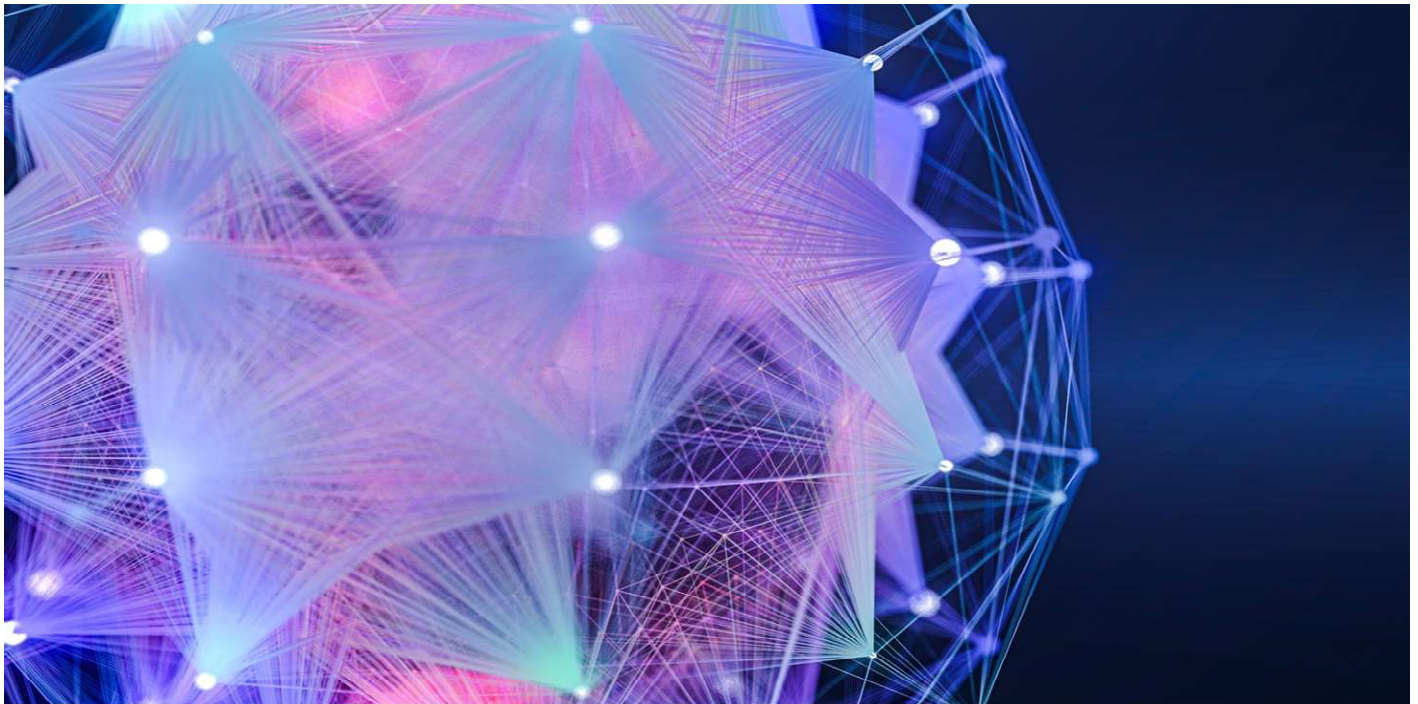


Health Preparedness: From Crisis to Control of Mpox



What is Mpox?

Mpox, formerly known as monkeypox, is a viral disease caused by the monkeypox virus (MPXV), a member of the Orthopoxvirus genus. It is similar to smallpox but typically milder. Mpox presents with symptoms such as fever, headache, muscle aches, swollen lymph nodes, and a characteristic rash that progresses from macules to pustules and eventually scabs. The virus spreads through close contact with an infected person or animal, or contaminated materials like bedding.

There are two primary clades of the mpox virus: Clade I and Clade II. Clade I, also known as the Congo Basin or Central African clade, is more virulent and has been associated with higher mortality rates. This clade is primarily found in Central Africa. Clade II, formerly called the West African clade, is less severe and includes two subclades: IIa and IIb. Clade IIb has been the primary cause of the recent global outbreaks, including cases in Europe and the Americas since 2022.

While mpox was once considered a rare disease, its spread outside Africa, particularly during the 2022 global outbreak, has highlighted the need for enhanced surveillance, vaccination, and public health responses to prevent further transmission and outbreaks.

WHO Global Framework

In response to the ongoing challenges posed by mpox (formerly known as monkeypox), the World Health Organization (WHO) has launched a comprehensive Strategic Framework for Enhancing Prevention and

Control of Mpox, covering the period from 2024 to 2027. This initiative seeks to eliminate human-to-human transmission of mpox through a series of targeted actions, including vaccination, surveillance, and community engagement. With the support of global partners, WHO aims to address the disparities in access to medical countermeasures, such as the JYNNEOS™ vaccine, which is crucial in preventing mpox and smallpox. The strategic framework also emphasizes the importance of integrating mpox prevention into existing health programs, such as those targeting HIV and other sexually transmitted infections. By aligning efforts across different health sectors, this plan aspires to not only control current outbreaks but also prevent future ones. As we move into this new phase, the goal is clear: to create a world where mpox no longer poses a threat to global health security.

National Biosecurity Frameworks

Most countries have a biosecurity framework activated during outbreaks both as epidemics or pandemics. For many countries the activation process is indexed to the World Health Organization risk scale. The United States biosecurity framework is a comprehensive system designed to protect the nation from biological threats, whether natural, accidental, or deliberate. It encompasses policies, regulations, and procedures aimed at preventing, detecting, and responding to biological risks. Key components include the National Biodefense Strategy, which outlines the coordination of federal, state, and local efforts to address biological threats, and the Select Agent Program, which regulates the handling of high-risk pathogens. Agencies such as the Centers for Disease Control and Prevention (CDC), the Department of Homeland Security (DHS), and the Department of Health and Human Services (HHS) play critical roles in implementing and enforcing biosecurity measures. The framework also involves partnerships with the private sector and international organizations to enhance global biosecurity. Despite its strengths, challenges remain, particularly in ensuring rapid detection and response capabilities across diverse jurisdictions and sectors.

Business Impact

Positive Impacts

1. Enhanced Global Health Security

- Implementing the strategic framework for mpox prevention will strengthen global health systems, making them more resilient to future outbreaks. This stability is essential for global markets, as it reduces the risk of economic disruptions caused by widespread health emergencies.

2. Increased Demand for Vaccines and Medical Supplies

- The emphasis on vaccination, particularly with JYNNEOS™, will boost the pharmaceutical and healthcare industries. Companies involved in the production and distribution of vaccines, diagnostics, and related medical supplies may experience significant growth in demand, leading to economic expansion in these sectors.

3. Boost in Public Health Initiatives

- The integration of mpox prevention into existing health programs will lead to an increase in public health funding and initiatives. This could create opportunities for businesses involved in healthcare services, health technology, and related fields, driving innovation and collaboration across industries.

4. Strengthened Community Trust

- Effective implementation of the framework, especially through community engagement and education, will build public trust in health authorities and businesses involved in health care. This trust is crucial for ensuring public cooperation during health crises, which can lead to better health outcomes and, in turn, a more stable and productive workforce.

5. Global Partnerships and Collaboration

- The framework encourages collaboration among countries, health organizations, and private sectors. Businesses that engage in these partnerships will likely benefit from shared resources, knowledge, and technologies, fostering innovation and potentially leading to new market opportunities.

Negative Impacts

1. Increased Operational Costs

- Businesses, particularly in the healthcare and pharmaceutical industries, may face increased operational costs associated with scaling up vaccine production, distribution, and monitoring as per the strategic framework's requirements.

2. Supply Chain Disruptions

- The global focus on mpox may strain supply chains for medical supplies and vaccines, particularly if demand exceeds supply. This could lead to delays, increased prices, and logistical challenges for businesses reliant on these supplies.

3. Economic Inequities

- The strategic framework's emphasis on equitable access to vaccines and medical care might expose economic inequities, particularly in lower-income countries. Businesses operating in these regions may face challenges in balancing costs with the need to provide affordable solutions.

4. Public Health Dependence

- Businesses, especially those in travel, tourism, and entertainment, may become increasingly dependent on public health outcomes. A failure to control mpox outbreaks could lead to decreased consumer confidence and reduced economic activity in these sectors.

5. Regulatory Challenges

- Companies may face increased regulatory scrutiny and compliance requirements as part of the framework's implementation. Navigating these regulations could be complex and costly, particularly for businesses involved in the development and distribution of vaccines and medical supplies.

Top 5 Actions Businesses Can Take to Minimize Disruption from Mpox

1. Implement Comprehensive Health and Safety Protocols

- **Summary:** Establish and maintain rigorous health and safety measures to prevent mpox transmission within the workplace.

- **Actions:**
 - Regularly sanitize workspaces and provide personal protective equipment (PPE) to employees.
 - Ensure access to hand sanitizers and encourage frequent handwashing.
- 2. **Promote Employee Awareness and Education**
 - **Summary:** Educate employees about mpox symptoms, transmission, and preventive measures.
 - **Actions:**
 - Conduct regular training sessions and distribute educational materials on mpox.
 - Encourage employees to report symptoms and stay home if they feel unwell.
- 3. **Support Vaccination and Healthcare Access**
 - **Summary:** Facilitate access to vaccines and healthcare services for employees to reduce the risk of outbreaks.
 - **Actions:**
 - Partner with local health authorities or clinics to provide on-site vaccination.
 - Offer paid time off for employees to get vaccinated or seek medical care.
- 4. **Develop and Implement Remote Work Policies**
 - **Summary:** Prepare for potential disruptions by having flexible work-from-home policies in place.
 - **Actions:**
 - Equip employees with the necessary tools and technology to work remotely if needed.
 - Establish clear guidelines and communication channels for remote work.
- 5. **Establish a Business Continuity Plan**
 - **Summary:** Create or update a business continuity plan that addresses potential mpox-related disruptions.
 - **Actions:**
 - Identify critical business functions and ensure there are contingency plans in place.
 - Regularly review and test the plan to ensure readiness in case of an outbreak.

These actions will help businesses minimize disruption, protect employee health, and maintain operational stability during mpox outbreaks.

Top 10 Themes to Watch in the Next 12-24 Months

1. **Global Vaccine Distribution**
 - **Importance:** Equitable vaccine distribution is critical to controlling mpox outbreaks globally.
 - **Key Ideas:**
 - Monitoring vaccine supply chains to ensure availability in low-income countries.

- Addressing potential bottlenecks in vaccine production and distribution.

2. Integration with Existing Health Programs

- **Importance:** Efficiently integrating mpox prevention into current health systems can enhance overall public health response.
- **Key Ideas:**
 - Combining mpox vaccination with routine immunization programs.
 - Training healthcare workers on integrated care approaches.

3. Surveillance and Reporting

- **Importance:** Accurate and timely data collection is essential for tracking and controlling mpox outbreaks.
- **Key Ideas:**
 - Strengthening global surveillance systems to detect mpox cases early.
 - Promoting transparent reporting practices across all regions.

4. Zoonotic Transmission Control

- **Importance:** Understanding and minimizing animal-to-human transmission is vital to prevent future outbreaks.
- **Key Ideas:**
 - Implementing One Health approaches to monitor and control zoonotic risks.
 - Enhancing research on animal reservoirs and transmission dynamics.

5. Community Engagement and Education

- **Importance:** Public awareness and community involvement are crucial for the success of prevention efforts.
- **Key Ideas:**
 - Developing culturally sensitive communication strategies to combat misinformation.
 - Engaging local leaders in education campaigns to build trust and cooperation.

6. Equity in Access to Care

- **Importance:** Ensuring all populations have access to diagnostics, treatment, and vaccines is a moral and practical necessity.
- **Key Ideas:**
 - Addressing disparities in healthcare access, particularly in marginalized communities.
 - Monitoring and promoting fair distribution of medical resources.

7. Regulatory and Policy Adjustments

- **Importance:** Adapting policies to reflect the evolving nature of mpox outbreaks will ensure effective response measures.
- **Key Ideas:**
 - Updating international health regulations to include mpox-specific guidelines.
 - Encouraging national governments to align with WHO recommendations.

8. Innovation in Diagnostics and Treatment

- **Importance:** Continued research and development of new tools are needed to manage and eventually eradicate mpox.
- **Key Ideas:**
 - Supporting R&D for rapid diagnostic tests and effective treatments.
 - Encouraging collaboration between public and private sectors to accelerate innovation.

9. Health System Resilience

- **Importance:** Building resilient health systems will help manage mpox and other emerging diseases more effectively.
- **Key Ideas:**
 - Investing in health infrastructure to support outbreak response.
 - Training healthcare workers in outbreak management and emergency preparedness.

10. Global Health Security

- **Importance:** Strengthening global health security frameworks is essential to prevent and control future pandemics.
- **Key Ideas:**
 - Enhancing international cooperation and resource-sharing mechanisms.
 - Integrating mpox control efforts into broader pandemic preparedness strategies.

Summary

Businesses and nonprofits play a critical role in supporting public health initiatives, especially during emerging health crises like mpox. By integrating preventive measures into their operations, promoting health awareness, and contributing to community resilience, they can help mitigate the spread of the disease and ensure continuity of operations.

Top 3 Actions Businesses and Nonprofits Can Take

1. Implement Workplace Health Protocols

- **Why It's Important:** Ensuring a safe workplace minimizes the risk of mpox transmission among employees and customers.
- **Key Actions:**
 - Establish and enforce hygiene protocols, such as regular handwashing and sanitizing.
 - Provide vaccinations to employees, particularly those at higher risk of exposure, either directly or through partnerships with local health providers.

2. Promote Health Education and Awareness

- **Why It's Important:** Educating employees and the community about mpox can reduce fear, stigma, and misinformation, leading to more informed and safer behaviors.

- **Key Actions:**
 - Distribute accurate information about mpox symptoms, prevention, and treatment options through internal communications.
 - Support public health campaigns that promote awareness of mpox and its prevention.

3. Support Community Health Initiatives

- **Why It's Important:** Contributing to community efforts enhances overall public health and strengthens the relationship between businesses and the communities they serve.
- **Key Actions:**
 - Partner with local health organizations to fund or facilitate vaccination drives, especially in underserved areas.
 - Offer resources or spaces for community health activities, such as hosting information sessions or providing facilities for vaccination clinics.



Dr. John Pournoor, CEO

| Let's Connect
| Contact us: [LINK](#)
| [GovernmentAnalytica.com](#)
| Thought Leadership - Weekly Newsletter

