

Athena's Adventures in Health Policy

COMMUNITY IMMUNITY



By Ana Rita Gonzalez and Hilary Felton

Illustrated by Melina Sugliano

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TABLE OF CONTENTS

Chapter 1: Vaccination Day	5
Chapter 2: A New Baby	13
Chapter 3: Vaccine Hesitancy	19
Chapter 4: Because I Care	27
Chapter 5: Herd Immunity	37
Chapter 6: The Presentation	47
Chapter 7: Become an Advocate	53



CHAPTER 1: VACCINATION DAY

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Autumn was in the air, and Athena couldn't wait to get back to school. She loved the anticipation of a new year, full of fresh perspectives and growth. Her new teacher, Ms. Nasha, seemed like just the sort of person Athena would enjoy learning from, and now that she was in middle school, she would be able to try out for the swim team.

Of course, before her first day, Athena had a lot to do. This was mostly shopping—new clothes and supplies were needed for the year ahead—but today, it meant going to her annual checkup with their family physician, Dr. Diego.

Athena and her siblings were running late when they piled into the car, but thankfully, their mom had already filled out the necessary forms online. “Odin and Rae,” she said, addressing Athena’s older brother and younger sister, “you’ll be getting your annual flu shot and your COVID-19 vaccine. Athena, you’re also due for your Tdap and HPV vaccines.”

“Okay,” Athena replied. “What are those for?”

Athena secretly loved going to the clinic. She always learned something new while she was there, and Dr.

Diego was exceptionally patient when she asked question after question. She trusted him—but she still wanted to know why vaccines were important.

“Ask Dr. D to explain them,” Athena’s mom replied, smiling at her in the rearview mirror. “I think he’ll do a better job than me.”

Athena nodded. She also wanted to ask him how vaccines *worked*. What made a tiny shot so protective? This year, she felt she had to know.

When they arrived at the clinic, Athena hopped out of the car and watched as Odin and Rae shuffled out behind her. “You’re the only person who gets excited about a checkup, Athena,” Odin said moodily.

She shrugged. “It’s interesting to me.”

“Well, it’s annoying to the rest of us,” Odin said—but Athena knew he was just kidding.

Inside, Athena volunteered to get her checkup first, waving to her siblings as she was led back to the exam room. She found Dr. Diego seated in a swivel chair, a clipboard in his hand, waiting for her. “Hi, Athena,” he said as she sat down on the table. “It’s good to see you.”

She smiled. “It’s good to see you, too, Dr. D.”

“It’s been a while,” he said, reviewing her chart. “Almost a year to the day. How are you doing?”

“Pretty well,” she told him. “I have a lot of questions for you today.”

The doctor laughed. “I knew you would—fire away.”

She took a deep breath to organize her thoughts.

Then, Athena asked, “Why are vaccines so important? I’ve learned a little about them in school, but no one really talks about their value.”

“That’s an excellent question,” said Dr. Diego. He set his clipboard on the counter behind him and faced her. “Vaccines are a public health measure that protects individuals, our loved ones, and our communities. It’s especially important to protect those who are immunocompromised.”

“Immunocompromised?” Athena repeated. “What does that mean?”

“People who are immunocompromised have weak immune systems,” the doctor explained. “Your immune system is meant to fight viruses, bacteria, and fungi, but when you’re immunocompromised, your defenses are low, affecting your ability to fight off infections and diseases. When a person’s immune system isn’t working well, they can’t always be vaccinated, or the vaccines don’t work as well.”

“*Oh.*” Athena’s eyes were wide; she understood this lesson all too well. “My grandma is immunocompromised—she has cancer. And my friend has type 2 diabetes.”

Dr. Diego nodded. “We vaccinate to protect people like your grandma and your friend.”

Athena suddenly felt the value of vaccines in her heart, in her bones. This was one of the most important things she could do for the people she loved most.

“Okay,” she said. “Let’s do this. My mom said I’m

due for my Tdap and HPV vaccines. Can you tell me about them?”

“Of course.” He took Athena’s pulse, then said, “Tdap is actually a combination of three vaccines to protect you from tetanus, diphtheria, and pertussis. Tetanus affects your muscles and nerves, diphtheria affects your breathing, and pertussis is a particularly bad cough.”

“Those sound terrible,” said Athena.

“They’re definitely not nice. That’s why I gave you three doses of the vaccine when you were a baby. Today’s dose is another booster to help keep you safe.”

“What is a booster?”

“A booster shot is meant to increase your level of protection after the initial vaccine. The body’s protection against the disease naturally diminishes over time, so a booster reminds the immune system to keep up its defenses.”

Dr. Diego took her blood pressure, then continued, “The HPV vaccine will help protect you from several types of cancer.”

That’s a relief, Athena thought to herself. Watching her grandmother suffer was the hardest thing she’d ever done. If a vaccine would help her avoid the same fate, she wanted it.

Dr. Diego measured Athena’s height and weight, then asked her to sit on the table again. “I’m also going to give you your annual flu shot and your COVID-19 vaccine,” he explained. “How does that sound?”

“Good,” Athena replied. She had a lot to accomplish this year—there was no time to be sick! Four quick pinches later, she was vaccinated.

“You’re all set, ma’am,” the doctor told her. “Any other questions?”

Athena smiled. She *a/ways* had more questions. “I read a bit about the vaccination schedule this summer. Can you tell me more about that?”

“Absolutely.” Dr. Diego grabbed a sheet of paper from the counter behind him and held it up. On it was a chart with different ages and vaccines. “The World Health Organization developed an approach called life-course immunization. Did you read about that?”

Athena nodded. “Life-course immunization helps us stay healthy as we get older.”

“Exactly.” He pointed to the chart. “When you were a baby, I gave you vaccines for things like hepatitis B, rotavirus, and measles. Before you go into seventh grade, I’ll give you the MenACWY vaccine, which will help protect you from meningococcal disease. And as an adult, you’ll continue to receive booster shots, so you remain protected. Does that make sense?”

Again, Athena nodded. It was comforting to know that vaccines would help protect her—and her loved ones—throughout life.

“Good,” Dr. Diego said. “The immunization schedule is an important health policy, designed by the government to keep us healthy and safe as we age. Have you

learned much about health policies in school?”

“At school and at home. They’re rules made by governments to keep everyone in a community healthy.” Athena had been fascinated by health policy since she was little—but she still had questions. “Dr. D, how do governments know which health policies to make?”

He smiled. “Another excellent question. Governments use information provided by scientists and experts to understand the best ways to prevent and treat diseases. They also study the things we must do to maintain our health and make policies based on that information.”

“That makes sense,” Athena said, deep in thought. It sounded like a fun job—teaching government leaders about public health.

After a moment, Dr. Diego asked, “Any other questions?”

She shook her head. “I’ll go get Odin. Thank you, Dr. D.”

“You’re very welcome, Athena. I think sixth grade is going to be wonderful for you. Any idea what you’d like to be when you grow up?”

Athena sighed. People had begun asking her about this often... and she just didn’t have an answer. “Not really,” she said, “but I’m hoping this year will help me figure it out.”

“I’m sure it will,” said Dr. Diego. “Learning new things is always inspiring.”

Athena smiled. She knew that to be true.



CHAPTER 2: A NEW BABY

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Odin's and Rae's appointments were much shorter than Athena's. They required fewer vaccines this year—and they didn't have many questions for Dr. Diego. Athena had learned over the summer that most people weren't as aware of their health as she was, which was hard for her to understand. She wanted to live a long, healthy life, and she hoped her loved ones would, too.

I can't control everything, she thought as Odin and Rae hurried out of the clinic. They couldn't wait to get home. Athena smiled to herself; she could spend all day here. But right now, it was time for lunch.

As the clinic door swung closed behind her and her mom, Athena spotted her Aunt Dara and baby cousin Hugo in the parking lot. "Aunt Dara!" she squealed, waving. Her aunt waved back, and Athena ran to meet her.

"Hi, sweetheart." Aunt Dara planted a kiss on Athena's forehead. "What a nice surprise. I didn't know you had an appointment today."

Athena nodded, eyes on baby Hugo. He had the tiniest nose and ears and fingers. She wished there was a chair nearby so she could sit down and hold him. "What

are you two doing here today?” she asked her aunt.

“We’re here for Hugo’s vaccines. Can you believe he’s already two months old?” Aunt Dara looked affectionately at her baby, who was cooing in her arms.

Smiling, Athena replied, “I feel like he’s always been part of the family.”

“How are you, Dara?” Athena’s mom asked as she joined them.

“Just fine,” said Aunt Dara. “I was telling Athena that we’re here for Hugo’s two-month vaccines.”

As she listened to her mom and aunt catch up, an idea occurred to Athena. During a pause in their conversation, she asked, “Mama, could I stay here with Aunt Dara and see which vaccines Hugo needs at his age?”

Her mom smiled. “If it’s all right with your aunt, it’s all right with me.”

“Of course you can stay, Thea,” said Aunt Dara. “I know how much you enjoy health policy, and vaccines are an important aspect of public health.”

And so, Athena hugged her mom goodbye and walked back into the clinic with Aunt Dara. Once baby Hugo was checked in, they were led back to the exam room, where Dr. Diego was waiting once again. He greeted Aunt Dara, then asked, “Is something wrong, Athena? Did we forget to check something?”

“Oh, no,” Athena told him, laughing. “Baby Hugo is my cousin. I just want to see which vaccines he needs at his age.”

“Ah, I see.” The doctor stood and gestured to his chair. “In that case, you sit here, and I’ll walk you through the process.”

Athena sat down and watched as Aunt Dara sat on the examination table, cuddling baby Hugo in her lap. She hummed softly as Dr. Diego prepared the vaccines, telling them about each one. “We’ll start with DTaP,” he said. “Just like Athena’s Tdap booster, it will help protect Hugo from diphtheria, tetanus, and pertussis. Then, we’ll give him the IPV vaccine, which protects against polio.”

Though she had heard of polio before, Athena wasn’t sure about its severity. When she asked, Dr. Diego explained, “Polio destroys nerve cells in the spinal cord, which causes paralysis. It’s extremely rare, but we want to protect ourselves anyway.”

Definitely, Athena thought. She was glad she’d gotten the IPV vaccine when she was little.

“We’re also going to give Hugo the PCV vaccine, which will help protect him from pneumococcal disease, including pneumonia.”

Athena had learned in school that pneumonia was a common lung infection. It seemed wise to protect Hugo’s tiny body from such a disease.

Next up was the Hib vaccine, without which, according to Dr. Diego, Hugo was at risk of a dangerous illness. Hugo was then vaccinated against rotavirus, a very contagious sickness in infants and young children. And finally, he received the HepB vaccine, which Dr.

Diego said would help protect her baby cousin from a serious liver infection.

Once Hugo was immunized, Athena asked, “Dr. D, why are vaccines valuable for babies? They can’t even walk on their own yet.”

“I wish more people would ask about this. It’s very important,” Dr. Diego said. “Each of the vaccines you saw today will protect Hugo from future illness by creating a ‘memory’ of sorts. They’ll teach Hugo’s immune system to shield him from deadly diseases. In a couple of months, we’ll give him another dose of most of these vaccines, which will provide even more protection. Does that make sense?”

Athena nodded. It was such a relief to know that baby Hugo’s immune system would be strong as he grew up. “Thank you, Dr. D. And thank you, Aunt Dara, for letting me come with you.”

Aunt Dara smiled. She looked... proud, Athena thought, though she wasn’t sure why. “You’re welcome, Thea. I’m glad this was informative for you.”

Athena and her aunt said goodbye to Dr. Diego, and then Aunt Dara drove Athena home. With a quick kiss to Hugo’s tiny forehead, Athena said, “See you later!” and hurried inside. She had so much to tell her parents.



CHAPTER 3: VACCINE HESITANCY

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On the first day of sixth grade, Athena met her friends in the cafeteria for lunch. Hui, Conroy, and Zosia all lived nearby, but it had been a few days since Athena last saw them, and she couldn't wait to catch up.

"What do you think of Ms. Nasha?" Zosia asked, popping a strawberry into her mouth.

"I think she's great," said Hui. She added a side salad to her tray of chicken nuggets before leading everyone to a table.

Conroy sighed. "I'm sure I've already annoyed her with my questions."

"You're not annoying anyone, Conroy," Athena said. "Asking questions is how we learn. I asked my doctor about a million questions a couple of weeks ago."

"Were you sick?" Zosia asked.

"No, I just went in for a checkup. Then, my aunt showed up with my baby cousin, and I got to stay and watch him be vaccinated." Athena took a bite of her macaroni and cheese and smiled. It felt good to be back at school.

Zosia frowned. "Wait, are you vaccinated, Thea?"

"Of course," Athena said. "Vaccination protects us

from a lot of diseases. Aren't you vaccinated, Zosia?"

Ignoring her, Zosia turned to Hui and Conroy. "Are you two vaccinated?"

Hui nodded. Conroy, looking suddenly uncomfortable, told her, "Because I'm diabetic, vaccines don't always work well for me, so I rely on other people to get vaccinated."

Zosia nodded slowly. "Oh. I didn't know that. My parents aren't really... sure about vaccines."

Not sure about vaccines? Athena had never heard that before and didn't understand it. Her focus landed on Zosia's proximity to Conroy. Shouldn't his friends be doing whatever they could to protect him?

Hui ate a chicken nugget in one bite, then said, "Let's change the topic."

Conroy struck up a conversation about history class, and Athena joined in—but she couldn't shake the feeling that being unvaccinated was dangerous. When school was dismissed in a few hours, she would have to ask her parents about it.

Back at home, Athena dropped her backpack near the door and bolted into the kitchen, searching for her mom. When she didn't immediately find her, she yelled, "Hey, Mama?" into the void and waited.

"Upstairs!" came her mom's voice. "I'll be right down."

Athena picked up her backpack, took out her homework, and poured two glasses of apple juice—one for Odin and one for herself. By the time her mom joined her in the living room, Athena had already powered through her first math problems of sixth grade.

Her mom smiled. “Hi, babe. How was school?”

“It was fine,” Athena said distractedly. She put her pencil down and blurted, “Did you know Zosia’s family doesn’t vaccinate?”

Mama’s brow furrowed. “No, I didn’t know that.”

“It’s true,” Athena said, though she still couldn’t believe it. “Her family *isn’t sure about vaccines*. What does that even mean?”

“It sounds like Zosia’s family is vaccine hesitant. They’re doubtful of the benefits of vaccination and refuse to be vaccinated.” Her mom sighed. “Unvaccinated people risk contracting diseases and passing them on to others.”

“Like Conroy.” Athena felt her cheeks heating. She hated to think that her friend was in danger because of another friend.

Her mom nodded. “Yes, vaccine hesitancy puts the immunocompromised at risk. It also endangers those who aren’t old enough to receive the vaccine.”

Now, *this* was unthinkable. “Like Hugo,” Athena said. “He isn’t fully vaccinated yet—he’s just a baby! And Grandma is immunocompromised like Conroy. What is Zosia’s family thinking, putting people like them at risk?”

“Athena,” her mom said gently, “we can’t control other people, remember? You’re doing everything you can to protect your loved ones. It’s okay to be upset, but you must realize that you can’t force people to see things from your point of view. Do you understand?”

With a deep breath, Athena nodded and said, “Yes.” She felt a bit calmer now that she’d expressed her concerns, and it was nice to be reminded that she was doing her best.

“Good. Now, what would you like to do?”

“Well, I want to talk to Zosia about vaccines. I just don’t want her to hate me.”

“She’s not going to hate you, Thea,” her mom said. “There’s a way to approach this using kindness and scientific evidence.”

Athena pulled a blank sheet of lined paper out of her backpack and picked up her pencil. “Okay. I’m going to take notes.”

Mama smiled. “There are some common myths and misconceptions about vaccines, even though they’ve eradicated certain diseases. For instance, smallpox has been eliminated worldwide, and measles and polio are at very low levels. Of course, when people don’t get their vaccines, it’s difficult to eliminate diseases completely.”

Athena scribbled down these facts as fast as she could. This was strong evidence of the public health impact of vaccines.

“Some individuals and families believe that vaccines are dangerous,” her mom continued. “They might have heard that they change your DNA or genetics, or they might be concerned that vaccines contain tracking devices.”

Athena stopped writing. “Wait, those things aren’t true, are they?”

Her mom shook her head. “No, sweetheart. Vaccines are safe, and they work. Not only do they *not* give you diseases, but getting the vaccine is *safer* than getting the disease. Most vaccine hesitant people are concerned about putting chemicals into their bodies because they don’t understand that while memory remains, the vaccine components do not.”

“How do you know all of this, Mama?” Athena asked as she continued taking notes.

“Everything I’ve told you is available from credible sources like the CDC, the WHO, and the GACVS.”

Athena recognized the acronym for the Centers for Disease Control and Prevention, as well as the World Health Organization. But... “What is GACVS?”

“That’s the Global Advisory Committee on Vaccine Safety,” her mom replied. “I know you’ve taken a lot of notes, but it might be helpful to print some of the most important pages from these websites and show them to Zosia. That way, she understands that you’ve done your research.”

“I think you’re right,” Athena said, pulling her laptop

from her backpack. “Could you help me choose the best pages to print?”

For the remainder of the afternoon, Athena and her mom scrolled through and printed the most important health policies related to vaccines. Then, Athena stapled them together so she could give them to Zosia the following day.

“Thanks, Mama,” Athena said, giving her mom a hug. “I’m going to go practice my speech in a mirror.”

“Not a speech, babe,” her mom reminded her. “This is a *conversation*. Make sure you give Zosia time to express her point of view.”

“Conversation,” Athena repeated. “I’m going to practice approaching it with kindness.”

Her mom smiled. “Perfect. I’ll call you when dinner is ready.” As Athena began marching up the stairs, Mama added, “You’re doing a good thing, Thea. I’m very proud of you.”

Athena turned around and shrugged. “I’m just trying to be helpful.”

And protect my friends, she thought. But hopefully, that was the same thing as being helpful.



CHAPTER 4: BECAUSE I CARE

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When she arrived at school the next morning, Athena sat down next to Zosia and whispered, “Can I talk to you at lunch?”

Zosia laughed. “We always talk to each other at lunch, Thea.”

“Yes, but I was hoping we could talk *alone*,” she clarified.

Zosia frowned. “Sure. Is something wrong?”

“No,” Athena said, though that wasn’t entirely true. “I just have some things to ask you.”

“Okay,” Zosia said, and then Ms. Nasha began taking roll call.

Later, in the cafeteria, Athena and Zosia chose a table in the corner and sat down to eat. After a couple of deep breaths, Athena asked, “So, would you be willing to talk more about vaccines?”

Zosia raised her eyebrows, seemingly surprised. “Is that what this is about? Sure, Thea, we can talk about them. But I trust my parents, you know? If they aren’t willing to vaccinate me, I’m okay with that.”

Smiling, Athena took the pages that she and her mom had printed and handed them to Zosia. “This is

some evidence I found on the CDC, WHO, and GACVS websites. It explains that vaccines work by creating memories that protect us from diseases.”

For what felt like a long time, Zosia was silent, her eyes scanning the pages in front of her. Then, without looking up, she asked, “How do you know these things are true?”

“Government agencies are a reliable source of information,” Athena told her. “Those pages are available online for anyone to read.”

Zosia nodded slowly, flipping back to the first page. After another long moment, she faced Athena and said, “I understand that this is important to you, but I don’t make the rules at home. If my parents wanted to vaccinate me, they would.”

“I don’t make the rules at my house either,” Athena said, tapping her fingers on the table. Keeping this conversation neutral was much harder than she’d anticipated. “I’m just wondering if you have any concerns about vaccines. If you do, maybe I can help.”

“Well...” Zosia paused to take a bite of her hamburger. “My parents don’t really talk about them, but that makes me think vaccines are dangerous. Is that weird?”

Athena shook her head. “Not at all. Many people are taught that vaccines are dangerous. But according to scientific evidence, getting the vaccine is safer than getting the disease.”

“Really?” Zosia took a sip of water and quickly added,

“I guess that makes sense.”

“Also—” Athena stopped. She didn’t want to manipulate Zosia’s emotions, but she thought it was important for her to have all the facts.

“What is it? You can tell me, Thea.”

With a deep breath, Athena said, “It’s just that Conroy is counting on us to protect him. He’s immunocompromised, you know, so his health is at higher risk even if he’s vaccinated.”

Zosia’s eyes went wide. “Yeah, that’s true. I know he said that yesterday, but I didn’t really understand until now.”

At that moment, the bell rang, guiding students back to class. Zosia picked up her tray and said, “Thanks for this, Thea. I’ll show these pages to my parents when I get home.”

As she was making her way to the carpool line that afternoon, Athena heard Conroy call her name. She turned quickly, backpack swinging, and collided with his shoulder. “Sorry, sorry,” she said as they both laughed. “You snuck up on me.”

“Sorry,” Conroy said. “I just wanted to thank you. Zosia told me about the research you gave her, and it means a lot that you would advocate for vaccines to protect me.”

Athena smiled. “Of course, Conroy. I want you to live a long, healthy life.”

“I want that, too,” he said, smiling back at her.

Ahead, Athena saw her dad pulling up to the curb. “That’s my ride. Have a nice evening, Conroy. I’ll see you tomorrow.”

“See you, Thea.” He gave her a hug, then disappeared into the crowd of students.

Gripping the straps of her backpack so it wouldn’t hit anyone else, Athena ran for her dad’s car. Ducking inside, she said, “Hi, Papa,” and shoved her bag onto the back seat. Normally, she would have ridden her bike to and from school, but today, her dad was scheduled to receive his adult vaccinations, and she wanted to watch.

“Hi, Athena,” Papa said. “How did your conversation with Zosia go?”

“Really well,” she said. “She’s going to talk to her parents about vaccination when she gets home.”

“That’s great news! Did she seem upset at all?”

“Not upset,” Athena said, considering. “Maybe a little surprised.”

Even so, she felt elated and relieved. She helped Zosia understand the importance of vaccines with only a few pieces of paper and genuine care! It was like real-life magic.

“Surprise is okay,” Athena’s dad said. “Learning new things is often surprising.”

As they pulled up to the clinic, Athena asked, “Which

vaccines are you getting today, Papa?”

“I’m scheduled for my annual flu shot, my COVID-19 booster, and a Tdap booster,” he told her.

“Tdap booster?” Athena frowned. “Why do you need that? I just got mine before school started.”

“To protect baby Hugo,” her dad replied. “A Tdap booster can help when there’s a new baby in the family.”

“Ah.” Athena nodded. That made sense. “I’m so glad you and Mama take care of yourselves like this. I don’t know what I’d do if you were vaccine hesitant.”

Her dad laughed. “I don’t think anything could stop you from abiding by health policies, Thea.”

Athena and her dad didn’t get home until dinnertime. By then, she was famished—and realizing how much homework she had to finish before morning. As she dug her history textbook out of her backpack, her mom said, “Hey, Thea, we need to have a quick chat.”

“Okay,” Athena said, distracted. “About what?”

“I got a call from Zosia’s parents a few minutes ago. They’re a bit upset about the research we printed.”

Athena stopped digging through her bag and looked up. “They’re *what*? Why? I thought I did everything right!”

“This isn’t about you, babe,” her mom said, sitting down beside her. “You did the best you could to help

your friend.”

“We can’t control the way others react to us—or to scientific evidence,” her dad added.

“But that research is important,” Athena argued. “Conroy was so happy that I was advocating for him. What happens when he finds out that Zosia’s parents won’t vaccinate her?”

“We can’t control that either,” Athena’s mom replied. “I think it’s best if you let this go for now, okay? Try to focus on school, and if another opportunity to help presents itself, we can discuss it.”

Athena nodded glumly. These were *not* the results she was expecting. Zosia had seemed so optimistic about talking to her parents. What happened?

Dinner was enchiladas—one of Athena’s favorites—but she barely touched the food on her plate. As her siblings recounted the day’s events, she mumbled, “I’m going to finish my homework,” and left the table.

In the comfort of her own room, Athena sat on her bed and had a good cry. For a while, she wasn’t sure what was more upsetting: the fact that Zosia was putting Conroy at risk, or the possibility that her friendship with Zosia was ruined. Athena felt a pang in her stomach, but it wasn’t hunger—it was worry.

This is my fault, she thought. I could have just let it go.

But now Conroy was expecting her to help him, and Zosia was probably mad at her.

Ugh.

Athena quickly finished her homework, put on her pajamas, and was about to crawl into bed when she heard her mom's voice downstairs. For a moment, she stood near the door, listening, but it wasn't until she heard Conroy's mom's name that she knew there was a phone call in progress. She wondered what they were talking about as her mom's voice softened. Athena could hear sounds but no words. And she was suddenly too tired to care.

Turning off her lamp, Athena pulled her covers over her head and went to sleep.



CHAPTER 5: HERD IMMUNITY

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Nearly a week passed, and Athena didn't see much of Zosia. It felt... strange. After years of best friendship, the girls hardly spoke at all. They sat next to each other in class and at lunch, but they rarely made eye contact or shared a laugh. Until now, Athena didn't know she could miss someone whom she saw every day—but she did.

The worst part was that Zosia didn't seem mad. As the days wore on, Athena wished they could argue about their families' views on vaccines. Maybe if they yelled at each other, they would feel better. But according to Athena's mom, that wasn't a healthy approach to the situation.

"Be patient, Thea," she said. "Things like this work out eventually."

All Athena could do was trust this token of wisdom. And after a while, she had less time to think about it. Ms. Nasha had assigned Athena and Conroy as science partners, and together, they were working on a presentation about herd immunity. According to their research, high levels of vaccine coverage prevent the spread of disease, even in people who haven't been or can't be vaccinated.

“Conroy, look at this,” Athena said during one of their many study sessions. She tapped on her laptop screen in excitement. “This says that vaccination prevents three to five *million* deaths every year. Can you believe that?”

He smiled as he wrote down this latest statistic for their poster. “That’s amazing. I wish—” He stopped, but Athena knew what he was thinking.

“Yeah,” she said quietly. “I wish Zosia’s family knew that, too.”

At dinner one evening, Athena’s dad said, “I saw Grandpa today. He just got caught up on his vaccines to help protect Grandma.”

“That’s great news,” said Athena’s mom as she scooped mashed potatoes onto Rae’s plate.

“Is Grandpa vaccine hesitant?” Athena asked, frowning.

Papa looked sad. “No, but he’s had a lot on his mind since Grandma’s diagnosis. He’s struggling to find time to take care of himself.”

“How can we help?” asked Odin. But before anyone could answer, he suggested, “Maybe I can go over this weekend and clean up the leaves in their yard.”

Their mom smiled. “I think that’s a wonderful idea.”

“I want to help, too!” cried Rae. “What can I do?”

“Why don’t you help me prepare some meals?” Mama proposed. “Odin can deliver them this weekend.”

Satisfied, Rae turned to Athena. “What are you going to do?”

Tapping her fork against her plate, Athena asked her dad, “Do you think Grandma and Grandpa would like to hear my herd immunity presentation? Maybe Conroy and I could go over and practice it for them.”

Papa nodded. “I think they would enjoy that, but you can give them a quick call just to be sure.”

Excited, Athena rushed through her dinner and stepped into the living room to call her grandfather. He picked up after only a few rings. “Hello?”

“Hi, Grandpa. It’s Athena.”

“Well, hello, young lady,” he greeted her. “What can I do for you?”

“Actually, I was hoping I could do something for *you*.” Athena pitched her idea and waited for her grandfather’s thoughts.

With hardly a moment’s pause, Grandpa said, “Of course, Thea. We’d love to hear your presentation. Bring Conroy over after school tomorrow, and we’ll be ready.”

“Okay,” Athena said happily. “We’ll be there.”

The following day, Conroy’s mom drove him and Athena to her grandparents’ house after school. On the car

seat between them was their poster board on herd immunity, and in their hands were stacks of notecards for their presentation.

“Do you think we should swap the second and third cards?” Conroy asked, looking from his notes to the poster. “It might make more sense.”

“I think you’re just nervous,” Athena said, smiling at him. “Try to relax. This is just for practice.”

“Yeah, but I want it to be good,” said Conroy, shifting uneasily in his seat.

“It’s going to be great. Here.” Athena passed him his water bottle, which had rolled to her side of the car. “Hydration solves a lot of problems.”

“You’re an odd one, Thea,” Conroy said jokingly, but he took a sip of water anyway.

At her grandparents’ house, Athena thanked Conroy’s mom, leapt from the car, and dragged their poster out behind her. Conroy knocked on the door, and they heard Grandpa call, “Come in!” Athena gave Conroy another reassuring smile, then went inside.

“There you are!” Athena’s grandmother was already seated in her purple recliner, her feet propped up in front of her. “We’ve been looking forward to this all day.”

“Hi, Grandma,” said Athena, kissing her on the cheek. “How are you feeling?”

“Oh, I’m fine, dear,” her grandmother replied with a dismissive wave of her hand. “How was school?”

“Same as always,” Conroy said. He took the poster

from Athena and set it up on an empty chair where everyone could see it.

Athena's grandfather laughed. "Well, we're excited to hear what you've been learning."

Once she had hugged both of her grandparents, Athena joined Conroy at the front of the room. With a nod in her direction, he began.

"Vaccines impact public health in many important ways. They have saved more lives worldwide than any other health intervention."

"Vaccines protect children, teens, and adults," Athena continued, "giving them the opportunity to become the best versions of themselves. Through vaccination, we can prevent, control, and eradicate diseases."

Conroy flipped to his next notecard. "Vaccination protects oneself *and* others through herd immunity."

Athena pointed to a diagram on their poster and explained, "When no one is immunized, diseases spread. When some people are immunized, diseases spread less. And when most people are immunized, diseases are contained."

"When a disease is contained, herd immunity has been reached," said Conroy.

"Vaccination prevents three to five *million* deaths worldwide each year," Athena emphasized, pointing to another image on their poster board. "It is one of the most cost-effective health interventions available today."

From there, Conroy offered a brief explanation of how vaccines work, and Athena spoke about the value of vaccination, particularly in the lives of the immunocompromised. Together, they explained the immunization schedule, childhood vaccination, and why life-course immunization is an important health policy.

At the end of their presentation, Athena and Conroy opened the floor for questions. This was something that Ms. Nasha had instructed each pair of students to do, but Athena didn't think it was necessary today. Her grandparents were older and wiser than her; they knew more than most people about the importance of vaccination. Why would they have any questions?

She was surprised, therefore, when her grandfather asked, "Athena, you mentioned that vaccination is cost-effective. Could you explain?"

"Of course," she said, pointing once again to the poster. "Vaccines keep people healthy, which means they can go to work, contribute to the economy, stay healthy, and live longer. Does that make sense?"

Her grandfather looked taken aback at first, then proud. "That makes perfect sense. Thank you for clarifying."

"Any other questions?" Conroy asked. Athena could tell that he was ready to wrap up.

"Not from me," said Athena's grandmother. "I think that was perfect, kids. Wonderful work."

Grinning, Athena and Conroy put down their note-

cards to give each other a hug. “That was even better than I thought it would be,” Athena whispered, her heart feeling full.

“We nailed it,” Conroy agreed.

They spent the remainder of the afternoon at Athena’s grandparents’ house, chatting and drinking Grandma’s famous cocoa. As evening settled, Athena’s dad pulled into the driveway to pick them up. But before she left, Athena’s grandfather pulled her aside.

“That was a very impressive presentation,” he said proudly. “Professional and thorough. Have you ever considered getting a degree in public health when you’re older?”

A public health degree? Athena smiled slowly. Could she really do that? “I haven’t thought about it... but that would be kind of cool.”

“I think you would excel in a public health program,” her grandfather encouraged. “You’re a smart girl, Thea. The world needs more minds like yours.”

“Thank you, Grandpa,” she said. “I’ll think about it.”

And she did—immediately. Athena contemplated this potential career path all the way home while her dad and Conroy talked. She couldn’t even hear them. All she wanted to do was practice her presentation again; she couldn’t wait to show it to her class.

Could this be her answer to the question, “What would you like to be when you grow up?”

Conroy’s mom was waiting for him at Athena’s

house. As they said goodnight, Conroy whispered to Athena, “What do you think about our parents meeting with the school administration tomorrow?”

She frowned. “What are you talking about?”

“Didn’t you hear what your dad said in the car? Our parents—and Zosia’s parents—are meeting with the administration tomorrow.”

“But why?”

“He didn’t say. I guess that’s all we’re allowed to know right now.”

Athena’s heart skipped uncomfortably. What was the meaning of this? At length, she said, “I don’t know, Conroy. I guess we’ll just have to trust them. They know what’s best for us.”

Conroy nodded, giving her one last hug. “You’re probably right. Goodnight, Thea. I’ll see you tomorrow.”



CHAPTER 6: THE PRESENTATION

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When Athena arrived at school the next morning, Zosia was already there. They hugged each other, as they normally would, but Athena could tell that something was different today. Something in her friend's limbs was bound too tightly, and her eyes looked red, as if she'd been crying.

Athena wondered, as she had all night, why their parents were gathering in the principal's office. It seemed like Zosia knew the answer—but Athena didn't want to ask her. She would just have to talk to her parents when she got home.

Ms. Nasha took roll call, then began class with a video about their upcoming book report. Athena barely saw it and forgot to take notes. Her thoughts were on Zosia, their tenuous friendship, and the herd immunity poster that leaned against her desk.

When their literature lesson ended, Athena was snapped out of her daze by Ms. Nasha saying, "Athena, Conroy, and Zosia, come here please."

Athena looked at her friends, who seemed equally surprised by this request. Were they all on trial? Slowly, they left their desks and met their teacher at the front of the classroom.

“Don’t look so pained,” Ms. Nasha said, smiling. “No one is in trouble, but you’re all needed in the principal’s office. Athena and Conroy, please bring your poster and notecards.”

Confused, Athena grabbed the herd immunity poster and her cards and followed her friends into the hallway. No one spoke as they shuffled toward the principal’s office.

What a strange day, Athena thought. She was ready for it to be over—and it wasn’t even ten o’ clock in the morning.

When they arrived at the office, Athena was surprised to find the door open, revealing all their parents, the principal, and the vice principal. It was Athena’s first year of middle school, so the administration was still new to her, but she did her best to smile and appear unconcerned.

“Welcome, students,” the principal said warmly. Her dark hair was pulled back in its usual ponytail, and she was wearing heels that made her short frame appear slightly taller—but still shorter than Conroy. “Thank you for joining us.”

The students nodded nervously. “Of course,” Zosia said softly.

“Zosia, why don’t you sit with your parents?” the principal suggested. “Athena and Conroy, Ms. Nasha told me that you’ve been working on a presentation about herd immunity. Would you practice it for us?”

Athena's eyes darted to Conroy, who was looking back at her in pure terror. The school principal wanted to hear their presentation—but *why*? Was there something wrong with it?

Finally, Athena said, "Yes, ma'am. Where would you like us to set up?"

"I have an easel here," the principal replied, moving out of the way. Carefully, Athena placed the poster board where everyone could see it.

"All right then." Athena eyed her parents, who were smiling at her. "Ready, Conroy?"

He nodded. He did not look ready.

And yet, as they began, their statements flowed even more smoothly than they had at Athena's grandparents' house. They utilized the images and statistics on their poster more easily. Conroy looked manic, but his words were confident and clear. They were doing it—they were presenting their research with professionalism. *Again*.

Somewhere behind her nerves and her notes, Athena registered how much she loved talking about health policy. It didn't matter that Zosia's parents were frowning at her or that the school administrator was practically a stranger. She knew herd immunity was an important topic, and she wanted people to know about it. She wanted them to be healthy.

At the conclusion of their presentation, Conroy and Athena turned to each other and grinned. Each knew what the other was thinking; their second practice run

was even better than their first.

I think you would excel in a public health program, Athena heard her grandfather say.

Yes, she thought. When she got to high school, she would have to ask her guidance counselor about studying public health in college.

The students were dismissed shortly after that. Athena hugged her parents, took the poster off the easel, and began walking back to class. She still didn't know the significance of the parents' meeting, but she no longer cared. She had done as the principal had asked—and done it well.

Halfway back to their classroom, Zosia said, “Hold on, you guys. I need to say something.”

Tentatively, Athena and Conroy turned to face their friend. “Okay,” said Conroy.

Zosia sighed. “I just wanted to thank you for teaching my family about herd immunity. I think... I think my parents might have changed their minds about vaccines.”

“So... you're not mad?” Athena smiled hopefully.

Zosia laughed. “No, I'm not mad. You're my best friends. I know you're trying to help me.”

Athena put down the poster and wrapped Zosia in a hug. Within seconds, Conroy joined them. It was the happiest they'd felt in weeks.



CHAPTER 7: BECOME AN ADVOCATE

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The front door was barely closed behind Athena's back when she charged into the kitchen and asked, "Okay, what was your meeting about?"

Her parents laughed. "Sit down, sweetheart," her mom said. "We're happy to explain."

Athena dropped her backpack onto the floor, took an orange from the bowl on the counter, and sat down to eat. As she peeled her fruit, her dad said, "Where's your poster?"

"I left it at school," she replied. "Conroy and I are finished with it. We get to present next week."

Her dad nodded. "That's great news. You two are more than ready at this point, don't you think?"

Athena smiled. "Yeah, we feel pretty good about it."

"As you should," her mom said. "It was your presentation that turned the tide during our meeting today."

"What do you mean?" Athena popped an orange slice into her mouth, confused.

"We were able to have a civil discussion about vaccine policies with Zosia's parents," Papa explained, "but it wasn't until you and Conroy described herd immunity that they understood the importance of the conversation."

“Zosia will begin catching up on her immunizations over the weekend,” Mama said, smiling.

Athena squealed. Zosia had been right—her parents *did* change their minds about vaccines. And it was due, at least in part, to Athena and Conroy’s research.

“How does it feel to make that kind of impact?” her dad asked.

She shook her head. “I can hardly believe it. This will be so good for her—and for Conroy, too. Now, Zosia can help protect his health at school.”

For a while, Athena was quiet, but her mind was racing. As she finished her orange, she realized she didn’t want to wait until college to help more people learn about vaccines. There had to be something she could do while she was still in middle school... right?

“Mama, Papa,” she said, “how can I continue making an impact, even though I’m still a student?”

“Would you consider becoming a vaccine advocate?” her dad asked. “You’ll have to do a bit of research, but I think you’ll enjoy promoting immunization.”

In a flash, Athena remembered what Conroy had said to her during their first week of sixth grade. *It means a lot that you would advocate for vaccines to protect me.* There were so many immunocompromised people in the world—probably at her school—who could benefit from someone speaking up for them.

“I could write an article for the school newspaper!” she cried, her heart leaping. “It could be about the

importance of vaccines and related policies.”

Her mom hugged her. “That sounds like a wonderful idea, honey. Go for it.”

For the next several hours, Athena feverishly refreshed her email inbox until a message from Ms. Nasha appeared. She opened it and read:

Hi Athena,

Thanks for your email.

Of course, I would love to have your doctor come in and speak to us about vaccines. Attached is our classroom calendar so he can choose the date that works best for him. I will reach out to him as well.

Please let me know if either of you has any questions.

Warmly,

Ms. Nasha

Thrilled, Athena opened a new draft and wrote to Dr. Diego, asking if he would be willing to speak to her class. Then, she attached the classroom calendar, read over her email, and sent it. This was her *third* advocacy effort of the day. Beyond speaking about herd immunity and compiling research for her article in the school paper, she was now orchestrating a guest speech.

Yes, Athena was going to enjoy being a vaccine

advocate. She couldn't wait to discover even more opportunities to spread the word about immunization policies.

This, she thought, might just be her life's purpose.

You can practice health policy just like Athena. Become a vaccine advocate in your own community by talking and writing about the benefits of vaccination and continuing to learn from experts. Remember, through vaccination, we can prevent, control, and eradicate diseases.

Writing this series of storybooks is a dream come true and is more rewarding than I ever could have imagined. I want kids of all ages to know that working in health policy is as viable as becoming a doctor, an architect, a teacher, or a farmer.

Thank you so much to my teammates for helping me conceptualize and write each book; to our amazing editor, Aquinnah Bree; and to our talented illustrators, Melina Sugliano and Rodrigo Palacios. In creating this series, we have also created a lifelong bond.

*- Ana Rita Gonzalez, President & CEO,
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Athena's doctor is used to her asking a lot of questions. This year, as she moves into middle school, she wants to know all about vaccinations and how they work. Confident that being vaccinated is wise, she's surprised to learn that her friend Zosia is skeptical. Her family is unfamiliar with the benefits of vaccination. Determined to help, Athena creates a presentation on herd immunity. But is it enough to impact Zosia's family?

Through Athena's Adventures in Health Policy, Policy Wisdom aims to inspire the next generation of public health professionals and show them the importance and impact of health policies.

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