

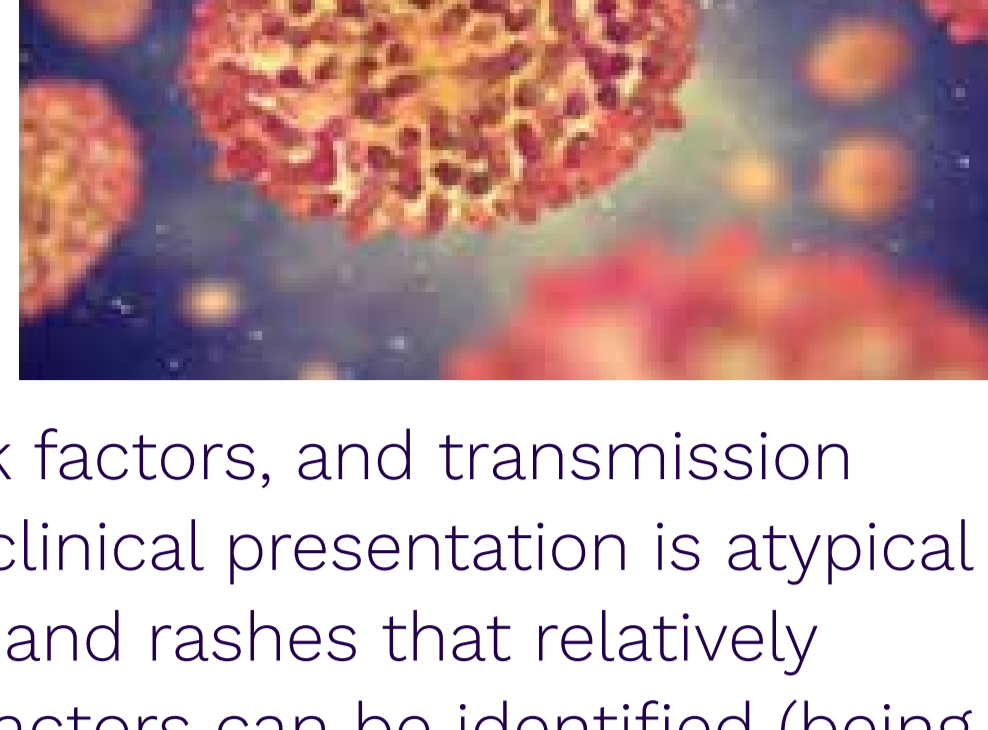
Travel & Endemic Newsletter

June 2022

Monkeypox

Epidemiological trends and clinical features of the ongoing monkeypox epidemic: a preliminary pooled data analysis and literature review

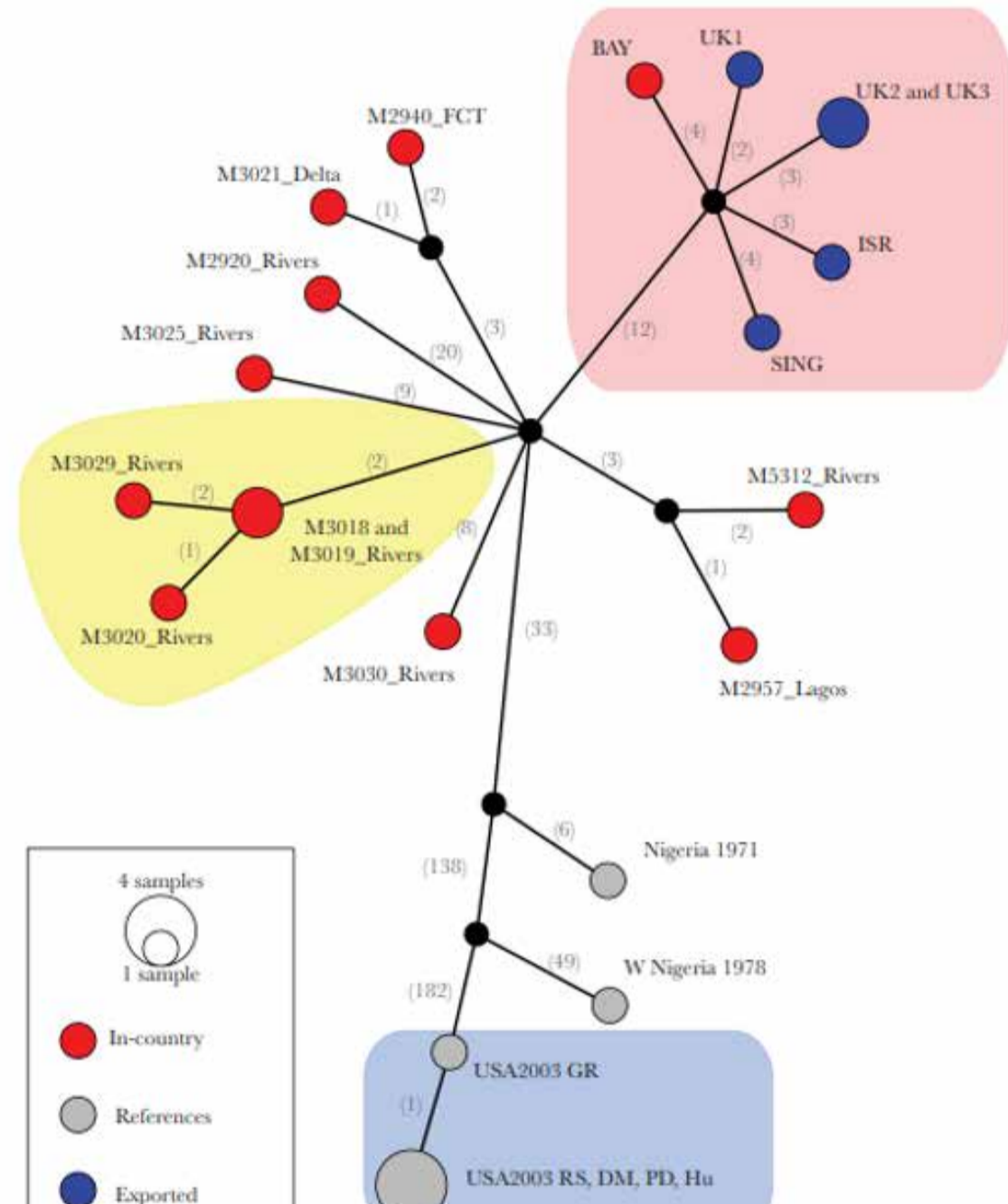
A preliminary report, collected and synthesized early data concerning epidemiological trends and clinical features of the ongoing outbreak and compared them with those of previous outbreaks. Data were pooled from four clusters in Italy, Australia, Portugal, and the UK. The ongoing epidemic differs from previous outbreaks in terms of age (individuals in their thirties), sex/gender (most cases being males), risk factors, and transmission route, with sexual transmission being highly likely. The clinical presentation is atypical and unusual, being characterized by anogenital lesions and rashes that relatively spare the face and extremities. Some preliminary risk factors can be identified (being a young male, having sex with other men, engaging in risky behaviors and activities, including condomless sex, HIV positivity, and a story of previous sexually transmitted infections, including syphilis). On the other hand, being fully virally suppressed and undetectable may protect against a more severe infectious course.



[Link to researchgate publication](#)

Exportation of Monkeypox Virus From the African Continent

The largest West African monkeypox outbreak began September 2017, in Nigeria. Four individuals traveling from Nigeria to the United Kingdom (n = 2), Israel (n = 1), and Singapore (n = 1) became the first human monkeypox cases exported from Africa, and a related nosocomial transmission event in the United Kingdom became the first confirmed human-to-human monkeypox transmission event outside of Africa. Despite thousands of MPX cases across Africa since 1971, these were the first human MPX cases outside of Africa since the 2003 US outbreak, which was caused by imported African rodents. Furthermore, they were the first documented infected humans to leave Africa, and all occurred within a period of 9 months. The investigation did not reveal an epidemiological link between the travelers. No city or state was visited by all international travelers, although all exportation cases individually visited either Delta State or Rivers State, which share a border.

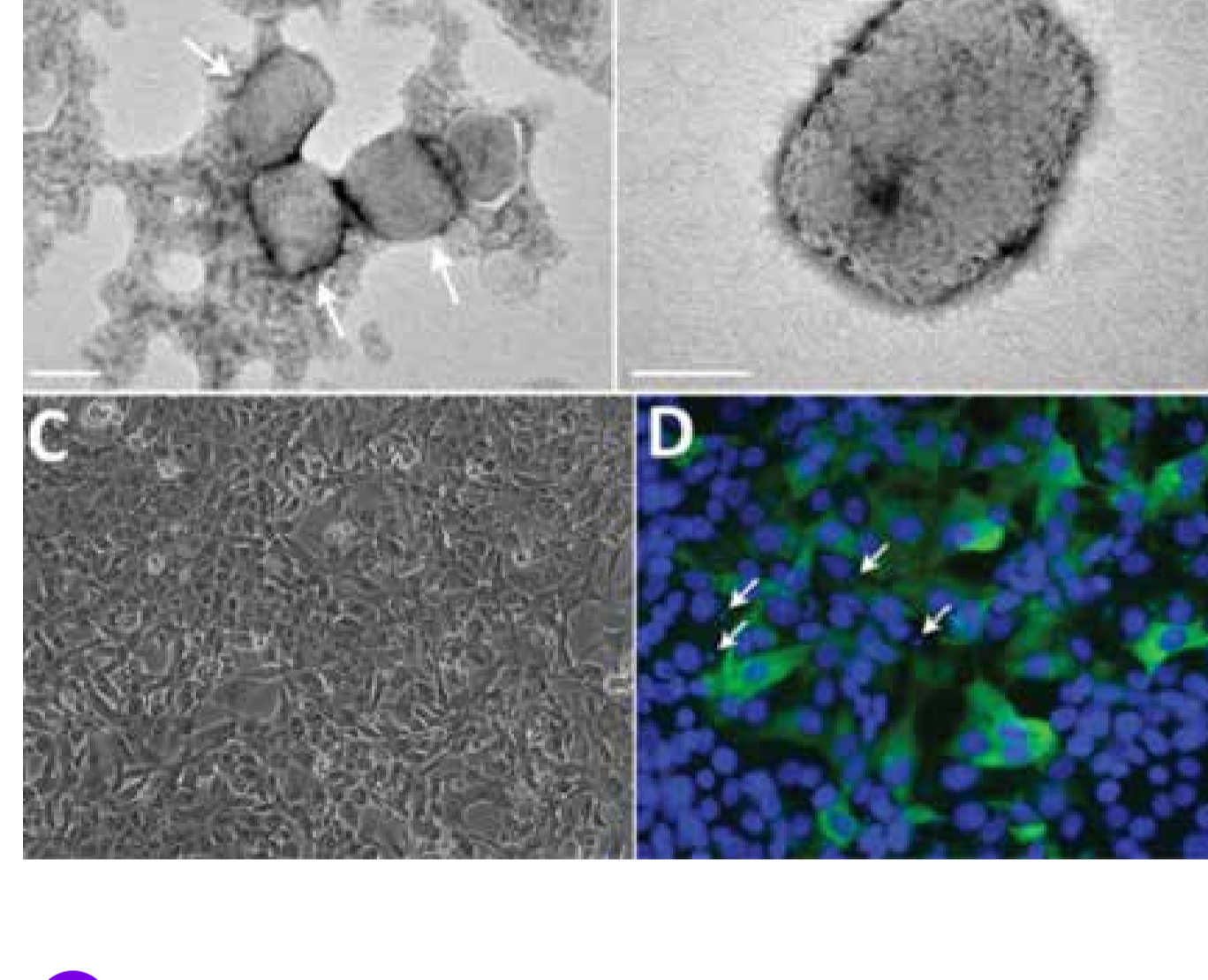


Median-joining haplotype network depicting relationships between Monkeypox virus samples based on single-nucleotide polymorphism matrix from whole genome data. Yellow-highlighted area indicates a cluster of epidemiologically related cases from Port Harcourt prison discussed previously [12], blue-highlighted samples represent epidemiologically linked cases from the 2003 United States outbreak generated from both human and animal samples, and pink-highlighted samples indicate the exportation-related cases, including the closest identified relative within Nigeria. Abbreviations: BAY, Bayelsa State; DM, dormouse; FCT, Federal Capital Territory; GR, Gambian pouched rat; Hu, human; ISR, Israel; PD, prairie dog; RS, rope squirrel; SING, Singapore; UK, United Kingdom; US, United States

[Link to Publication](#)

Diagnosis of Imported Monkeypox, Israel, 2018

A case of monkeypox in a man who returned from Nigeria to Israel in 2018. Pustule samples were sent to the Israel Institute for Biological Research. Virus was detected in pustule swabs by transmission electron microscopy and PCR and confirmed by immunofluorescence assay, tissue culture, and ELISA.



Transmission electron microscopy and cell culture-based diagnosis of monkeypox in patient in Israel, 2018. Virus particles were detected in lesion samples as either virion aggregates (arrows) (A) or individual virions (B) with a typical brick shape. Infected Vero cells depicted typical cytopathic effect, exhibiting cell detachment and rounding. Scale bar in A indicates 0.2 µm; scale bar in B indicates 100 nm. C) Infected Vero cells depicting typical cytopathic effect: cell detachment and rounding. Original magnification ×10. D) Immunofluorescent staining of infected Vero cells: DNA (DAPI [4',6-diamidino-2-phenylindole] stain) and monkeypox virus; viral factories are evident (arrows). Original magnification ×25.

[Link to article](#)

CDC: No Evidence Monkeypox Is Airborne

There is currently no evidence that monkeypox is airborne, CDC officials said. Not all MXPV cases in the US are linked to international travel. The virus transmits either through "direct contact" with an infected person via sores on the body, contact with materials that have touched those sores, or "respiratory secretions" during close face-to-face contact. It is unclear whether it spreads through semen or vaginal fluids, or whether asymptomatic people can spread the virus.

[Link to Publication](#)

Community transmission of monkeypox in the United Kingdom, April –May 2022

This report describes an ongoing outbreak of MPXV infections in the UK detected since the beginning of May 2022 affecting people without documented history of travel to endemic countries. The outbreak cases are currently grouped into three distinct incidents with one case resident in Scotland and 85 in England. The current outbreak signals a change in basic assumptions about the epidemiology of MPXV in Europe with profound implications for surveillance and control.

[Link to Publication](#)

Dengue

Dengue Management in Triage using Ultrasound in children from Cambodia: a prospective cohort study

Ultrasound findings including gallbladder wall thickening, ascites and pleural effusions secondary to plasma leakage have been described in dengue. Point-of-care ultrasound findings, particularly gallbladder wall thickening, in suspected early dengue can help predict disease progression in ambulatory patients. Ultrasound has potential to help guide management of suspected dengue patients and resource management during periods of dengue outbreak.

[Link to Publication](#)

Incidence of dengue fever in Israeli travelers 2008–2019

A prospective study of the temporal trends of travel-related DENV burden and its geographical sources. The average global DENV attack rate increased from 2.5 cases per 100,000 tourist-entries in 2008 to 10.7 cases per 100,000 tourist-entries in 2019. The highest number of DENV cases were reported from Thailand and India; DENV incidence rates increased from 94.5 to 142.2 cases per 100,000 travel-years, and from 49.3 to 90.4 cases per 100,000 travel-years for Thailand and India respectively.

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Travel and GI Infections

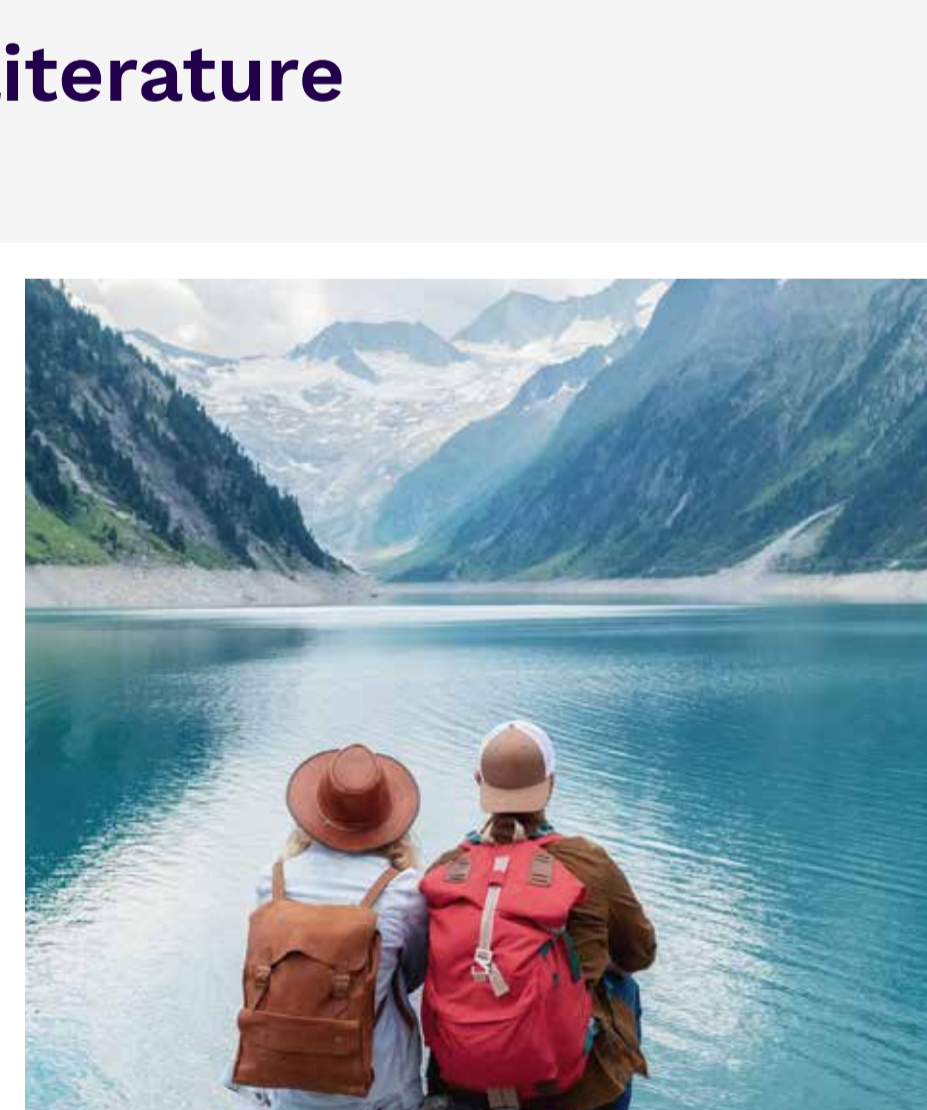
Bacterial travellers' diarrhoea: A narrative review of literature published over the past 10 years

This review summarises evidence published on bacterial TD over the past 10 years, focusing on the epidemiology and etiology of TD.

Conclusions:

- Overall travellers' diarrhea (TD) attack rates remained high, between 10% and 70% in studies from 2010–20.
- Enteropathogenic E. coli (EPEC) and enterotoxigenic E. coli (ETEC) cause TD more frequently than enterohemorrhagic E. coli (EHEC), especially in East and West Africa, South and Southeast Asia, and Latin America and the Caribbean.
- Fluoroquinolone resistance has continued to increase in ETEC, EAEC, Campylobacter, and Shigella spp., especially in isolates from Southeast and South Asia. Resistance of some TD enteropathogens to azithromycin has also been documented in Africa, and Latin America and the Caribbean (up to 25%, 33%, 9%, respectively).

[Link to Publication](#)



Persistent abdominal symptoms in returning travelers: Clinical and molecular findings

Persistent abdominal symptoms (PAS) are the leading cause of post-travel morbidity although there is a paucity of evidence concerning the etiology of this condition. From 2017–2019, clinical information and stool specimens from returning travelers with PAS were analyzed for the presence of parasites using the Allplex-GI-Parasite-assay. The median duration of symptoms before seeking care was 6 months, the most common symptoms were fatigue (79.2%), abdominal pain (75.7%) and loose stool (70.8%). Most of travelers had returned from Asia (57.6%), mainly from the Indian subcontinent and only 52.6% were backpackers. 36.9% samples were positive for protozoa, with Blastocystis hominis being the most common (26.6%) in samples, followed by D. fragilis (18.7%), Giardia lamblia (3.0%) and Cryptosporidium spp (0.5%).

[Link](#)

Morbidity among Israeli backpack travelers to tropical areas

A prospective study among 400 Israeli travelers regarding morbidity during travel.

Conclusions:

Being a female, traveling with friends or alone and longer travel periods were associated with illness/injury. Practitioners at pre-travel clinics should inform travelers of the possible risks including the potential severe consequences of rabies and altitude sickness.

[Link to Publication](#)

Globally Vibrio cholera antibiotics resistance to RNA and DNA effective antibiotics: A systematic review and meta-analysis

This meta-analysis estimated the pooled proportion of V. cholera antimicrobial resistance against RNA and DNA effective antibiotics.

The resistance patterns are various in geographical regions. novobiocin 0% (0, 0), and ofloxacin 0% (0, 1) in Africa, gatifloxacin 0% (0, 0), and levofloxacin 0% (0, 6) in Asia and ciprofloxacin 0% (0, 2) in North America are most effective antibiotics.

[Link](#)

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