



M-Pox: Key Information, Challenges, and National Response Strategy

2 pager notes | Science & Technology | Current Affairs Urgent Importance

[Syllabus Portion Targeted:

General Studies III: Awareness in the fields of IT, Space, Computers, Robotics, Nano-technology, **Bio-technology** and issues relating to Intellectual Property Rights.]

Introduction

Monkeypox, a viral zoonotic disease, has been making headlines due to its recent spread in India. First identified in the Democratic Republic of Congo in 1970, the virus has found its way across continents, raising global health concerns. In India, the first case was reported in Kerala in July 2022, and as of August 2024, over 30 cases have been confirmed.

Symptoms of Monkeypox

- **Initial Symptoms:** Fever, headache, muscle aches, and back pain.
- **Specific Symptoms:** Swollen lymph nodes (a key differentiator from smallpox).
- **Rash Development:** A rash resembling blisters typically begins on the face and then spreads to other parts of the body, particularly the hands and feet.

Precautions to Prevent Spread

1. **Avoid Close Contact:** Stay away from individuals who exhibit symptoms or are known to be infected.
2. **Hand Hygiene:** Regular handwashing with soap and water or using an alcohol-based hand sanitizer.
3. **Personal Protective Equipment (PPE):** Use masks, gloves, and other protective gear when in contact with infected persons or animals.

Current Spread in India

- **Areas Affected:** Kerala, Delhi, and other regions have reported cases.
- **Current Status:** Over 30 cases have been documented across the country, with health authorities closely monitoring the situation.

Challenges in Tackling Monkeypox in India

1. **Limited Awareness:** Unlike COVID-19, public awareness about Monkeypox is relatively low, leading to delayed detection and potential underreporting of cases.
2. **Health Infrastructure Strain:** With the lingering effects of COVID-19 on the healthcare system, the sudden emergence of another infectious disease could overwhelm existing resources.





3. **Stigma and Misinformation:** Social stigma attached to the disease, along with misinformation, may deter people from seeking timely medical help, exacerbating the spread.
4. **Vaccine and Treatment Accessibility:** Unlike COVID-19, where vaccines were rapidly developed, vaccines specific to Monkeypox are not widely available, posing a challenge for large-scale immunization efforts.

Comparison: Monkeypox vs. COVID-19

	Monkeypox	COVID-19
Causative Agent	Monkeypox virus (Orthopoxvirus)	SARS-CoV-2 (Coronavirus)
Transmission	Close contact with infected individuals or animals; contact with contaminated materials	Primarily through respiratory droplets; also via contact with contaminated surfaces
Incubation Period	5-21 days	2-14 days
Symptoms	Fever, rash, swollen lymph nodes, muscle aches	Fever, cough, shortness of breath, loss of taste/smell
Mortality Rate	1-10% (historically, varies by strain)	Varies (estimated 1-2% globally)
Vaccine Availability	Limited, smallpox vaccine provides some protection	Widely available across the globe
Treatment	Symptomatic treatment, supportive care	Antivirals (e.g., Remdesivir), vaccines, supportive care
Public Awareness	Low, especially before recent outbreaks	High, due to the global pandemic

National Policy Recommendations

1. **Enhanced Surveillance:** Implement strict monitoring at international borders, airports, and within communities to detect and isolate cases early.
2. **Public Awareness Campaigns:** Launch nationwide campaigns to educate citizens about the symptoms, transmission routes, and necessary precautions to prevent the spread.
3. **Stockpile Vaccines and Antivirals:** Proactively stockpile vaccines and antiviral medications, ensuring they are readily available for high-risk populations and during potential outbreaks.

Prelims Question for Practice

Which of the following countries was the first to report a case of Monkeypox?

- a) India
- b) Nigeria
- c) Democratic Republic of Congo
- d) USA

Answer: c) Democratic Republic of Congo



