

well as ethical concerns regarding a bill before of the state Legislature, which would further restrict eligibility for exemption from vaccinations based on religious grounds. As a growing number of parents question the mandated immunization course, primary care physicians and pediatricians are working overtime to help families understand the protections that vaccinations provide.

effectiveness of pediatric vaccinations, as

• T accines are safe and effective, and we're fortunate to live in a time when vaccines are available," says pediatrician Arturo Brito, deputy commissioner of the state Department of Health. "Diseases such as smallpox, measles, mumps and polio have been so effectively eradicated by vaccines that younger doctors only see them in textbooks.

"Historically, vaccines are one of the top public health developments of the last century and they've made such a difference in protecting children, their family members and the community from serious illnesses," he says.

"I've watched medicine change within my own lifetime, as all of these vaccines came online," says Margaret Fisher, medical director of Unterberg Children's Hospital at Monmouth Medical Center in Long Branch.

"I used to see up to 20 cases of bacterial meningitis come into the hospital every year, but that disease is gone in the last 15 years, thanks to the vaccine," says Fisher, who also is past president of the New Jersey chapter of the American Academy of Pediatrics. "The fact is, vaccines work and have revolutionized modern society such that these diseases are no longer a threat."

"We used to see people dying from measles and Haemophilus influenzae type B in America, but now, we barely

Best Shot at Good Health?

In New Jersey, where the pediatric vaccination rate is 95 percent, questions still persist about immunizing children

2015

By SUSAN BLOOM

IT'S A TYPICAL WEEKDAY AT **RUTGERS** New Jersey Medical School in Newark as Hanan Tanuos, director of primary care for University Pediatrics, administers a vaccination to a brighteyed, albeit teary infant during a wellness visit. Her young patient is among the 1,400 children, newborn through age 21, who are seen by the bustling practice in a normal month, 75 percent of whom are coming in just for vaccines in compliance with state and national mandates.

"Our patients are pretty good about accepting vaccinations," says Tanuos, noting that New Jersey's more than 95 percent pediatric vaccination rate exceeds the national average of between 82 percent and 93 percent for children under the age of 3, depending on the vaccine. This makes New Jersey among the nation's most stringent and compliant states when it comes to vaccinations. "But some parents do refuse or raise concerns, especially about vaccines for things like HPV or the flu, wondering if these vaccines will make their children sick." Tanuos says.

"I always provide them with handouts on the schedule of different vaccinations and give them the opportunity to raise questions so that we can talk about it openly," she adds. "I want them to read from a reliable source, not necessarily the Internet or the media or a flawed study."

Tanuos' comments speak to the longtime debate about the safety and



Hanan Tanuos, left, director of primary care for University Pediatrics at Rutgers New Jersey Medical School in Newark, administers a vaccination to 15-year-old Yasmine Johnson in May

remember these diseases," says Glenn Fennelly, a pediatric infectious disease specialist and chairman of the Department of Pediatrics at Rutgers New Jersey Medical School in Newark.

Some vaccines are administered as early as the first hours after birth, and most are required for children to attend school, unless they are granted a valid medical or religious exemption.

Of the state's more than half-million children in pre-K, kindergarten, and first and sixth grades (years when vaccinations are required), about 0.3 percent were exempt for medical reasons while 1.7 percent were excused on religious grounds - for a total of about 11,000 student exemptions statewide in 2014.

As these statistics show, some parents are not comfortable accepting New Jersey's mandated course of pediatric vaccinations.

Among them is Sue Collins, co-founder of the New Jersey Coalition for Vaccination Choice. Decades ago, as many of today's parents were growing up, "we used to get a total of four vaccines - for smallpox, diphtheria (DPT), polio and measles/mumps/rubella (MMR)," says Collins, the parent of two teenagers who have not been vaccinated. "Now, children receive 49 doses of 14 different vaccines by age 6 and 69 doses of 16 different vaccines by age 18," she says.

Collins believes that "the new normal is not a healthy kid - kids are increasingly sick in America and something's causing that. The GMOs in food and other factors may be contributing to this outcome, but toxins in vaccines also play a role in

"We want to have a vaccine for everything," she says. "But it's not clear that the body can handle all of them. We keep piling on the vaccines, but there are no studies confirming how effective or safe all of these are alone or in combination."

However, Brito is quick to refute Collins' assertions: "Vaccines are made available for serious illnesses only and are developed with great care, caution and scientific integrity."

Brito adds that while it's a complicated issue, many variables have contributed to the rise in chronic conditions such as ADHD, autism and other developmental or endocrine disorders among children. He says that part of the increase in their occurrence is because the medical

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Top Doctors for Children's Health

Adolescent Medicine

Silvia A. Blaustein

Preventive Medicine, Adolescent Gynecology, Adolescent Behavior-High Risk, Vaccines Paterson (973) 754-2523 St. Joseph's Regiona Medical Center

Adolescent Gynecology, Eating Disorders, Preventive Medicine

(732) 565-5487 Saint Peter's University Hospital

Robert T. Brown Adolescent Gynecology, Adolescent Behavior-High Risk, Preventive Medicine Camden (856) 342-2001 Cooper University Hospital

Jill Clark-Hamilton Eating Disorders, Adolescent Gynecology, Behavioral Disorders Gorveb Children's Hospital

Lori B. Feldman-Winter Nutrition, Eating Disorders Behavioral Disorders (856) 751-9339

Peter J. Imbornone (201) 291-1010 Hackensack University Medical Center

Robert L. Johnson AIDS/HIV. Abuse/Neglect. Behavioral Disorders Newark (973) 972-2100

Wendy P. Neal Adolescent Gynecology Newark (973) 926-7282 Children's Hospital of New Jersey at Newark Beth Israel Medical Center

Eating Disorders (973) 971-5199 Goryeb Children's Hospital

Leslie Sanders Eating Disorders (908) 522-5757 Overlook Medical Center

Barbara K. Snyder Eating Disorders, Pediatric New Brunswick Hospital - New Brunswick

Paulette D. Stanford Adolescent Gynecology, Adolescent Behavior-High Risk (973) 972-2100

Allergy & Immunology

Eric W. Bantz Asthma & Allergy, Pediatric Allergy & Immunology, Food & Drug Allergy, Allergic Rhinitis (609) 953-7500 Virtua Memorial Hospital - Burlington

Theodore FalkAsthma, Pediatric Allergy & Immunology, Immune Deficiency, Chronic Fatigue Syndrome River Edge (201) 487-2900

Debora K. Geller Pediatric Allergy & Immunology, Allergic Rhinitis, Asthma

Emerson (201) 265-7515 Chilton Medical Center

(732) 283-3040 JFK Medical Center

Patrick Perin Allergy, Asthma, Pediatric Allergy & Immunology

(856) 227-5700 Kennedy University Hospital
- Stratford

Justin M. Skripak Asthma & Allergy, Food Allergy, Immune Deficiency, Pediatric Allergy & Immunology

Child & Adolescent Psychiatry

Elizabeth

Autism Camden (856) 342-2328 Cooper University Hospital

Mood Disorders (973) 618-0100 Hackensack University Medical

Suneeta E. Chacko-Varkey ADD/ADHD, Anxiety & Mood Medical Center

Rama R. Goginen Camden (856) 342-2328 Cooper University Hospital

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Holy Name Medical Center

Sinus Disorders, Food Allergy,

Pediatric Allergy & Immunology, Rhinitis, Urticaria, Sinusitis, Contact Dermatitis Englewood (201) 871-4755

Nayla Z. Mumneh Asthma & Allergy, Pediatric Allergy & Immunology, Food Allergy & Eczema

(201) 836-6400 Holy Name Medical Center

Paresha S. Shah Allergic Rhinitis, Asthma, Food Allergy, Pediatric Allergy & Immunology

(201) 722-9850 Valley Hospita

Romulo A. Aromin Jr. Addiction/Substance Abuse (908) 994-7028 Trinitas Regional Medical Center

Family Therapy, ADD/ADHD, Bipolar/Mood Disorders, Passaic (973) 471-8006 St. Mary's Hospital

Center - Mountainside

Westfield (908) 232-6566 Newark Beth Israel



Pediatrician Hanan Tanuos, left, speaks with Hanan Almubalak, holding her young daughter Saba at Rutgers New Jersey Medical School, in Newark

community has simply gotten better at recognizing and diagnosing these issues earlier.

"Vaccines are on a well-studied and approved schedule, and there's no scientific evidence that vaccines contribute to any chronic disease," Brito says.

"There's no proven causal link between vaccines and autism," says Fennelly, referring to a well-publicized 1998 study by Andrew Wakefield, published in the UK medical journal The Lancet, which first sparked concerns about a link between the MMR vaccine and autism. The story gained a foothold in the media and among celebrities such as Jenny McCarthy, mother of a 13-year-old son with autism. "The research was ultimately retracted because it was flawed and the author has since had his medical license revoked," Fennelly says. "The data in that original study has been discredited and does a disservice to the medical community's extensive efforts to get at the true root cause of autism."

While Fisher acknowledges that severe allergic responses can occur following a vaccination, she says, "These are rare. Many other conditions appear or are recognized after immunization, but almost always these are temporal associations, not causal associations."

Fennelly says that "almost all of the effects of vaccinations are rather common and mild, including swelling, discomfort and tenderness at the site of the immunization, the same as if we were injecting salt water.

"As for concerns over being overloaded with vaccine antigens," he says, "there were many more antigens contained in the fewer vaccines administered years ago than in all of them combined today because vaccines have become more purified and highly developed."

"Everyone wants to raise healthy children," says Collins, who believes that vaccine immunity and protection don't last as long as people think and that outbreaks can be generated by the vaccinated when the live virus is shed.

"We're not born vaccine-deficient, and a strong and healthy immune system is the best protection against disease," she says, adding that the media has recently covered new studies suggesting that the measles virus may naturally protect against certain cancers and that strains of the polio virus might hold promise in helping to treat brain cancer.

Collins argues against the "onesize-fits-all" mentality of vaccinating everyone across the board to prevent the possibility of contracting measles, the flu, hepatitis B and

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Lisa A. Kotler Eating Disorders, ADD/ADHD, Depression, Anxiety Disorders

(201) 465-8111 NYU Langone Medical Center, N.Y.

Emile I. Pincus Substance Abuse, Suicide ADD/ADHD, Anxiety

Andres J. Pumariega Cross Cultural Psychiatry, Eating Disorders, Psychiatry in Physical Illness, Mood Disorders

(856) 342-2328 Cooper University Hospital

Pervasive Development Disorders, Anxiety Disorders, ADD/ADHD, Child Psychiatry

(732) 548-1600 Robert Wood Johnson University Hospital - Somerset

James R. Varrell

Behavioral Disorders, Family Therapy, Psychopharmacology, Virtua Marlton Hospita

Child Neurology

Ronald E. Barabas

Developmental Diso Metabolic Disorder: (855) 852-8150 Monmouth Medical Center

> Harvey S. Bennett Cerebral Palsy

(973) 971-5700 Goryeb Children's Hospital

Epilepsy/Seizure Disorders

(201) 444-0868 Valley Hospital

Trevor Desouza Epilepsy, Neuromuscular Disorders, Cerebral Palsy,

Tourette's Syndrome Morristown (973) 993-8777 Goryeb Children's Hospita

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Michael H. Goodman Brain Injury, Concussion Management, Seizure Disorders, Fetal Neurology (856) 342-2226 Cooper University Hospital

Elliot A. Grossman Migraine, ADD/ADHD,

Tourette's Syndrome, Epilepsy, Developmental Disorders, Sleep Disorders Florham Park (973) 966-6333 Saint Barnabas Medical Center

Peter L. Heilbroner Pediatric Neurology, ADD/ADHD **Ridgewood** (201) 444-0868

Valley Hospital Lorraine M. Lazar Epilepsy/Seizure Disorders

Morristown (973) 971-5700 Gorveb Children's Hospital

Autism, Epilepsy, Headache West New York (201) 766-9666 Hoboken University

Sue Xue Ming Autism, Sleep Disorders Newark (973) 972-2922

Mark I. Mintz

Asperger's Syndrome, ADD/ ADHD, Autism, Epilepsy/ (856) 346-0005

Jayoung Pak Epilepsy/Seizure Disorders Newark (973) 972-2922

Rolando Sousa Epilepsy, Autism, Neurofibromatosis

Hackensack (201) 518-7290 NYU Langone Medical Center, N.Y.

Eveline C. Traeger Autism, ADD/ADHD, Learning Disorders Mountainside (908) 233-3720

Jan B. Wollack

New Brunswick (732) 235-7875 Robert Wood Johnson University Hospital - New Brunswick

Children's Specialized Hospital

Clinical Genetics

Helio F. Pedro Pediatric Clinical Genetics, Chromosome Disorders, Inherited Disorders Hackensack (551) 996-5264 Hackensack University Medical Center

Rhonda E. Schnui

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AUGUST 2015 | 40 | ni.com/inside-iersev ni.com/inside-iersev | 41 | AUGUST 2015 other conditions. "Are we not just trading mild rites of passage for more deadly, chronic illnesses? What we're experiencing today, with the prevalence of sick kids, far outweighs the incidence of diseases like polio, which reported fewer than 1,700 cases worldwide in 2009," she says.

F or those like Louise Kuo Habakus, a Monmouth County resident who is the founding director of Fearless Parent, an online hub for evidence-based news about health, wellness, green living and holistic parenting, the state's mandated pediatric vaccination requirements reflect more than health-related concerns. She believes they also raise serious questions regarding freedom of informed choice, the rights of individuals in relation to governments, and other moral and ethical issues.

"I believe that much of the confusion, disconnect and anger regarding vaccinations today goes beyond the potential toxins they contain or the risk of injury they pose, and involves the way they disrupt our freedom to make informed health choices for ourselves and our children," says Kuo Habakus.

And while she says that her children, 11 and 14 years old, are vaccinated, Kuo Habakus promotes the notion of informed consent. "Most kids are vaccinated," she says, and with fewer than 200 cases of measles reported in the United States so far this year, "there's no public health emergency here requiring government to override an individual's right to informed choice."

Medical experts beg to differ, citing that illnesses such as the measles — vaccinations for which have been routinely administered to kids since the 1960s — once affected 3 million to 4 million Americans each year and resulted in brain damage or death for hundreds of thousands annually. "The world is so small and we're only a plane ride away from seeing a resurgence in illnesses like the measles," Brito says.

"Some parents do raise issues over their right to choose, but what they may not understand is that the choice they make doesn't end with their child," Fisher says. "A cluster of unvaccinated kids exposes other kids, some of whom may be too young to receive their vaccinations yet or who have other underlying medical conditions that preclude them from being immunized, and who may then further expose parents, grandparents and other caregivers to illness.

"One day, we may be able to know which child needs which vaccine and do selective vaccinations," she says, "but we're not there yet, and today vaccines absolutely ensure less incidence of these diseases in the entire population."

At her Newark-based practice, Tanuos says, "We counsel parents on immunizations, and ... try to address questions or concerns before their child's next vaccine so that parents have time to digest the information. Some parents feel more comfortable postponing a vaccination by a few months, until the end of the recommended age range, but I see that as far better than their child not receiving the vaccine at all."

In addition to asking questions and doing their research, "people need to weigh the risks with the benefits, and the benefits of vaccinations far exceed any risks," she says. "It's very rare to get serious complications from vaccine administration, and vaccines protect your child and the entire community from outbreaks." ⁽ⁱ⁾

LEARN MORE

- For information on pediatric vaccinations mandated in New Jersey, eligibility requirements for exemption and other resources, visit the National Vaccine Information Center at nvic.org/Vaccine-Laws/ state-vaccine-requirements/ newiersey.aspx.
- Additional information can be accessed at the Centers for Disease Control's Vaccines & Immunizations home page at cdc.gov/vaccines.
- The New Jersey Coalition for Vaccination Choice is online at njvaccinationchoice.org.

— S.B.

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Dermatology

Miriam Fishman

Pediatric Dermatology Skin Cancer Englewood (201) 569-5678 Englewood Hospital & Medical Center

Warren R. Heymann Dermatopathology, Pediatric Dermatology Marlton (856) 596-0111 Cooper University Hospita

Steven M. Manders Pediatric Dermatology, Dermatologic Surgery Marlton (856) 596-0111 Cooper University Hospital

Sandy S. Milgraum Skin Laser Surgery, Tattoo Removal, Cosmetic Dermatology, Pediatric Dermatology East Brunswick (732) 613-0300 Robert Wood Johnson University Hospital - New Brunswick

Helen T. Shin
Pediatric Dermatology
Hackensack
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Hackensack University
Medical Center

Eugene W. Sweeney Skin Cancer, Pediatric Dermatology, Acne, Skin Treatments Teaneck (201) 837-3939 Holy Name Medical Center

Developmental- Behavioral Pediatrics

David B. Burgess
Developmental & Behavioral
Disorders

Mays Landing (609) 677-7895 Children's Hospital of Philadelphia, Pa.

Audrey E. Mars
Developmental Disorders, Autist
Flemington
(908) 788-6650

Hunterdon Medical Cente

Lisa M. Nalven Developmental & Behavioral Disorders Ridgewood (201) 447-8151 Valley Hospital

Frances Rhoads
Developmental Disorders
Flemington
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Alison Smoller Autism, Developmental & Behavioral Disorders, ADD/ADHD, Learning Disorders Oakhurst (732) 660-0220

Diagnostic Radiology

Melissa Schubach Liebling Pediatric Radiology Hackensack (201) 488-1188 Hackensack University Medical Center

Robyn C. Murphy Pediatric Radiology Morristown (973) 971-5370 Morristown Medical Center David L. Rosenfeld Pediatric Radiology

East Brunswick (732) 390-0040 Robert Wood Johnson University Hospital - New Brunswick

Sharon J. Underberg-Davis Pediatric Radiology East Brunswick (732) 390-0040 Robert Wood Johnson University Hospital - New Brunswick

Hand Surgery

Abram E. Kirschenbaum

Carpal Tunnel Syndrome, Cubital Tunnel Syndrome, Dupuytren's Contracture, Fractures, Tendon Surgery, Arthritis, Sports Injuries, Pediatric Hand Surgery **Denville** (973) 664-9899 Children's Specialized Hospital

Internal Medicine

Michael A. Renzi Adolescent Health, Asthma

Complex Diagnosis
Haddon Heights
(856) 547-6000
Cooper University Hospital

Neonatal-Perinatal Medicine

Nicole A. Anderson

Prematurity/
Low Birth Weight Infants,
Respiratory Distress Syndrome
Ridgewood
(201) 447-8388
Valley Hospital

Elizabeth B. Carlin Nutrition Englewood (201) 894-3472

(201) 894-3472 Englewood Hospital & Medical Center

Rakesh S. Chhabra Multiple Gestation, Prematurity/ Low Birth Weight Infants Hackensack (551) 996-5362 Hackensack University Medical Center

Onajovwe O. Fofah Newark (973) 972-6753

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Michael A. Giuliano Hackensack (551) 996-5362 Hackensack University Medical Center

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Michael A. Graff Neonatology Neptune (732) 776-4283 Jersey Shore University Medical Center

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