## The Vaccine War | The Growing Debate Over Vaccine Safety (10:11) Transcript

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NARRATOR: Tonight on FRONTLINE, they're hailed as medicine's greatest triumph, conquering smallpox, diphtheria, polio, and more.

PAUL OFFIT, M.D., Children's Hospital of Philadelphia: If you look at vaccines over the past hundred years, they've increased our lifespan by 30 years.

NARRATOR: But today, some Americans question if all those vaccines are worth the risk.

JENNIFER MARGULIS: And I said, why am I supposed to vaccinate my newborn baby against a sexually-transmitted disease, and the nurse got really mad.

NARRATOR: And some parent groups attack vaccines as the cause of chronic diseases, from ADHD to autism.

J.B. HANDLEY, Founder, Generation Rescue: My kid got six vaccines in one day and he regressed.

JENNY MCCARTHY, Spokesperson, Generation Rescue and Actress: Would I rather have the measles versus autism? We'll sign up for the measles.

NARRATOR: Despite numerous scientific studies saying vaccines are safe, public concern persists. The result? Outbreaks of infectious diseases not seen for a generation.

DONNA BRADSHAW-WALTERS, M.D., Pediatrician, Ashland, OR: We are not living in a bubble. It's just a matter of time before someone brings that disease into our community.

NARRATOR: As public health officials struggle to communicate with a skeptical public, they face a radically changed social media environment, where YouTube videos spread virally across the Internet.

[on screen: clips of multiple YouTube videos]

YOUTUBE VIDEO VOICEOVER: A regular flu shot gone horribly wrong.

Dr. PAUL OFFIT: These people are much more likely to believe something they had seen on YouTube than the Centers for Disease Control and the FDA. That's a little frightening.

NARRATOR: Tonight, FRONTLINE reports on the science and the politics of a bitter vaccine war.

[on screen: Frontline opening and credits. Car driving to the Doylestown Hospital. C-section operation.]

DELIVERY ROOM STAFF AND PARENTS: [home video] What a cute little face. Here we come! It's a girl! She's beautiful. What's her name? Rachel.

NARRATOR: A new life begins. Out of her mother's womb, Rachel Murphy is now surrounded by a new world filled with countless germs. Modern medicine will do what it can to protect her.

NURSE: It's just a tiny little stick.

NARRATOR: Barely an hour old, Rachel gets her first shot, against hepatitis B. This is the first of up to 35 inoculations she will get in the next six years of her life to fight 14 diseases.

[on screen: Diphtheria, Hib disease, hepatitis A, hepatitis B, influenza, measles, meningitis, mumps, pertussis, pneumonia, polio, rotavirus, rubella, tetanus]

NARRATOR: Public health doctors celebrate vaccines as one of medicine's shining achievements.

DR. PAUL OFFIT: They've increased our lifespan by 30 years. Hib would cause 20,000 to 25,000 cases a year. Gone. I mean, polio would paralyze, you know, tens of thousands of children every year. Gone. I mean, diphtheria was the most common killer of teenagers in the 1920s. Gone. I mean, you know, vaccines— the benefit of vaccines is clear.

MELINDA WHARTON, M.D., M.P.H., Centers for Disease Control and Prevention: Well, there's now 16 diseases that are preventable by vaccination for children. Fourteen of those are diseases that we vaccinate infants and young children for, and two of them are diseases that we vaccinate adolescents. From my point of view, being able to prevent 16 diseases by vaccination is a really good thing.

NARRATOR: But not everyone agrees. Across America, the CDC has discovered certain communities where parents are hesitating to vaccinate their children. One is Ashland, Oregon.

JENNIFER MARGULIS, Parent, Ashland, OR: This is our neighborhood, and we love it because we can walk everywhere. Ashland is a very safe town compared to almost every place else in America.

NARRATOR: It's a college town, the home of an annual Shakespeare festival, where a well-off, educated population has easy access to alternative medicines, an organic food co-op and yoga centers. Jennifer Margulis, a writer with a Ph.D. in English Literature, is the mother of four children.

JENNIFER MARGULIS: When my daughter was born in 1999, the nurse bustled in with her tray and said, "OK, it's time for your hepatitis B vaccine." And I looked at my daughter and I looked at the nurse and I said, "Isn't hepatitis B a sexually transmitted disease?" And I said, "Why am I supposed to vaccine my newborn baby against a sexually transmitted disease?" And the nurse got really mad.

NARRATOR: Margulis went on to research and write about vaccines, and in 2009 published a long article about the vaccine debate in *Mothering* magazine, a magazine promoting a natural lifestyle.

JENNIFER MARGULIS: Why are we giving children so many vaccines? They get four times the number of vaccines than I got when I was child growing up in the '70s. As a parent, I would rather see my child get a natural illness and contract that the way that illnesses have been contracted for at least 200,000 years that homo sapiens has been around. I'm not afraid of my children getting chicken pox. There are reasons that children get sick. Getting sick is not a bad thing.

NARRATOR: In common with many other Ashland parents, Margulis decided not to fully vaccinate her other children. Ashland still has one of the lowest vaccination rates in the country. An estimated 28 percent of its children lack some or all of their required vaccinations.

DONNA BRADSHAW-WALTERS, M.D., Pediatrician, Ashland, OR: So we're going to need today the D-TAP number 5, your final polio, your second—

NARRATOR: Pediatrician Dr. Donna Bradshaw-Walters worries that these parents may unwittingly bring back diseases that haven't been seen for decades.

Dr. DONNA BRADSHAW-WALTERS: The possibility of an outbreak is real here in Ashland. We are not living in a bubble, especially in this day and age of international travel. Our Shakespeare festival draws people from all over the world, and it's just a matter of time before someone comes to here from another area who is unimmunized and who has the disease and brings that disease into our community.

NARRATOR: There are many pro-vaccine parents in Ashland, like Lorie Anderson, whose adopted son, Evan, is fully vaccinated.

LORIE ANDERSON: It's an outbreak waiting to happen. And so I don't just care about my own child. My child may be well protected because of his vaccination. But I hate to see people get hurt, injured, die, have to be quarantined, isolated because of an outbreak that is preventable with a vaccine. All they have to do is sign an exemption and their kid is exempt from immunization before they go to school. I would try not to be angry. I hope it doesn't get contentious. It will, though. It will get contentious if there's an outbreak. If vaccinated children start to get breakthrough disease because of the high rate of unvaccinated children, it probably will get ugly.

NARRATOR: The CDC tracks outbreaks of infectious diseases around the country from its center in Atlanta. In 2008, for example, there were numerous small pockets of infection. One involving measles erupted in an under-vaccinated area of San Diego. Like most measles outbreaks, it came from abroad. It began when an infected 7-year-old returned from a family vacation in Switzerland on January 15th. The child gave measles to two siblings, and collectively, they infected classmates at the San Diego Cooperative Charter School in Linda Vista. A visit to the Children's Clinic of La Jolla spread the infection to four others. One of these, an infant, flew on a plane to Hawaii, where she was intercepted and quarantined. Her fellow 250 passengers had to be contacted and tracked.

Dr. Wilma Wooten is San Diego County's public health officer.

WILMA WOOTEN, M.D., M.P.H., Public Health Officer, San Diego: This entire process resulted in exposures of almost 1,000 individuals, 90 with no proof of immunization, 73 were quarantined, 12 additional actual cases of measles in San Diego.

NARRATOR: Public health officials determined that what allowed measles to enter the community was the number of vaccine-hesitant parents who took advantage of the "personal belief exemption" allowed by California.

School principals find themselves caught on the front lines.

WENDY RANCK-BUHR, Principal, SD Cooperative Charter School: The fact is that some families choose not to immunize their children. And then there are families who have children who are particularly medically sensitive, and they're in jeopardy because they could get sick from unimmunized children. So it's a very emotional issue on both sides.