Vaccination/ Paul introduces the creator

Carol: Have you ever heard about the terrible infectious disease called smallpox? It has killed millions of people, and left many more with awful scars, or blind. But I can promise you, you won't get smallpox. There are no smallpox cases in the world today! Do you know why smallpox has disappeared?

Hello! You're with Women of Hope, and I'm Carol.

Tammy: And I'm Tammy. And look who joined us today! Fran is with us too.

Fran: ...and it's *good* to be with you. I'm sure we'd like to hear why smallpox has disappeared.

Carol: It's because of one thing- *vaccination*. And that's what we want to talk about today. Smallpox killed so many people in the past, but doctors found that a similar virus caused a much milder sickness. This milder sickness was called *cowpox*. Guess how they worked out the connection!

Tammy: I've read about this; they noticed that women who milked cows hardly ever got smallpox during an epidemic, but they often caught cowpox. They realized that having cowpox seemed to protect the milkmaids from smallpox. One of the first people to notice this was Benjamin Jesty in 1774. He was afraid that his wife and children would die in a smallpox epidemic. So he deliberately infected them with the liquid obtained from blisters found on cows with cowpox. They put the liquid on scratches in their skin. They got the blisters of cowpox, but they didn't get smallpox. I think they were pretty brave to do that experiment on themselves, don't you?

Carol: Yes, I think this is one of the amazing stories of medical discovery. Well, after some time doctors worked out how to make the virus weaker and safe, and started giving it to lots of people. Then their own immune systems could make *antibodies* in the blood that would find any smallpox virus and destroy it.

But then they had to persuade people all over the world to be vaccinated with this weaker virus.

Tammy: I would want to be vaccinated for my own safety and for my family. Then, if most people did that, the smallpox virus wouldn't spread through the community.

Carol: And that's exactly what happened. It took many years to get rid of the virus from every community. Since 1979 there has been no known case of smallpox in the world, and in 1980 the World Health Organization declared that smallpox had been wiped out.

Tammy: Isn't that wonderful! But maybe I should explain about antibodies. Antibodies are special proteins in the blood, so small that you can't see them. When bacteria or viruses get into our bodies, we produce antibodies. Each kind of antibody hunts down the germs for one particular disease. They're like little armies of soldiers inside our bodies. God made our bodies to be so amazing!

Now we can prevent many infectious diseases by vaccination. That means giving a very small amount of the germ that causes the disease, in a dead or very weak form. You don't get the disease, but your body learns to recognize the germ and makes antibodies to fight it. Then we say that you are *immunized*- you've had the vaccine and it's made you immune. You can be vaccinated by having an injection, or sometimes by taking medicine.

Carol: So we want parents to know that it's very important to have their children vaccinated. Children are still dying of diseases that could have been prevented if they had received the proper vaccination from their doctor or health care worker.

Mothers ... child care workers... have you had your child vaccinated against diphtheria, measles, and tetanus? Vaccines are one of the best ways of protecting children against many of the contagious diseases that cause serious illness or death. All countries have immunization programs and clinics where vaccines are given. Often they're free.

Fran: In Australia, where I live, they are *compulsory* unless you have a very good reason not to have your children vaccinated! The medical authorities think it's so important!

Tammy: Mothers probably would ask some questions about vaccinations. For example, what is in the vaccine? It's a liquid that contains a very small dose of a weakened form of a virus... dead bacteria ... or a small dose of a toxin produced by bacteria, that has been made harmless.

Vaccines might also contain a small amount of preservative or a small amount of an antibiotic to preserve the vaccine. Some vaccines may also contain a small amount of an aluminium salt, which helps them to work better.

Carol: In general, it takes about two weeks to work, until you are really safe from the infection. Most vaccines need to be given several times to build long lasting protection. For example, what about a child who has been given only one or two doses of measles vaccine? He's only partly protected against measles, and he might become sick if he's exposed to measles. However, some vaccines give protection after only one dose. When you're immunized, the protection against some diseases might not last your whole life. For some illnesses, like tetanus, you need to have booster doses after a few years. Children are more likely than adults to die from those common infections, but vaccination protects about 95% of children who are given it.

Fran: At the hospital where I work, we have an influenza vaccine every year.

Tammy: That's because the influenza virus changes very quickly, so scientists have to keep preparing a vaccine that kills the latest form of the virus. Doctors recommend a yearly flu injection for older people, or those who are weakened by illness, or those who work with people who would be badly affected by the flu.

Fran: Right- like hospital workers!

Tammy: A young baby is protected from most infectious diseases by antibodies from the mother, that she shares with the baby during pregnancy. The baby's immune system is also strengthened if they're breastfed. When these antibodies wear off, the baby is at risk of serious infections and so the first vaccinations are given before these antibodies have gone.

Carol: Here on Women of Hope, we're talking about vaccinations against infectious diseases. Let me tell you now about some of the vaccinations that children should have.

Most countries have a plan for vaccinations against the common illnesses that begins when a baby is two months old and is completed by two years of age. Follow-up vaccinations or boosters are given after two years of age to keep up immunity to diseases.

There is also a vaccine for Hepatitis B that should be given the day a baby is born.

You will need to talk with your doctor or health care worker about the vaccinations that your child needs.

Here are the vaccinations that are usually recommended. Your country may have a different name for these, but they protect against the same things.

The first is called DPT; this stands for diphtheria... tetanus... and pertussis. Diphtheria is a severe infection of the throat. Tetanus, also known as lockjaw, is a nerve disease caused by germs in a dirty cut. And pertussis or whooping cough is a breathing illness with severe coughing and wheezing. These can all kill a child.

The second vaccine is for polio, a viral infection that can paralyze you. It used to be quite common but it's very rare now in places where they vaccinate against it.

The third is called MMR – this stands for measles, mumps and rubella (also known as German measles). These range from mild to severe diseases but the main reason for vaccination is to prevent the spread of infection to pregnant women, as they can lead to serious abnormalities in the developing baby.

Tammy: Are these diseases common where you live? People sometimes think, Oh, I'll just let the children catch the disease, it won't last long and then they'll be immune. But they can all be quite serious, it's better to have them vaccinated.

Carol: Once children have received all their vaccinations, their immune systems will be able to recognize and fight off the germs that cause these diseases.

Tammy: After a child has received a vaccination by injection, the area where the injection was given might be red, hot and sore. They might get a slight fever too, or be irritable and unsettled. Give your child a safe children's painkiller like paracetamol (Panadol) to relieve the pain, and contact your health worker if you have any concerns. Serious reactions such as breathing difficulty, high fever or a sudden rash are very rare, however if they do occur go to your doctor immediately.

If you're anxious about vaccination, remember that vaccines are very much safer than the diseases they prevent. These vaccines are tested for years before governments approve them for use, and there are very strict rules about how they're stored and used.

Carol: Getting your child all his vaccinations might not be easy. You might have to travel out of your way. However, please remember that diseases such as measles and polio are still active in our world. It's your responsibility to see that your child is protected against these diseases. And remember, you're not just protecting your family, you're protecting your community. So spread the news about vaccination!

Tammy: Welcome back to Women of Hope. We've been talking together about having our children vaccinated. We've looked after our bodies, and now it's time to look after our souls. Have you been listening to the stories Fran's been telling us- stories from God's word, about the first followers of Jesus, God's promised savior? Paul was one of their leaders, and he and his friends spread the good news about Jesus wherever they went.

Carol: Some people welcomed their message, and put their faith in Jesus. But usually those who were in power rejected them, so they had to move on!

Tammy: So Fran, have Paul and his friends travelled in today's story?

Fran: Yes, they're on the move again! Let me tell you what happened next, from God's true word the Bible (Acts 17).

Paul came to Athens, an important city in Greece. It was known for its university and its philosophers. The citizens loved to hear about any new ideas. They worshipped many different idols. Paul walked around and saw all these idols and temples to different gods, and he was very upset about it. Each day he went to the town square, where people met to learn and discuss ideas. He talked with the philosophers. Some of them were called Epicureans- they believed life was just a search for happiness and pleasure. Others were Stoics, who were proud of being self-disciplined and independent. So they were pretty much like people today!

Paul was preaching about Jesus, who had been crucified, but God had raised him up from death to be the savior of the world. Some listened and said, 'What is this babbler saying?' Others said 'He's talking about foreign gods'. So they asked him to a meeting at Mars' Hill, to speak to the council who were concerned with religious matters.

Tammy: Can I interrupt, Fran? I know people like that- they love to hear new ideas, but they don't always care whether they are true or not, just whether they're interesting. And they don't decide on one belief and try to follow it properly. Surely we should find out what is *true*, and then follow *that* way with all our hearts.

Fran: I agree Tammy. Let's find out how sincere these people in Athens were. And let's think about how sincere we are, as we hear what Paul said to the people at this meeting. Bill's going to read it.

Bill: 'Men of Athens! I can see that you are very religious. For as I walked around and looked carefully at your objects of worship, I even found an altar with these words: "To an unknown god". You worship something you don't know, but I can tell you all about this God.

The true God who made the world and everything in it is the Lord of all heaven and earth. He doesn't live in temples built by people's hands. He doesn't need us to give him things; *he* is the one who gives all people life and breath and everything else. He made every nation from one race of people, and spread them throughout the whole earth, each in the places and at the times that God set for them. God wanted them to reach out and seek him and find him- though in fact he is not far from any of us. One of your own poets said 'In him we live and move and exist'. Another wrote 'we are his offspring'.

Since we are his offspring, created by God, we shouldn't imagine that this powerful creator could be an image made by skillful craftsmen, made of gold, silver or stone. That would just be ignorant. In the past God has overlooked such ignorance, but now you are hearing the truth. Now God commands all people everywhere to turn away from their sins. Now God has set the day when the world will be judged fairly, and the appointed judge will be this man I've been telling you about. God showed he was the one, by raising him from the dead.'

Fran: Of course Paul was talking about Jesus Christ, God's promised savior. He had already told them about Jesus' death and resurrection. So now they had to decide. Some of them just sneered at Paul; others put it off, saying, 'We want to hear more.' But a few people, men and women, saw that Paul's message was the truth, and they believed in one true God and in Jesus Christ. That's the end of this part of Paul's story.

Fran: So what did you think about the people of Athens?

Carol: It sounded like some of them were just looking for new ideas to talk about, but some of them were serious about looking for the truth. Many people are like that – how about you?

Tammy: I think their basic problem was how they thought about God. If you get that wrong, everything else you think about life will be twisted. How could they imagine that a metal statue they had bought from a craftsman in the market could represent the creator of the whole universe? It sounds like some of them realized God must be more than that, so they offered worship to an

'unknown god' – one that they didn't know anything about. Paul saw that they were reaching out to look for God, and he started from that small beginning.

Fran: People have always wondered about what God is like. Do you wonder? Paul wrote in the Bible about how we can learn some things about God from nature. He said that we can see God's eternal power and divine nature as we look at the universe around us. (Romans 1:20-23).

Tammy: That's true; we can see that there must be a creator, and he must be amazingly powerful and creative. Some people see that, but they don't know how to relate to this wonderful God. Often people have imagined God was like a man... a bird or animal... or like the sun or moon, and they have tried to worship this 'unknown god'.

Carol: We really need *God to show us* what he is like- and what did Paul say to the people of Athens? God *wants* us to know him! I don't mean what he *looks* like- God is spirit, he existed before he had made any of the universe. He can be everywhere at once. But we need to know what his *character* is like, and that's what *Jesus* came to show us. Jesus was divine, the image of God in every way. He was perfect, he never sinned. He hated sin and the way it hurts people, but he loved us even though we do wrong things. Jesus showed us that God is loving and compassionate, as well as holy and powerful. That's good news!

Fran: And now we know about Jesus, God's savior, we need to make a decision, like those people in Athens. We're not ignorant any more. Now we need to turn to God and turn away from idols, turn away from our sins. Let me ask you: are you still looking for God, or have you found him in Jesus? Remember, God wants you to get to know him, he made you, he loves you, he is not far from you.

Tammy: Would you like to know more about Jesus? Maybe you have a friend who follows Jesus, or you could visit a church. And you can certainly keep inviting Women of Hope into you home. As you reach out to God, you will find he has already reached out to you.

We do hope you will be with us again. Have a great week filled with God's blessings.

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