

UPDATED GUIDELINE

New pneumococcal vaccination guidelines: what adults need to know

*Streptococcus pneumoniae* infection is a common cause of pneumonia in adults. Vaccines have helped reduce some strains, but new ones have emerged, leading to the development of three recommended vaccines: PCV15, PCV20, and PPSV23. Recently, CDC's Advisory Committee on Immunisation Practices (ACIP) updated the new pneumococcal vaccination guideline.

For healthy adults under 65, pneumococcal vaccination is not typically recommended. Adults aged 19-64 with health issues should get either PCV20 or PCV15 followed by PPSV23 a year later if they have not had a pneumococcal conjugate vaccine before. If PCV20 is given, PPSV23 is not needed. Those in the same age group who have had just one dose of PPSV23 should receive PCV15 or PCV20 at least a year after their PPSV23 shot.

If adults aged 19-64 with health issues (or healthy adults aged 65+) have received PCV13 alone, they should get PCV20 or PPSV23 a year later. For adults over 65 without prior vaccination, PCV20 or PCV15, followed by PPSV23 a year later, is recommended. These vaccines cover similar strains, but the duration and type of immunity can differ. Some might need re-immunisation.

Previous guidelines suggested PPSV23 alone (2 doses) or PCV13 followed by PPSV23. It is important to consult healthcare providers for personalised recommendations on pneumococcal vaccination based on age, health status, and prior vaccinations.



WORLD AIDS DAY 2023

Let communities lead in the fight against HIV/AIDS

STAR HEALTH DESK

This World AIDS Day transcends a mere celebration of past achievements; it serves as a resounding call to action, urging the empowerment and support of communities in their pivotal leadership roles. The theme of World AIDS Day 2023, 'Let communities lead,' resonates deeply, emphasising the criticality of community involvement in all facets of HIV plans and programmes.

Community leadership is not merely a recommendation but a foundational aspect that should permeate the formulation, budgeting, implementation, monitoring, and evaluation of HIV plans. The rallying cry, "Nothing about us without us," underscores the necessity of authentic community involvement.

Moreover, robust funding, reliable support, and equitable remuneration are imperative to unleashing the full potential of community leadership. As the UNAIDS Global AIDS Update highlights, countries placing people and communities at the forefront of their policies and programmes exhibit leadership in the global HIV response.

Yet, despite their significance, community-driven efforts remain underutilised and underfunded on a global scale. Shockingly, globally 9.2 million individuals living with HIV are unable to access life-saving treatment, resulting in 630,000 AIDS-related deaths in 2022. Central, eastern, western, and southern Africa, which harbour 65% of all people living with HIV, continue to be the most affected regions.

This crisis stems from a lack of



community-focused HIV prevention services, inadequate funding, and the absence of innovative approaches for marginalised populations. Additionally, punitive laws and discrimination act as barriers to effective community-driven initiatives.

The efficacy of community-first approaches cannot be understated. Models like community-led monitoring, community-based participatory research, and community advocacy serve as pillars of empowerment. These approaches not only empower communities but also yield tangible improvements in service accessibility, acceptability, affordability, and quality.

World AIDS Day itself, observed annually on December 1st, stands as a cornerstone in the global fight against HIV/AIDS. It unites people worldwide to raise awareness, demonstrate solidarity, and reflect on the progress made and the challenges that persist. This year's theme, 'Let communities lead,' underscores the pivotal role

of communities in shaping the HIV response, aligning with the overarching objective of ending AIDS by 2030.

Health workers, government bodies, civil society, community leaders, and HIV programme managers all play vital roles in this fight. Advocating for access to essential HIV services, allocating resources, combating stigma, and empowering frontline health workers are just a few aspects of their concerted efforts towards an AIDS-free world. In conclusion, World AIDS Day 2023 serves as a poignant reminder that the journey towards an AIDS-free future demands collective commitment, unwavering dedication, and comprehensive community involvement. It's a call to champion community-first approaches, fostering an environment where every individual impacted by HIV/AIDS is empowered, supported, and given the opportunity to thrive. Together, let us reinforce our resolve to ensure that no one is left behind in this global endeavour.

Breakthrough AI technology offers potential life-saving heart attack detection

A revolutionary AI tool has emerged as a potential game-changer in identifying individuals at risk of heart attacks. In a groundbreaking real-world trial, this technology demonstrated an impressive 45% improvement in treatment for patients with chest pain.

Traditionally, around 350,000 individuals undergo cardiac CT scans annually in the UK, with many discharged due to inconclusive results. Unfortunately, a significant number of these patients later experience heart attacks, often due to undetected arterial issues. Professor Charalambos Antoniades and his team at the University of Oxford created and tested the innovative AI tool, which examined data from over 40,000 patients who had undergone routine cardiac CT scans.

By examining changes in artery fat and other clinical factors, the AI accurately predicted cardiac events. What is revolutionary is that this tool identified a ten-fold higher risk of heart-related fatalities among patients with inflammation in their blood vessels but no artery obstructions. In a world-first pilot, clinicians altered treatment plans in up to 45% of cases based on the AI-generated risk scores.

Professor Antoniades, enthusiastic about its potential, believes this AI tool could save thousands of lives annually. Professor Sir Nilesh Samani of the British Heart Foundation echoes this sentiment, emphasising the critical role of AI in identifying high-risk patients and driving better treatment decisions. With the potential to transform patient care and reduce needless heart-related fatalities, this AI-powered innovation holds promise for revolutionising how chest pain cases are managed and treated across the NHS.

Professor Antoniades's research is supported by the National Institute for Health and Care Research Oxford Biomedical Research Centre.



DISABILITY DAY and occupational therapy

RABEYA FERDOUS

On December 3, 1992, the United Nations established the first International Day of Persons with Disabilities. The aim of this day is to promote an understanding of disability issues and mobilise support for the dignity, rights, and well-being of persons with disabilities. The theme for 2023 is "United in action to rescue and achieve the SDGs for, with, and by persons with disabilities."

According to the 'Persons with Disabilities Rights and Protection Act 2013' of Bangladesh, among the population overall, 2.80% have disabilities, which is 3.28% for males and 2.32% for females, 2.89% in rural areas, and 2.45% in urban areas.

An occupational therapist plays a significant role in rehabilitating disabled people. Occupational therapy (OT) is a client-centred health profession that promotes health and well-being through the use of occupation. By working with people and communities and modifying their environment, therapists enhance their ability to participate in and engage in activities of everyday life. The primary emphasis of occupational therapists is on fine motor skills, visual-perceptual skills, cognitive skills, and sensory processing deficits.

OT is part of the overall treatment programme that people with disabilities are using. The overall

goal is to promote the individual's ability to perform daily activities in a way that enhances their quality of life and makes it possible to enjoy independent living.

The programme should enable the participants to foster independence, productivity, and self-care, both at home, at work, in school, and out in public.



Therapists focus not only on improving strength and coordination while performing different tasks but also on assisting in decision-making, problem-solving, memory, abstract reasoning, and perception, to name a few.

Occupational therapists treat a variety of conditions, including:

- Paediatric conditions such as autism, cerebral palsy, Down syndrome, spina bifida, mental retardation, and so on.

- Neurological conditions like stroke, Guillain-Barré syndrome, transverse myelitis, spinal cord injury, Parkinson's disease, meningitis, encephalitis, and many more

- Mental conditions: Occupational therapists provide mental health support for different mental health conditions. For example, depression, anxiety, bipolar mood disorder, conduct disorder, schizophrenia, etc.

- Musculoskeletal conditions: different types of arthritis, neck pain, back pain, knee pain, heel pain, etc.

- Environmental modifications: Occupational therapists ergonomically modify the environment according to patients' abilities, which includes bedroom modification, kitchen modification, study room modification, office room modification, and so on.

Occupational therapy has incredible benefits for patients.

Now, there are 408 qualified occupational therapists. Among them, a few are working in Bangladesh in a limited capacity. The government should need to recruit occupational therapists in every government hospital. That is how disabled patients will get more facilities.

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RSV's surprising impact on older adults

STAR HEALTH REPORT

Recent investigations into respiratory syncytial virus (RSV) have revealed a surprising trend: it is not just a concern for children anymore. Studies focusing on adults aged 60 and above have unveiled the serious impact of RSV on this age group.

In one study analysing data from US hospitals, researchers found that among adults hospitalised between February 2022 and May 2023, 5.3% tested positive for RSV. Since COVID-19 and influenza had previously overshadowed RSV cases in older adults, this discovery was

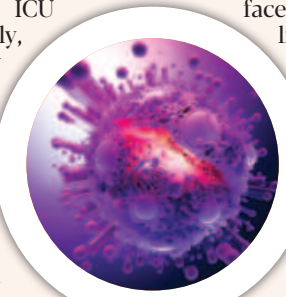
significant.

Surprisingly, RSV-infected patients faced more severe outcomes, including a higher need for oxygen, ICU admission, and, sadly, higher mortality rates compared to those with other infections.

Another study examining RSV's effects on older adults found that certain factors, like age and specific health conditions such as obesity, lung diseases (like COPD), heart

problems (like congestive heart failure), and diabetes, increased the risk of severe outcomes. Around 20% of these patients faced critical consequences like ICU admission or worse.

These findings underscore the importance of understanding RSV's impact on older adults. It is not just a virus for children anymore; it can lead to severe illness and even death in older individuals, especially those with underlying health issues.



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PLUJ

MCDK

Vesicoureteric reflux

Exstrophy Bladder

PUV

Hydrocele

PAEDIATRIC UROLOGY

Paediatric Urology is a medical specialty that focuses on diagnosing and treating urological conditions in children, including the urinary tract system and the male and female genitalia. The urinary tract system includes the kidneys, ureters, bladder, and urethra, while the male genitalia includes the penis, testicles, scrotum, and the female genitalia is vagina.

Advanced Paediatric Urology Surgeries

- Pelviureteric Junction Obstruction
- Multicystic Dysplastic Kidney
- Vesicoureteric reflux
- Exstrophy Bladder
- Posterior Urethral Valve
- Undescended Testis
- Epispadias
- Hypospadias
- Phimosis
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