

WHO invites vaccine manufacturers to apply for emergency use listing amid growing mpox outbreak

The World Health Organisation (WHO) Director-General announced on 7 August 2024 that he had triggered the process for Expression of Interest for Emergency Use Listing (EUL) of mpox vaccines given worrying trends in the disease's spread. There is a serious and growing outbreak in the Democratic Republic of the Congo (DRC) that has now expanded outside the country. A new viral strain, which first emerged in September 2023, has for the first time been detected outside DRC.

The EUL procedure is an emergency use authorisation process, specifically developed to expedite the availability of unlicensed medical products like vaccines that are needed in public health emergency situations. This is a time-limited recommendation based on a risk-benefit approach.

WHO is requesting manufacturers to submit data to ensure that the vaccines are safe, effective, of assured quality, and suitable for the target populations.



Granting of an EUL will accelerate vaccine access, particularly for those lower-income countries that have not yet issued their own national regulatory approval. The EUL also enables partners, including Gavi and UNICEF, to procure vaccines for distribution.

Mpox is a viral illness caused by the monkeypox virus, a species of the genus Orthopoxvirus. Mpox can be transmitted to humans through physical contact with someone who is infectious, with contaminated materials, or with infected animals.

There are currently two vaccines in use against the disease, both of which have been recommended for use by the WHO Strategic Advisory Group of Experts on Immunisation, or SAGE.

Source: World Health Organisation



High-carb foods that are actually healthy

STAR HEALTH DESK

Carbohydrates have had a rough go of it in recent years, often being blamed for everything from weight gain to type 2 diabetes. But not all carbs are created equal. While processed foods high in sugar and refined grains can be unhealthy, many nutrient-dense, fibre-rich foods are packed with healthy carbs that are good for you.

Oats: Oats are carb-rich food that deserves a place in your diet. A cup of raw oats contains 54 grammes of carbs, but it also packs in 8 grammes of fibre, including a special type called oat beta-glucan. This fibre is known to lower cholesterol levels, reduce the risk of heart disease, and improve blood sugar levels. Oats are also surprisingly high in protein, making them a great option for breakfast or a snack that keeps you full and satisfied.

Bananas: Bananas are a staple in many diets, and for good reason. One large banana contains about 31 grammes of carbs, primarily in the form of starches and sugars. Bananas are also high in potassium, vitamins B6 and C, and beneficial plant compounds. They are particularly good for heart health, thanks to their potassium content, and less ripe bananas contain resistant starch and pectin, which support digestive health.

Sweet potatoes: Sweet potatoes are a delicious and nutritious root vegetable, rich in carbs and packed with vitamins A and C, potassium, and antioxidants. A half-cup serving of mashed sweet potatoes contains about 20.7 grammes of carbs. The antioxidants in sweet potatoes help protect your cells from damage, reducing the risk of chronic diseases. Plus, their fibre content can aid in weight management by keeping you feeling full longer.

Oranges: Oranges are not only refreshing but also nutritious. These citrus fruits contain about 15.5 grammes of carbs per 100 grammes and are a great source of r. Oranges are particularly high in vitamin C, potassium, and several B vitamins. They also contain citric acid and antioxidants, which can boost heart health, prevent kidney stones, and enhance iron absorption from other foods, helping to prevent anaemia.

Apples: Apples are a beloved fruit with a sweet-tart flavour and crisp texture. Depending on the variety, apples generally contain 14-16 grammes of carbs per 100gms. They are a good source of vitamin C, fibre, and antioxidants. Eating apples has been linked to better blood sugar management and heart health, and early research suggests they may even reduce the risk of certain types of cancer.

Kidney beans: Kidney beans are a legume rich in protein, carbs, and fiber. A 100 gramme serving of cooked kidney beans contains about 21.5 grammes of carbs. They are also packed with vitamins, minerals, and antioxidants, including anthocyanins and isoflavones. Kidney beans have been shown to help regulate blood sugar and may reduce the risk of colon cancer.

Chickpeas: Chickpeas, also known as garbanzo beans, are another legume high in carbs and fiber. A 100 gramme serving of cooked chickpeas contains 27.4 grammes of carbs, and nearly 8 grammes of chickpeas are also a great source of plant-based protein, iron, and B vitamins. They have been linked to improved heart and digestive health, and some studies suggest they may help protect against certain types of cancer.

Not all carbs are bad. In fact, many of the healthiest foods are high in carbohydrates. While refined carbs like white bread and pasta may not be the best choice, these nutritious, high-carb foods can be part of a healthy, balanced diet.

So, the next time you are planning a meal, consider adding some of these healthy carbs to your plate. Your body will thank you!

EVERYDAY CARCINOGENS What you need to know to stay safe

Carcinogens are substances that can cause cancer, and they are more common than you might think. They can be found in the air we breathe, the products we use, and even the foods we eat. But just because you come into contact with a carcinogen does not mean you will automatically get cancer. It depends on how much you are exposed to and your genetic makeup.

One of the most well-known carcinogens is tobacco. Whether you are smoking or inhaling secondhand smoke, tobacco contains at least 70 chemicals that can damage your DNA and lead to cancer. Even smokeless tobacco is not safe.



Radon, a naturally occurring gas, becomes dangerous when it accumulates indoors. It is the leading cause of lung cancer in non-smokers, and since you can not see or smell it, testing your home is essential.

Then there is asbestos, once commonly used in building materials. If its tiny fibres become airborne and are inhaled, they can lodge in your lungs and cause serious health problems, including cancer.

Even foods can be risky. Crispy, browned foods like roasted potatoes can release acrylamide, a chemical that has been linked to cancer in animals. Limiting these foods might help reduce your risk.

Other everyday carcinogens include formaldehyde in household products, ultraviolet rays from the sun or tanning beds, alcohol, processed meats, engine exhaust, and polluted air.

Understanding these risks and making small changes in your daily routine can help you protect your health and reduce your exposure to these common carcinogens.

Occupational therapy for bullet injury

RABEYA FERDOUS

Many students and normal people experienced gunshot injuries in recent times in Bangladesh. This injury hampered their life very significantly.

A gunshot wound is a penetrating injury caused by a projectile from a gun. Damage may include bleeding, bone fractures, organ damage, wound infection, and loss of the ability to move parts of the body. In severe cases, death may occur.

There are numerous conditions that may arise after gunshot injuries. These include soft tissue injury, muscle injury, nerve injury,

the approach to care.

4. The treatment plan is then implemented, with the necessary interventions and actions being carried out.

Finally, the effectiveness of the treatment is evaluated to determine whether the desired outcomes have been achieved.

According to patients' conditions, treatment may vary. Overall, the occupational therapist provides the following therapy:

- Functional Range of Motion (ROM) exercises
- Functional strengthening exercise
- Practice Activities of Daily Living (ADL)



vascular injury/haemorrhage, bone injury, pain, spinal cord injury, amputation.

After a gunshot, the patient faces different long-term complications. These are joint contracture, myofascial, chronic, or neuropathic pain, complex regional pain syndrome, central sensitisation, mental health issues, including post-traumatic stress disorder, anxiety, or depression, difficulty to participate in daily activities, etc.

Occupational therapy has a significant role in rehabilitating bullet-injured patients. Occupational therapists help to train up on re-performing daily activities and facilitate community reintegration. An occupational therapist uses specific activities to limit the effects of disability and promote independence in all aspects of daily life.

Mainly, occupational therapists use the following stage during therapy sessions:

1. Upon receiving a referral, the first step involves conducting a thorough assessment of the situation or condition.

2. Following the assessment, the next phase is identifying the specific problem or problems that need to be addressed.

3. With the problem identified, a detailed treatment plan is then developed to guide

like dressing, grooming, brushing, combing hair, etc.

- Functional balance training
- Memory training
- Carer and family training
- Writing practice
- Learn energy conservation techniques.
- Fall prevention
- Ergonomically home, office, or classroom modification
- Provide an assistive device or splinting.
- Stress management
- Social skills training

A person may suffer from any type of disability after a gunshot injury. Students face different challenges to continue their study. In this situation, the occupational therapist can help to make him/her independent from their study-related or other daily task activities. Occupational therapy focusses on functional performance and occupational engagement—staying in school, keeping a job, and maintaining relationships.

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A new hope for spinal cord injury patients

Predicting recovery from a cervical spine injury has always been a tough challenge, often leaving patients and their families in uncertainty. However, a recent study may have discovered a key to more accurate forecasts: preserved spinal tissue bridges, which are intact neural tissue near the injury site.

The Lancet published a groundbreaking study that spanned three countries and included 227 patients with spinal cord injuries (SCI) at the C1-C7 vertebrae, revealing these tissue bridges as a powerful predictor of sensory motor recovery. The research team conducted imaging assessments a few weeks after the injury, followed by neurological check-ups at 3 months and, for most patients, at 12 months.

The results are promising. For every millimetre of preserved tissue bridge, patients saw significant improvements in their ability to move and sense touch. A tissue bridge width of 2.0 mm or more was linked to better recovery at 3 months, while a width of 4.0 mm was particularly telling for long-term improvement.

These findings could transform the way doctors and therapists approach spinal cord injuries, offering a new tool to guide treatment and give patients a clearer picture of their recovery journey. As researchers continue to explore this exciting development, the future looks brighter for those facing the daunting road to recovery after a spinal cord injury.

Is Bangladesh ready to face the hit of Mpox?

GOURI BASAK PAROMA

The World Health Organisation (WHO) has classified the Mpox epidemic a Public Health Emergency of International Concern (PHEIC) on August 14, 2024, prompting governments throughout the world to reevaluate their readiness. Bangladesh, a highly populated South Asian country, is at a critical juncture as the new, more transmissible Clade Ib type of Mpox spreads fast throughout Africa and beyond, prompting a thorough assessment of its preparedness to face this possible calamity.

The global health community is on high alert following the discovery of the Clade Ib form, which appears to spread more easily through sexual networks, adding a new dimension to the issue. Mpox mostly infects people and animals. It is in the same viral family as smallpox, although the symptoms are milder, such as fever, chills, and body pains. However, it has the potential to cause serious disease and even death in certain circumstances.

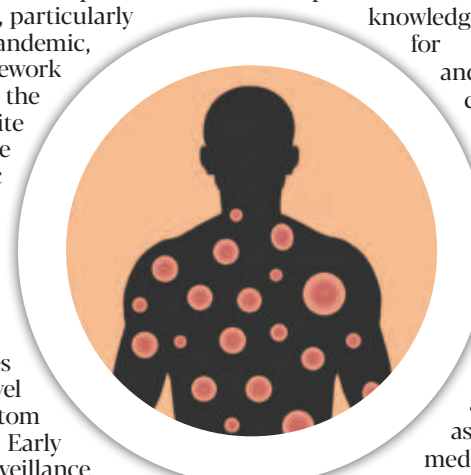
Bangladesh's previous experience with health emergencies, particularly the COVID-19 pandemic, serves as a framework for its response to the Mpox danger. Despite being pressured, the country's public health system has demonstrated resilience and adaptation in recent years. However, the distinct properties of mpox and its novel version need a custom response plan. Early detection and surveillance are one of the most significant difficulties Bangladesh confronts.

Dhaka airport has implemented a system to handle passengers with Mpox symptoms, in response to the World Health Organisation's global public health alert. The airport is providing leaflets, and arrival health desks are staffed by doctors 24/7. Passengers' temperature is screened using thermal scanner archways, and those with symptoms will be sent to designated hospitals via ambulance if necessary. The airport's health team recommends avoiding close contact with suspected or confirmed cases, wearing medical masks, avoiding skin-to-skin contact, using disposable gloves, and regularly cleaning hands with soap or alcohol-based hand rubs.

Health authorities need to set up a strong surveillance system, evaluate

its laboratory's competence, and promptly train healthcare professionals about mpox symptoms and diagnostic procedures. During the COVID-19 pandemic, Bangladesh made progress in strengthening its diagnostic capacities; nonetheless, testing for Mpox necessitates specialised knowledge and equipment. In order to upgrade facilities, the nation must evaluate its present laboratory infrastructure and look for outside assistance. Two worldwide Mpox vaccines are still not widely available in Bangladesh, and in order to obtain vaccination doses, the health ministry must work with foreign groups. It is important to have a well-defined vaccine priority plan that targets high-risk populations and healthcare workers.

Bangladesh is getting ready for a possible epidemic of Mpox by concentrating on producing necessary drugs and vaccinations locally. To investigate these options, the government should communicate with pharmaceutical corporations. In order to share resources,



knowledge, and best practices for mpox preparedness and response, regional cooperation—especially within the context of the South Asian Association for Regional Cooperation (SAARC)—may be indispensable. Bangladesh has significant expertise and assets at its disposal, such as its handling of prior medical crises. However,

Mpox and its new variant's distinct qualities necessitate a customised, all-encompassing strategy. Early planning, vigilant monitoring, strong public relations, and multinational collaboration are essential for success.

By taking proactive steps now, Bangladesh can strengthen its resilience against Mpox and other potential health emergencies. As the global health landscape evolves, Bangladesh's ability to adapt and respond effectively will be crucial for protecting its population and contributing to global health security. Continuous assessment, adaptation, and collaboration will be essential in navigating this new chapter in global public health.

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