A F A B E P G H M N G I D S J K H G I U D E R
N G I F T J D J F T J X H D B K R W Y Z A
Z K A O N J N K I X S E L S A E M Q H O J
W M I N B V S X C P R L T P X K M Y I
S M S I S S U T R E P T Y Y H C R
E O M J A P D Y O P O I N
I C H C D F Z D A
W J Q

Answer Key

Page 5: Answers to Crossword Puzzle

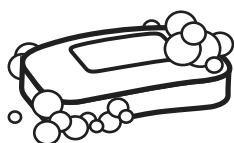


Page 6: Answers to Word Unscramble

1. HEALTHY
2. GERMS
3. VIRUS
4. BACTERIA
5. IMMUNE
6. VACCINE
7. CELL
8. SCIENCE
9. MEDICINE
10. SICK

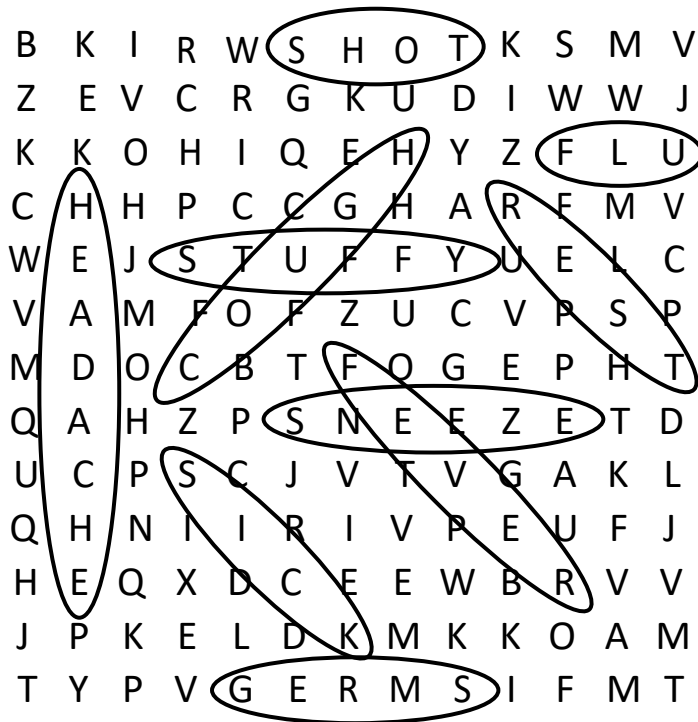
Page 25: Secret Message Answers

$\frac{W}{23}$ $\frac{A}{1}$ $\frac{S}{19}$ $\frac{H}{8}$
 $\frac{Y}{25}$ $\frac{O}{15}$ $\frac{U}{21}$ $\frac{R}{18}$
 $\frac{H}{8}$ $\frac{A}{1}$ $\frac{N}{14}$ $\frac{D}{4}$ $\frac{S}{19}$!



Answer Key

Page 26: Answers for Flu Word Search



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