

Global Health Newsletter

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Americas

New Law in Tennessee Requires Parental Consent for Vaccinations

The Tennessee General Assembly recently passed the Mature Minor Doctrine Clarification Act, restricting the ability of adolescents to consent to immunizations. This legislation, often referred to as a “parental rights” bill, counteracts the Mature Minor Doctrine, stipulating that healthcare providers cannot administer vaccines to minors without the explicit consent of a parent or legal guardian. Moreover, the law prohibits state employees or agents of the state, including the Tennessee Department of Children’s Services (DCS), from mandating vaccinations for children in state custody, including foster children. Only biological parents of children in foster retain the authority to consent to vaccinations while their children are under state custody, with the DCS having the option to petition the court for vaccination approval.



<https://foxchattanooga.com/news/local/new-tennessee-bill-would-keep-teens-from-getting-vaccinations-without-parental-consent>

The Mature Minor Doctrine, previously in effect, allowed minors aged 14 and above to independently consent to medical procedures, including vaccinations, if they could demonstrate sufficient maturity to make such decisions. In 2021, Dr. Michelle Fiscus, medical director of Tennessee’s Vaccine Preventable Diseases and Immunization Program, shared a memo with the Tennessee Department of Health outlining this doctrine that would allow adolescents to consent for receiving the COVID-19 vaccine. As a response, the state legislature temporarily halted all state-led immunization outreach efforts for children and adolescents and fired Dr. Fiscus. Furthermore, this led to the production of this Mature Minor Doctrine Clarification Act to limit the powers of adolescents to provide consent for immunizations.

Many times legal guardians may not always be available to provide consent for routine medical appointments, with grandparents or other caretakers often stepping in, particularly in cases where parents are absent due to work commitments, rehabilitation programs, or other reasons.

These developments occur amidst rising levels of vaccine hesitancy and refusal, contributing to record-low immunization rates. In Tennessee, childhood immunization rates have declined for three consecutive years.

Further Reading

<https://academic.oup.com/jpids/article/13/2/155/7597167#>

<https://www.nbcnews.com/health/health-news/tennessee-vaccine-law-pits-parental-rights-public-health-rcna141897>

Middle East/Northern Africa

Flooding in the United Arab Emirates

On April 16th, torrential rains triggered widespread flooding in the United Arab Emirates (UAE), marking the country's most significant rainfall event in 75 years. Al Ain, a city bordering Oman, experienced the highest recorded rainfall, reaching 10.03 inches within a 24-hour period. The severe weather claimed the lives of at least 20 individuals in Oman and four in the UAE. Additionally, Dubai International Airport, the world's second busiest airport, faced significant disruption, with 1,244 flights cancelled over a two-day period.



<https://health.wustl.edu/2024-04-18/photos-uae-sees-its-heaviest-rains-in-75-years>

Initially, speculation arose regarding the cause of the intensified rainfall, with some attributing it to cloud seeding. Cloud seeding, a weather modification technique employed by the UAE government to tackle water scarcity, involves the manipulation of existing clouds to stimulate rainfall. This process entails dispersing small particles, such as silver iodide, into clouds to facilitate condensation and precipitation. However, meteorologists have refuted cloud seeding as the driver behind the heavy rainfall.

The flooding resulted from a "cut off" low-pressure weather system, which drew in warm, moist air and while impeding the movement of other weather systems. Climate change has also been cited as a contributing factor, with rising temperatures leading to increased atmospheric moisture. For every degree Celsius rise in temperature, warmer air can hold approximately 7 percent more moisture, potentially resulting in intensified rainfall.

The UAE's susceptibility to heavy rainfall is exacerbated by its dense urbanization, limited green spaces, and inadequate drainage infrastructure. These factors hinder the absorption of rainfall, rendering the country particularly vulnerable to flooding events.

Further reading

<https://www.bbc.com/news/science-environment-68839043>

Asia/Pacific

Sperm Count Falls with Temperatures Rise

A study conducted in Singapore has revealed that temperatures exceeding 30 degrees cause the sperm count in men to decrease. This research was completed as a part of the National University of Singapore's Project HeatSafe initiative, aimed at investigating the repercussions of extreme heat on various aspects of society.

Scientists monitored semen samples from 818 men aged between 25 and 35 in the city-state of Singapore. They discovered that men exposed to average temperatures exceeding 39.8 degrees Celsius (103.64 degrees Fahrenheit) within three months of providing a sample exhibited a 46 percent higher risk of low sperm count. Moreover, sperm motility was also observed to decrease under such conditions.



<https://www.telegraph.co.uk/global-health/climate-and-people/sperm-counts-fall-as-temperatures-rise-new-research-suggest/>

Furthermore, in addition to examining male sperm counts, researchers analyzed birth records of over 30,000 mothers. They found that exposure to extreme heat during the third trimester of pregnancy was associated with an increased risk of premature births, miscarriage and stillbirths.

Further reading

<https://www.telegraph.co.uk/global-health/climate-and-people/sperm-counts-fall-as-temperatures-rise-new-research-suggest/>

Sub-Saharan Africa

Nigeria Leads Global Efforts with the Introduction of Men5CV Vaccine

Nigeria has achieved a significant milestone by becoming the first country in worldwide to introduce the Men5CV Vaccine. The Men5CV vaccine offers protection against five strains of the meningococcus bacteria with a single shot, covering strains A, C, W, Y and X. Notably, the existing meningitis vaccine only targets one strain, namely strain A. The development and deployment of this vaccine have been made possible through funding support from vaccine activities by Gavi and the Vaccine Alliance. The vaccine creation was 13 years in the making and was produced by PATH and Serum Institute of India, with financial backing from the United Kingdom.



<https://www.who.int/news/item/12-04-2024-in-world-first--nigeria-introduces-new-5-in-1-vaccine-against-meningitis>

Nigeria is one of 26 meningitis hyper-endemic countries in Africa. There was a 50 percent increase in annual meningitis cases reported across Africa in 2023. Within Nigeria, an outbreak of *Neisseria meningitidis* occurred between October 1 2023, and March 11, 2024, resulting in 1,742 suspected cases and 153 deaths.

Further reading

<https://www.who.int/news/item/12-04-2024-in-world-first--nigeria-introduces-new-5-in-1-vaccine-against-meningitis>

Europe

UTIs Prevented by Vaccine

The European Association of Urology (EAU) presented the findings of a long-term study assessing the efficacy of the MV140 vaccine in preventing recurrent urinary tract infections (UTIs) during the 39th Annual European Association of Urology Congress in Paris, held in April. Recurrent UTIs were defined as three or more UTIs within a 12-month period. The study revealed that 54 percent of participants, both men and women, remained UTI-free for nine years following vaccination.

UTIs are the most prevalent bacterial infections, with approximately 20 to 30 percent of cases categorized as recurrent. Moreover, the rise of antibiotic-resistant UTIs further underscores the urgency for innovated preventative measures. The MV140 vaccine, also referred to as Uromune, was developed by the Spain-based pharmaceutical company Immunotek. The vaccine contains inactivated forms of four bacterial species -*Escherichia coli.*, *Klebsiella pneumoniae*, *Proteus vulgaris*, and *Enterococcus faecalis*- suspended in water. Administered as an oral pineapple-flavored suspension spray, the vaccine is delivered sublingually daily for three months.



<https://www.biopharma-reporter.com/Article/2024/04/08/Breakthrough-UTI-vaccine-could-prevent-infections-for-nine-years>

Conducted by clinicians at the Royal Berkshire Hospital in the United Kingdom, this study focused on evaluating the safety and efficacy of the MV140 vaccine. The cohort consisted of 89 patients aged 18 years and older, who were followed over nine years. Initial follow-up in the original trial spanned 12 months, with subsequent analysis using electronic health records data to assess long-term outcomes. 48 of the 89 participants remained entirely infection-free throughout the nine years. On average, participants experienced an infection-free interval of 54.7 months (four and a half years) with 40 percent administering the vaccine again after one or two years.

Further reading

https://www.eurekalert.org/news-releases/1039942?utm_campaign=morning_rounds&utm_medium=email&_hsenc=p2ANqtz-8RiqUMiVCfe6AOhEGUlwQ7nn3DE1tJUgiARizrrEstxP-C_BW2WwoeLW0rTb9yMJLoEjV-SpOF-Or-ki9MwOG1ActdQ&_hsmi=301604418&utm_content=301604418&utm_source=hs_email
<https://newatlas.com/medical/utis-oral-vaccine/>

Upcoming Lectures/Conferences

Public health saved your life today and you don't even know it.

In a new four-part series Bloomberg School faculty, public health leaders, and practitioners delve into the often overlooked, yet crucial, role of public health in safeguarding our well-being.

https://www.pbs.org/show/the-invisible-shield/?mc_cid=a5ae0fdb6&mc_eid=3c187e982e

Condoms were once an essential part of the public health toolkit to fight HIV and STIs. But over the last decade, condom use among men who have sex with men has declined. UW Professor Steven Goodreau discusses why public health experts should tout the advantages of one of the most ubiquitous tools for safer sex practice.

https://johnshopkinssph.libsyn.com/732-bringing-back-condoms-to-prevent-hiv?mc_cid=a5ae0fdb6&mc_eid=3c187e982e

Methadone Access for Incarcerated Pregnant Women

Johns Hopkins Medicine gynecology and reproductive health researcher Dr. Carolyn Sufrin and Bloomberg Fellow Camille Kramer discuss their new study that shows how difficult it is to access opioid use disorder medication for anyone behind bars, let alone pregnant women in the prison system.

https://johnshopkinssph.libsyn.com/728-methadone-access-for-incarcerated-pregnant-people?mc_cid=a5ae0fdb6&mc_eid=3c187e982e

Infant and Young Child Feeding in Emergencies during Infectious Disease Outbreaks

This course is designed to equip learners with foundational knowledge on how to protect, promote, and support recommended infant and young child feeding (IYCF) practices in humanitarian settings during outbreak preparedness and response.

<https://kayaconnect.org/course/info.php?id=6174#:~:text=This%20eLearning%20course%20is%20designed,during%20outbreak%20preparedness%20and%20response.>