Interim Guidance for the Public Health Management of Cases and Contacts of mpox – **Chapter 1 (Introduction)**

Please note that this document should be used in tandem with other <u>Interim Management of Mpox</u> <u>documents</u>.

Readers should not rely solely on the information contained within these guidelines. Guidance information is not intended to be a substitute for advice from other relevant sources including, but not limited to, the advice from a health professional. Clinical judgement and discretion will be required in the interpretation and application of this guidance. This guidance is under constant review based upon emerging evidence at national and international levels and national policy decisions. For further information please contact rgdu@hpsc.ie

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Contents

1.0	INTRODUCTION	4	
1.1	PURPOSE		
1.2	METHODOLOGY		
1.3	FUTURE UPDATES	5	
1.4	DISCLOSURE STATEMENT AND FUI	IDING5	
1.5	EPIDEMIOLOGY	5	
1.	.5.1 Mpox 2024		
1.6		7	
1.7	CLINICAL FEATURES	7	
1.8	IMAGES OF INDIVIDUAL MPOX LESI	DNS9	
1.9	DIAGNOSIS	9	
1.10	TREATMENT	9	
1.11	INFECTION PREVENTION & CONTR	DL 10	
1.12	FURTHER INFORMATION		
2.0 AP	PENDIX A		
3.0 AP	PENDIX B		
3.1	CHAPTER 1, 2, AND 3		
3.2	CHAPTER 5		

1.0 Introduction

1.1 Purpose

This guideline is for the public health management of cases and contacts of human mpox infection in Ireland providing advice for contacts of HCID (Clade I) and non-HCID (Clade II) strains of mpox virus.

It provides infection prevention and control advice (IPC) for cases in different settings, household (i.e. including multiple occupancy dwellings), congregate settings¹, education and childcare settings, international travel (i.e. including humanitarian aid workers), other underserved populations (i.e. including prisons and places of detention), and IPC advice for outbreaks. IPC advice for the management of suspected/confirmed High Consequence Infectious Diseases (HCIDs) in Adult and Paediatric Acute Healthcare Settings can be found <u>here.</u>

This guidance is mainly for use by the National Health Protection Office (NHPO) and regional Departments of Public Health (DPHs), together called the Health Protection Service (HPS) in this document.

This guidance has been adapted from available international guidelines and national subject matter expert recommendations in areas where there are deficiencies (see **2.0 Appendix A**). This guidance review was undertaken by a multidisciplinary subject matter expert group convened by the Mpox National Incident Management Team (N-IMT) in September 2024 following the declaration of a PHEIC by the World Health Organization (WHO) in August 2024 (see **3.0 Appendix B** for membership of Contact Tracing Sub-Group). This guidance has been externally reviewed by the Mpox National Incident Management Team, Irish College of General Practitioners (ICGP), Area Directors of Public Health (ADPHs) in Ireland and Antimicrobial Resistance & Infection Control (AMRIC).

1.2 Methodology

The methodology applied to develop this guidance was based primarily on good practice guidance (GPG) recommendations. This methodology is used to assist practitioners in

¹ Congregate setting refers to a range of facilities where people (most or all of whom are not related) live or stay overnight and use shared spaces (e.g., common sleeping areas, bathrooms, kitchens) such as: homeless shelters, refuges, group homes and State-provided accommodation for refugees and applicants seeking protection. Those living or staying in the facility are referred to as residents.)

effectively implementing health protection functions and public health interventions. Recommendations are determined from colloquial evidence (particularly, expert opinion) and other types of non-scientific evidence. The process adopted to develop GPG broadly conforms to the seven main stages outlined in the HSE Public Health: National Health Protection Office - Framework for Health Protection Guidance Development in Ireland. These are modified, as required, to allow a degree of flexibility to meet the needs of a given situation. Within this methodology, it is acknowledged that scientific evidence is not always available and public health organisations often face having to make decisions in situations where there is insufficient (or even conflicting) evidence and/or where the context plays an essential role and, therefore, needs to be considered. In GPG, expert opinion and other non-scientific considerations (e.g. legislation, codes of practice), play an essential role in interpreting and qualifying the scientific evidence (if available at all) or in formulating recommendations for good practice.

1.3 Future Updates

A review of this guidance will be undertaken three years after publication by the Research and Guideline Development Unit (RGDU) as part of the routine cycle of guidance review. The RGDU may undertake a more rapid update of specific chapters within this guidance if new and relevant evidence is published according to need.

1.4 Disclosure Statement and Funding

The subject matter expert group members were asked to declare potential conflicts of interest at the time of appointment. A policy for the management of conflict of interest was put in place The RGDU was commissioned by the Mpox N-IMT to undertake the work on this guidance. No funding was received for the development of this guidance.

1.5 Epidemiology

Mpox is a <u>viral zoonotic disease</u> that historically occurred mostly in tropical rainforest areas of Central and West Africa and has spread to other regions. Zoonotic diseases can spread between animals and humans.

The mpox virus is part of the same family of viruses as variola virus which causes **smallpox**. It is a rare viral illness that can become serious. For most people, symptoms will clear up on their own after 2 to 4 weeks. Mpox can spread through close contact (including sexual contact) with a person with mpox, through direct contact with infected wild animals or it can also be spread through contact with contaminated materials. Mpox does not spread easily between people. It takes close contact to spread. The biggest risk of spread between people is through sexual contact or close contact with household members.

There are 2 major genetic groups (clades) of mpox, Clade I and Clade II. Clade I (formerly known as Central African or Congo basin clade) has two sub-clades I(a) and Ib. Clade II (formerly known as West African clade) consists of two subclades (IIa and IIb). Clade IIb was the clade (genetic group) circulating in the 2022 global outbreak.

Since 2023, Clade II mpox virus (MPXV) is no longer considered a high consequence infectious disease (**HCID**)² within Ireland. MPXV Clade I remains an HCID. Information on the epidemiology of mpox is available <u>here</u>.

1.5.1 Mpox 2024

Historically, Clade I mpox was known to circulate in 5 Central African Region countries:

- Cameroon;
- Central African Republic (CAR);
- the Democratic Republic of the Congo (DRC);
- Gabon; and
- the Republic of the Congo.

In 2024, clade I mpox cases were reported from countries in Africa beyond these five Central African Region countries. This is likely to be because of multiple factors including waning population immunity from the discontinued smallpox vaccine and changing environmental and social factors, but the full aetiology remains unclear.

Clade I MPXV has previously been intermittently transmitted from animals to humans, with small mammals and primates acting as hosts. Clade I MPXV can also spread via human-tohuman transmission and had previously been associated with close contact. However, in March 2023, infections linked to sexual contact and international travel were reported in the DRC for the first time.

² **HCID:** High consequence infectious disease (HCID is defined as: an acute infectious disease; typically having a high case-fatality rate; not always having effective prophylaxis or treatment; often difficult to recognise and detect rapidly; able to spread in the community and within healthcare setting; and requiring an enhanced, individual, population, and system response to ensure it is managed effectively, efficiently and safely.

The latest epidemiology of mpox is reported here

1.6 Transmission

Mpox transmission occurs if the individual(s):

- Come in contact with the rash, rash fluid or scabs of a person who has mpox, especially if you are caring for the sick person, living with the sick person, or if you are the sexual partner of a sick person.
- Touch objects contaminated by an infected person such as bed linen, towels or clothing.
- Are in close contact with an infected person and breathe in the virus which can be passed on when they cough or sneeze.
- Are a healthcare worker caring for someone with mpox without using appropriate infection prevention and control precautions including personal protective equipment.

Or, if the individual(s) are in countries where mpox is found naturally in animals, and there is interaction by:

- Touching or handling an animal that is infected with mpox;
- Being bitten or scratched by an animal with mpox;
- Eating bushmeat that is infected with mpox (especially if it has not been thoroughly cooked, or if the meat is still bloody); and
- Touching objects contaminated by infected animals (such as bedding), or products from infected animals (such as animal hides).

An infected individual can pass the infection on to another person whom they are in close contact with (especially sexual partners, and household members). Occasionally, mpox can be passed to other people who are in close contact with the sick person.

1.7 Clinical features

The incubation period is the duration/time between contact with the person with mpox and the time that the first symptoms appear. The incubation period for mpox is between five and 21 days.

Mpox infection is usually a self-limiting illness, and most people recover within several weeks. However, severe illness can occur in some individuals. HCID mpox is known to cause more severe disease than non-HCID mpox clades with case fatality rates of 10% reported in nonvaccinated individuals previously. Mpox symptoms can appear in two stages, however, some individuals may only have a rash:

- Initial symptoms: The first stage usually begins with a sudden onset of fever (higher than 38.5°C) and chills, followed by a bad headache, swollen glands (in the neck, under the arms, in the groin) and exhaustion. There may also be muscle ache, backache, cough and runny nose, and gastrointestinal symptoms (vomiting and diarrhoea). Not everyone with mpox has these initial symptoms.
- Rash: one to three days after the fever starts, an itchy rash appears. It may first appear on the face and spread to other parts of the body. The rash generally is only seen on the face, palms of the hands, soles of the feet and occasionally in the mouth. The rash starts like pimples, that grow and turn into sores. Scabs then form, which eventually drop off. Following sexual contact, the rash can also be found in the genitals and around the anus and may not spread elsewhere. Not everyone will experience all the symptoms of mpox. Rash in the anogenital area, or complications of the rash such as rectal pain, may be the main symptom. Some people may have only a small number of lesions.

An individual is contagious until all the scabs have fallen off and there is intact skin underneath. The scabs may also contain infectious virus material.

1.8 Images of individual mpox lesions



d) Ulcerated lesion

5mm diameter



b) Small pustule, 2mm diameter





e) Crusting of mature lesions

f) Partially removed scab



1.9 Diagnosis

Clinical diagnosis of mpox can be difficult, and it is often confused with other infections such as varicella zoster virus (presenting as chickenpox or herpes zoster), herpes simplex, syphilis, smallpox, and other poxvirus infections. A definite diagnosis of mpox requires assessment by a health professional and specific testing in a specialist laboratory.

In Ireland, testing is undertaken at the National Virus Reference Laboratory (NVRL). See **<u>guidance on laboratory testing</u>** for information on how to submit samples for testing.

1.10 Treatment

Most people require no, or only supportive, treatment for mpox. This may include simple pain relief. Antiviral treatment (with such drugs like tecovirimat) may be needed in patients with more severe disease. Antibiotics may be required if the lesions become infected.

Vaccines can be given either before or after a person is exposed to the virus, but before exposure is recommended for the best protection. For more information on vaccination

recommendations based on the individual situation, refer to the <u>National Immunisation</u> <u>Advisory Committee (NIAC) guidelines</u>.³ Individuals vaccinated against smallpox in childhood may experience a milder disease. Vaccines have been used to protect high risk individuals during outbreaks.

1.11 Infection prevention & control

Prevention of transmission by respiratory and contact routes is required. Appropriate precautions are essential for suspected and confirmed cases. Scabs are also infectious, and care must be taken to avoid infection through handling bedding and clothing. Information on infection prevention and control measures are available <u>here</u>.

1.12 Further information

- <u>HPSC</u>
- <u>HSE</u>
- <u>WHO</u>
- ECDC
- <u>CDC</u>
- <u>UKHSA</u>

³ Pending clarification around funding for post-exposure prophylaxis vaccination administration by Sexual Health Services for sexual contacts on mpox cases, review on case-by-case basis will need to be considered with Departments of Public Health and local Sexual Health Services.

2.0 Appendix A

NAME of SOURCE & DOCUMENT	WEBLINK of SOURCE (Date accessed: 10/10/2024)	SUMMARY
World Health Organization (WHO): Interim guidance: Surveillance, case investigation and contact tracing of mpox	https://iris.who.int/bitstream/handle/10665/376306/WH O-MPX-Surveillance-2024.1-eng.pdf?sequence=1	The WHO document titled "Surveillance, Case Investigation and Contact Tracing for Mpox (Monkeypox): Interim Guidance" (March 2024) provides updated guidelines for managing mpox outbreaks. Key points include: Surveillance: Detecting new outbreaks and stopping transmission. Case Investigation: Identifying and isolating cases, providing clinical care, and managing contacts. Contact Tracing: Monitoring contacts for 21 days to identify early signs of infection. Reporting: Clinicians should report suspected, probable, and confirmed cases to public health authorities and WHO.
World Health Organization (WHO): Public Health advice on mpox and congregate settings: settings in which people live, stay or work in proximity	https://cdn.who.int/media/docs/default- source/documents/health-topics/monkeypox/public- health-advice-for-congregate- settings_v10_final.pdf?sfvrsn=deea3bf4_12&download =true	The document from the World Health Organization (WHO) provides public health advice for managing mpox (monkeypox) in congregate settings, such as places where people live, stay, or work in close proximity. It includes guidelines on: Infection prevention and control: Measures to reduce the spread of mpox, including hygiene practices and use of personal protective equipment (PPE). Case management: Steps for identifying, isolating, and treating individuals with mpox. Communication: Strategies for informing and educating residents and staff about mpox and its prevention. Environmental cleaning: Recommendations for cleaning and disinfecting surfaces to prevent transmission.

European Centre for Disease Prevention and Control (ECDC): Rapid scientific advice on public health measures for mpox (2024)	https://www.ecdc.europa.eu/en/infectious-disease- topics/mpox/rapid-scientific-advice-public-health- measures-mpox-2024	The European Centre for Disease Prevention and Control (ECDC) document provides rapid scientific advice on public health measures for managing mpox (monkeypox) in 2024. Key points include: Travel Advice: No cross-border travel restrictions are required, but travellers should be informed about mpox transmission in their destinations and advised on how to reduce their risk of infection. Preventive Measures: Recommendations include avoiding skin-to-skin contact with potentially infected individuals, practicing safe sex, and maintaining good hand hygiene. Healthcare Access: Travelers should know how to access healthcare services if they develop symptoms while traveling.
Public Health Agency of Canada (PHAC): Mpox: Public Health management of human cases and associated human contacts in Canada	https://www.canada.ca/en/public- health/services/diseases/mpox/health- professionals/management-cases-contacts.html	The Public Health Agency of Canada (PHAC) document provides guidance for health professionals on managing mpox (monkeypox) cases and contacts. Key points include: Case Management: Identifying, isolating, and treating individuals with mpox. Contact Tracing: Monitoring and managing individuals who have been in contact with mpox cases. Vaccination: Updated recommendations on the use of the Imvamune® vaccine. Risk Assessment: Information on the new clade I strain and its potential risk of importation into Canada.
United Kingdom Health Security Agency (UKHSA): Mpox contract tracing guidance: classification of contacts and follow- up advice for non- HCID strains of MPXV	https://assets.publishing.service.gov.uk/media/66f53b1 830536cb927482788/monkeypox-contact-tracing- classification-and-vaccination-matrix.pdf	 The UK Health Security Agency (UKHSA) document provides guidance on contact tracing and vaccination for mpox (monkeypox). Key points include: Contact Classification: Contacts are categorized based on their exposure risk (e.g., high-risk contact involves direct exposure to body fluids or lesions). Vaccination Recommendations: Guidelines for post-exposure vaccination, including the use of the MVA-BN vaccine. Follow-Up Advice: Recommendations for monitoring and managing contacts, including isolation and public health advice.

United Kingdom Health Security Agency (UKHSA): Mpox contract tracing guidance: classification of contacts and follow- up advice for HCID strains of MPXV	NOT PUBLISHED	
Mpox Situation in Africa: Guidance for schools and childcare facilities	https://africacdc.org/download/mpox-situation-in-africa- guidance-for-schools-and-childcare-facilities/	The document titled "Mpox Situation in Africa: Guidance for Schools and Childcare Facilities" by Africa CDC provides essential guidelines for school authorities, healthcare workers, and students to manage and respond to the ongoing mpox outbreak. Key points include: Purpose: To help schools continue in-person learning during the mpox outbreak and prevent disruptions such as delayed openings or closures. Current Situation: Mpox cases have surged in Africa, with the outbreak declared a Public Health Emergency of Continental Security (PHECS) on August 13, 2024. The WHO also declared it a Public Health Emergency of International Concern (PHEIC) due to its spread in the Democratic Republic of Congo and neighbouring countries. Impact on Children: Children under 15 years old account for 70% of cases, with the highest risk of severe disease and death among infants and children under five, especially where healthcare is limited. Preventive Measures: The guidance emphasizes infection prevention strategies to maintain safe school environments and minimize transmission. This summary highlights the critical aspects of the guidance to ensure schools and childcare facilities are well-prepared to handle the mpox outbreak effectively.

3.0 Appendix B

3.1 Chapter 1, 2, 3 and 4

NAME	TITLE
Dr Keith Ian Quintyne	Consultant in Public Health Medicine si Health Protection
Ms Claire Gilbourne	Health Protection Researcher
Dr Randal Parlour	Research & Guideline Development Unit Coordinator, NHPO
Dr Derval Igoe	CPHM si HP (Infectious Diseases), NHPO
Dr Mark Campbell	Senior Medical Officer, HPSC
Dr Aileen Kitching	CPHM, NSIO
Ms Andrea King	ADON, HSE Dublin and Midlands
Ms Aideen McLoughlin	Secretariat, Acute Operations Programme, ID, NHPO
Ms Deborah Moriarty	Rehabilitation Lead Occupational Health, HSE Workplace Health & Wellbeing
Mr Adam Shanley	Programme Manager MPOWER
Dr Emer O'Connell	CPHM, HSE West and North West
Dr Donna Kilmartin	Epidemiologist, HSE West and North West
Dr Ruth Corcoran	Epidemiologist, HSE West and North West
Dr Anthony Ortiz	Epidemiologist, GZV Team, HPSC

3.2 Chapter 5

NAME	TITLE
Dr Keith Ian Quintyne	Consultant in Public Health Medicine si Health Protection
Ms Claire Gilbourne	Health Protection Researcher
Dr Randal Parlour	Research & Guideline Development Unit Coordinator, NHPO
Dr Abigail Collins	Consultant in Public Health Medicine - Clinical Lead for Child Health
Prof Alida fe Talento	Consultant in Clinical Microbiology – CHI – Temple Street
Ms Andrea King	ADON, HSE Dublin and Midlands
Dr Anne Sheahan	Area Director of Public Health – HSE South-West