CONSULTATIVE SIGNAL ASSESSMENT

PRIMARY RISK ASSESSMENT

MPOX EPIDEMIC IN THE DEMOCRATIC REPUBLIC OF THE CONGO, 2022 - 2024

Date of the signal	Date of the RA	Signal provider	Experts consultation	Method
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SIGNAL	**In the first sixteen weeks of 2024, 5 743 suspected cases and 331 deaths of mpox were reported in the Democratic Republic of the Congo (DRC), a two-fold increase compared to the same period of 2023. The ongoing outbreak in the DRC is due to *monkeypox* virus (MPXV) clade I, in contrast to the 2022 multi-country epidemic of mpox, which was due to MPXV clade IIb.**

DESCRIPTION

Event

In December 2022, the authorities of the DRC officially declared a national epidemic of mpox after an unprecedented increase in the number of reported cases of mpox [1]. In 2022[1], 5 644 suspected cases and 231 deaths (case-fatality rate [CFR] 4.1%) were reported in the DRC [2]. Subsequently, 14 626 suspected cases and 654 deaths (CFR 4.5%) were reported in 2023 [1]. This constitutes a substantial increase compared to the median number of 3 767 (range: 2 500 to 6 216) suspected cases and 77 deaths (range 76 – 202) per year over the period 2016-2021 [3].

As of 8 May 2024, 5 743 suspected cases and 331 deaths (CFR 5.8%) have been reported over the first sixteen weeks of 2024. In 2023, 2 925 suspected cases and 146 deaths were reported over the same period. The weekly number of suspected cases at the national level reached a maximum in week 8 of 2024 and declined thereafter (Figure 1Figure 1: National number of suspected cases & deaths and observed CFR, per week [1]), yet the reported number of cases continues to grow in some provinces [1].

As of 8 May 2024, nineteen out of twenty-six provinces have reported suspected cases in 2024, while twenty-two provinces reported suspected cases in 2023 (Figure 2). The province of Équateur is the most affected, with 3 122 suspected cases and 247 deaths over the first sixteen weeks of 2024. Following the introduction of control measures in week 7 of 2024, the weekly number of cases in the province of Équateur is now decreasing (Figure 3) [1].

All known modes of transmission, including sexual transmission, have been reported in the current outbreak in the DRC. Sexual transmission has been reported in at least three separate areas: Kenge (Kwango province, March 2023), Kinshasa (August 2023), and Kamituga (South-Kivu province, September 2023) [4]. These are the first officially documented instances of sexual transmission of MPXV clade I.

- The cluster in Kenge, Kwango Province, included six confirmed cases (five male and one female). The index case was a man who developed symptoms on the day of arrival in Kinshasa, from Belgium. He identified as a man who has sexual relations with men. He visited several clubs of men who have sex with men after his arrival in the DRC and had several sexual contacts. Among 27 contacts identified, six contacts were tested and five were positive for MPXV. All five were sexual contacts.
  Sequencing of the viral genome showed all six cases to be due to MPXV clade I. The six sequences were closely related to each other, and similar to other sequences from the DRC [4,5]. The index case reported having sexual contacts nine days before onset of his symptoms in a European country with a man who frequently visits the DRC and who had symptoms compatible with mpox at that time [6].
  Importantly, an investigation by the ITM found no evidence of undetected circulation of MPXV clade I in Belgium, neither after retrospective re-testing of 296 stored MPXV-positive samples, nor during screening with a MPXV-generic PCR of 2 415 MSM visiting the sexual health clinic between January and November 2023. Of note, only one undetected case of mpox was found during the screening, a pre-symptomatic

[1] Week 1 until week 51

individual infected with MPXV clade IIb [7].
Another case of mpox was reported later in 2023 in Kenge. It concerns a man who had sex with men, who could not be epidemiologically linked to the initial cluster. Genome sequencing was not performed for this case [4]. In 2024, only thirteen suspected cases have been reported in Kwango province, as of 8 May 2024 [1].

- In Kinshasa, four separate importation events from other provinces were identified. Each of these led to small clusters of local transmission in Kinshasa. As of 8 May 2024, there are no indications of a growing outbreak in Kinshasa, with 22 suspected cases reported in the first sixteen weeks of 2024 [1].
- In South-Kivu province, cases of mpox had not been reported before 2023. The first confirmed case reported onset of symptoms on 26 September 2023, a few days after travelling from Kisangani, Tshopo province [4]. Since February 2024, the weekly number of cases in South-Kivu has been steadily increasing, bringing the number of suspected cases over the first sixteen weeks of 2024 to 291 (Figure 4). A large majority of cases (n = 245) occurred in the health zone of Kamituga, a gold mining town. The population of Kamituga is considered to be very mobile, with a large representation of migrants, including international migrants, working in the mining industry. Indeed, between weeks fourteen and sixteen of 2024, five other health zones in South-Kivu have reported their first cases – suggesting geographical expansion. The newly affected health zones include zones in and near the provincial capital Bukavu on the border with Rwanda, and the Uvira health zone on the border with Burundi [1; I. Brosius - personal communication].
  Professional sex workers are reported to make up a large proportion of cases in the outbreak in South-Kivu [1]. In an observational study recruiting patients admitted to hospital with symptoms compatible with mpox in Kamituga, 24 out of 51 individuals were sex workers and five others were gold miners. Heterosexual close contact was identified as the main mode of transmission [8]. Similar findings were reported in a more recent study, which found that most cases were adolescents or young adults, that professional sex workers were overrepresented among cases, and that most suspected cases presented with genital lesions [9].

Phylogenetic analysis of six MPXV genome sequences from samples originating from the South-Kivu outbreak and 113 earlier African MPXV sequences placed the South-Kivu samples in a separate sub-cluster, suggesting that the outbreak might be resulting from a separate introduction event [10]. A more recent study based on a larger set of sequences (n = 22) from Kamituga confirmed these phylogenetic results and proposed to designate a new Ib (sub-)clade [9]. Importantly, all sequences in both studies lack the target sequence for the CDC-recommended clade I-specific PCR test (see Recommendations) [9,10].

Among the genetic mutations between twenty-two clade Ib sequences from Kamituga, mutations consistent with deamination mediated by APOBEC3 (a human enzyme) are overrepresented, indicating sustained human-to-human transmission. Importantly, this pattern was not observed in the part of the phylogeny comprised of sequences obtained from samples from other provinces during the current epidemic. This suggests a more limited role for sustained human-to-human transmission in the other provinces, in which the majority of suspected cases are reported [9].

It should be noted that the reported cases are not PCR-confirmed cases, but suspected cases based on clinical signs and symptoms. The capacity for diagnostic testing in the DRC is limited due lack of access to sampling kits in remote locations, and difficulties transporting samples to central laboratories. The test positivity rate among suspected cases in 2024 was 66% (598 / 905) at the national level [1]. In Kamituga the test positivity rate was higher, at over 80% [I. Brosius, personal communication].

Type of risk *Unusual*	Since mpox was incorporated in the passive surveillance system of the DRC in 2001, a steadily increasing incidence as well as geographic spread to new provinces has been observed. While in the 1980s clusters of mpox cases were typically small and linked to zoonotic spill-over in remote forested areas, it is well-documented that the relative importance of sustained human-to-human transmission has increased over time [11–14]. Even against this background, however, the current situation is **unusual**. Firstly, the current (2022-2024) epidemic in the DRC is of a two- to three-fold larger magnitude than observed in previous years. Secondly, the reports of sexual transmission, including among networks of men who have sex with men and among professional sex workers, raise concerns due to the similarity with the multi-country outbreak of clade IIb MPXV in 2022-2023. This is especially the case for the outbreak in South Kivu with mainly sexual transmission and high cross-border mobility. In contrast to the decreasing national trend, this outbreak is still growing.
Exposed population	In Belgium and other European countries, an outbreak of mpox due to MPXV clade IIb occurred in 2022. Following this outbreak, a limited number of new cases has continued to occur in Belgium (Figure 5). As of April 30th 2024, nine cases of mpox have been reported in Belgium in 2024. Out of 809 confirmed cases in Belgium since 2022, only two occurred in children – both in 2022. One was a child under the age of three, the other was a child above the age of twelve. Among 715 cases for whom information on sexual orientation is available, 613 (86%) reported their sexual orientation as MSM. In the current epidemic of clade I mpox in the DRC, the affected populations are different from those observed in the 2022 clade IIb outbreak in Belgium. Of suspected cases of mpox over the first sixteen weeks of 2024, 68% were among children under the age of fifteen. This implies a substantial overrepresentation of children among mpox cases. Based on the latest UN data (2020, [15]), children under the age of 15 constitute 48% of the population of the DRC. Cases in children typically occur due to skin contact, possibly following zoonotic spill-over events to adult household members. Among adults, outbreaks among networks of men who have sex with men and among professional sex workers have been reported. Although the relative importance of the sexual transmission route among adult cases at the national level is unclear, the outbreak in South Kivu is found to be driven to a large extend by sexual transmission. Based on publicly available sequences, there is currently no evidence of clade I MPXV circulation outside of the Central African countries where clade I MPXV is considered endemic. **Therefore, among the Belgian population, those most likely to be exposed to clade I MPXV are travellers to the DRC. Travellers to the DRC who have multiple sexual contacts in the DRC, and clients of sex workers in South Kivu are at increased risk of exposure. In case of introduction of clade I MPXV in Belgium, the groups most likely to be exposed in Belgium are the Congolese community, and men who have sex with men.**
Severity of the risk *Low to moderate*	For most people, mpox is a self-limited disease, typically lasting two to four weeks and resulting in complete recovery. In some cases, mpox can be more severe, requiring hospitalization. During the epidemic of mpox due to clade IIb MPXV in Belgium, 41 patients were admitted to the hospital (out of 718 cases for whom information on hospitalisation is available). For 29 of those patients the purpose of admission was treatment (of whom 6 had an underlying immune disorder). For another 4 patients the reason for admission was that isolation at home was not possible, while the reason for admission was unknown for the other 8 patients. There were two deaths, both in patients with underlying health conditions. Based on historical outbreaks in African countries, clade I MPXV is generally considered to be more virulent than clade II. In previous outbreaks of clade I MPXV,

the CFR has varied between 0-11%, depending on the setting [5,16]. In the current outbreak the CFR is 5.6% over the first sixteen weeks of 2024. In animal studies in mice, prairie dogs, and cynomolgus macaques, clade I was likewise found to be more virulent than clades IIa and IIb [17,18]. However, as outbreaks with clade I have never been observed outside the African continent, important uncertainty remains about the severity of clade I relative to the severity observed during the multi-country outbreak of clade IIb in 2022-2023 [5]. In particular, given the challenging circumstances in many of the affected areas in the DRC, it is likely that contact tracing is limited and case finding therefore incomplete, especially for less severe cases. Indeed, in a follow-up investigation with active case finding following a 1996 mpox outbreak in the DRC, the CFR was 3.3% while the CFR reported on the basis of routine surveillance was 8.5% [19]. The severity of clade I mpox might also be attenuated in Belgium due to better overall health status of the population, and the availability of high-quality medical care.

In addition to the overrepresentation of children among suspected cases in the epidemic in the DRC (see 'Exposed Population'), the reported CFR in the current epidemic is also higher among children than in adults. Among children, the highest CFR (10.7%) is reported for children younger than one year, followed by children between the ages of one and five (8.9%). For children between five and fifteen, the reported CFR was 4.5% [1]. Correspondingly, 85% of deaths over the first sixteen weeks of 2024 have occurred in children under the age of 15 [1]. Poor nutritional status, lack of access to clean water and concurrent epidemics of other diseases likely contribute to the high CFR observed. During an imported clade IIb outbreak in the US in 2003, 10 out of 34 cases were under eighteen. They were not significantly more likely to develop severe disease or to be hospitalised, but were significantly more likely to be admitted to the intensive care unit than adults, possibly out of precaution [20].

The severity may be further attenuated by residual cross-immunity from smallpox vaccination, but among adults born in Belgium, only those born before 1975 have been vaccinated [21]. Based on the latest data by Statbel, this corresponds to 41% of the 2023 population, not taking into account that immigrants may have been vaccinated later than 1975, before moving to Belgium. During the four years immediately after the cessation of the smallpox vaccination programme in the DRC, smallpox vaccination was found to provide 85% cross-protection against mpox clade I [22]. More recently, childhood smallpox vaccination was found to provide some, but incomplete, protection against clade II mpox during a 2003 outbreak in the US, 32 years after cessation of the childhood smallpox vaccination programme in the US [23]. Given the longer period since cessation (around 48 years) at present in Belgium, the protection due to residual immunity due to childhood smallpox vaccination in the Belgian population may be lower.

In contrast, individuals who were vaccinated with MVA-BN or who experienced an episode of mpox in the last years are expected have immunity to mpox clade IIb as well as clade I, although there is some uncertainty about the extent of cross-protective immunity against mpox clade I, and the waning rate of immunity. No direct evidence is available on the vaccine effectiveness of MVA-BN against clade I. Indirect evidence from the DRC on vaccine effectiveness of first-generation vaccines indicates that the effectiveness of these vaccines against clade I was similar to the (real-world) effectiveness of MVA-BN against clade IIb found in more recent studies [24,25]. However, it is unknown to what extent the efficacy of later-generation vaccines such as MVA-BN may vary by clade [24].

Taking these factors and their associated uncertainty into account, the severity of the risk is considered to be in the range from low to moderate. The severity of the risk is very low for those with recent vaccine- or infection-acquired immunity. It is important to note that this assessment is based on the assumption that the observed CFR for clade I in the DRC is likely to be an overestimation of the true CFR and that the true CFR in Belgium would be lower than the true CFR in the DRC, including among children. Given the centrality of this assumption in the further risk assessment, the situation in the DRC and the evolution of any future outbreak in other countries should be closely followed for any contradicting evidence.

Risk of international dissemination
Moderate

The ongoing epidemic in the DRC increases the risk of dissemination of MPXV clade I outside of the Central African region. Compared to other European countries, the risk of dissemination to Belgium is increased due to the relative intensity of travel between the DRC and Belgium. In 2022 and 2023 there were respectively 75 457 and 80 145 passengers arriving from the DRC in Belgium, according to Eurostat (Table 1). For comparison, the total number of passengers arriving from the DRC in all European countries in 2022 amounted to 125 017. There is a seasonal pattern in the number of arriving passengers in Belgium, with around 8 000 passengers arriving per month during the summer and lower numbers outside the summer season (Figure 6).

The reported outbreaks linked to sexual contact represent the first reports of sexual transmission of clade I MPXV. This highlights the risk that clade I MPXV could spread among sexual networks, including among men who have sex with men, as observed during the 2022 multi-country outbreak of clade IIb MPXV. The outbreak in Kenge involved members of clubs of men who have sex with men. At least fifty of these clubs exist in Kinshasa. The membership of the clubs can be international and members are known to travel to visit other clubs both within the DRC and in other Central African and European countries [4].

The outbreak in Kamituga (South-Kivu) occurs in a region with frequent cross-border travel to Rwanda, Burundi and Uganda, including among mine workers and professional sex workers. The recent reports of (a currently limited number of) cases in the major city of Bukavu, on the border with Rwanda, could increase the risk of dissemination to Belgium in the future. In 2022 and 2023 there were respectively 16 784 and 6 465 passengers arriving from Rwanda in Belgium, according to Eurostat (Table 1). It should be noted that due the porosity of the borders and limited mpox surveillance, initial cross-border spread would likely remain undetected.

The Republic of the Congo (Brazzaville), where mpox clade I is considered endemic, declared an epidemic of mpox on April 24th 2024. Fifty-nine suspected cases have been reported in 2024 as of April 24th 2024 [26]. This exceeds the highest annual number of confirmed and suspected cases previously recorded (53 in 2021 [3]). Due to its smaller magnitude, and limited travel connections with Belgium (Table 1), this epidemic is currently less concerning than the epidemic in the neighbouring DRC from the point of dissemination to Belgium. While the Republic of the Congo (Brazzaville) borders the most affected provinces (Équateur, Sud-Ubangi) in the northeast of the DRC, it is currently unclear to what extend cross-border dissemination plays a role in this outbreak [4].

Taking these factors into account, the risk of dissemination is considered to be moderate.

PREPAREDNESS & CONTROL MEASURES ALREADY IN PLACE

Surveillance

As mpox is considered a public health threat, it has been handled as a mandatory notifiable disease since the beginning of the outbreak in May 2022. Every probable and confirmed case has to be notified to the regional health agencies. The regional health agencies, in turn, conduct case investigation and contact tracing. MPXV-positive samples are sent to the Institute of Tropical Medicine (ITM) or the KU Leuven/Rega for clade identification. The information collected by the regional health agencies is shared with Sciensano, which maintains a national database. Sciensano publishes a three-monthly bulletin[2] on mpox and reports cases to ECDC via the TESSy platform.

Control

The following procedures and guidelines, developed in the context of the 2022 outbreak are currently in place.

- Suspected case of mpox in schools or childcare (12/09/2022)
- Information for healthcare workers (03/10/2022)
- Sampling and sample transport (26/08/2022)

As part of the travel Advice for the DRC, in relation to the ongoing mpox epidemic, the FPS Foreign Affairs advises to follow general precautions such as washing hands and seeking medical care in case of symptoms.

Primary preventative (pre-exposure) vaccination (PrEV) was offered to individuals at high-risk in 2022. In Flanders, the vaccination campaign was discontinued at the end of 2022, while PrEV is currently still offered in Brussels and Wallonia. Post-exposure vaccination (PEV) is still available for individuals who had a high-risk or very high-risk contact, within four days after the exposure.

Case management

The only available antiviral treatment is the Tecovirimat SIGA, which has been authorised by the EMA on January 6th 2022 under the 'exceptional circumstances' authorisation, based on evidence on safety in non-infected people and evidence from animal studies on effectiveness to reduce mortality[3]. In Belgium, treatment with tecovirimat is currently reserved for hospitalised patients with severe disease, upon approval by an expert committee [27]. For other patients, the management consists of symptom control with analgesics, antipyretics, and/or antipruritics.

There is currently no evidence from clinical trials regarding the effectiveness of tecovirimat against Clade I. The target viral protein of tecovirimat (VP37) is highly conserved among all *Orthopoxviruses* [28], suggesting that the efficacy may be similar for both clades. A randomised controlled trial (PALM007[4]) is ongoing in the DRC in two hospitals in the provinces Maniema and Sankuru, with study completion estimated in September 2024 [4].

[2] Mpox epidemiologische situatie - Sciensano
[3] Tecovirimat SIGA | European Medicines Agency (europa.eu)
[4] Study Details | | ClinicalTrials.gov

RISK ASSESSMENT FOR PUBLIC HEALTH IMPACT IN BELGIUM	
General population	For the **general population in Belgium**, the **likelihood of exposure** at the moment is assessed as **very low,** since there is no evidence of circulation of clade I MPXV outside of the Central African region. Given low secondary attack rates among non-sexual household contacts during the 2022-2023 multi-country outbreak, the **likelihood of sporadic importation leading to a sustained outbreak among the general population is very low** [5]. The **impact in case of exposure** is considered to be **moderate**, the higher end of the severity range (low to moderate), following the precautionary principle. Considering the very low likelihood of exposure and the moderate impact in case of exposure**, the risk for the general population (including children) in Belgium is assessed to be low.**
Travellers to the DRC	**For travellers to the DRC, the likelihood of exposure is considered to be low at the moment,** based on the limited circulation in major population centres in the DRC. This assessment is contingent on the current situation, and could be subject to revision based on the evolution of the outbreak in the DRC, in particular the increasing number of reported cases in South-Kivu in the vicinity of Bukavu. Importantly, the likelihood of exposure is very heterogeneous. **Individuals who have sexual contacts while traveling in affected provinces have a strongly increased risk of exposure,** especially in settings with documented transmission among sexual networks (MSM or heterosexual) or among sex workers**. The impact in case of exposure is considered to be moderate,** for the same reasons as outlined for the general population. Considering the low likelihood of exposure and moderate impact in case of exposure, **the risk for travellers in general is assessed to be low. For travellers who have sexual contacts in regions with documented sexual transmission among MSM networks or with sex workers in South Kivu, the risk is moderate.** In line with the likelihood of exposure, the assessed risk for travellers is strongly dependent on the evolution of the epidemiological situation in the DRC. In particular, is should be reviewed in case of increased circulation in large population centres.
Congolese community in Belgium	In case of introduction into Belgium, the likelihood of exposure of members of the Congolese community is considered to be higher than for the general population. **The likelihood of exposure is therefore considered low to moderate.** The impact in case of exposure is expected to be similar as for the general population, namely **moderate**. Taking into account the low to moderate likelihood of exposure and moderate impact, **the overall risk for the Congolese community in Belgium is assessed to be low to moderate.**
MSM in Belgium	**For MSM in Belgium, the likelihood of introduction is considered to be moderate**. While there is no evidence of circulation of clade I MPXV outside of the Central African region, the report of transmission in a club of MSM in Kenge with international links increases the likelihood of introduction in Belgium, either directly or after a potential outbreak in a third country with strong links to Belgian MSM networks. Of note, Belgian MSM with links to the DRC are considered to be interconnected with broader MSM networks in Belgium. Among MSM most at risk of exposure, there is a level of vaccine- or infection-acquired immunity. No new outbreaks of mpox have been observed in Belgium after 2022, despite sporadic cases among MSM in Belgium. This could be due to changes in risk behaviour, immunity, control measures such as contact tracing and PEV, or other factors. Of note, almost two years after the period of peak mpox circulation in Belgium, the perceived risk may be lower than in 2022, leading to a reversion of risk behaviour to pre-2022 patterns. Yet, the **likelihood that an introduction leads to a sustained outbreak among MSM is considered to be low**. The **impact in case of exposure depends on the immunity status**. For immune-naïve individuals the impact in case of exposure is similar as for the general population (moderate). For individuals with natural or vaccine-acquired immunity, the expected impact in case of exposure is very low. Given that persons at

increased likelihood of exposure are more likely to have some form of immunity, **the overall risk for MSM in Belgium is assessed as low. But importantly, the personal risk is higher, namely moderate, for unvaccinated MSM without prior infection.**

RECOMMENDATIONS

Surveillance

It is important that clade and travel history are specified when regions report new mpox cases in Belgium. Clade identification should be done on all mpox cases, and especially if travel history to central Africa is reported. If MPXV clade I is detected in Belgium, it should be reported immediately to Sciensano and the applicable regional health agency.

Given the potential for genetic alterations to interfere with certain clade-specific MPXV PCR tests [10], it is important that generic *Orthopoxvirus* or generic MPXV PCR tests [29] are included in the diagnostic protocol. While this is the case for the Institute of Tropical Medicine [7], this should be verified for the other clinical laboratories[5]. Clade I-specific PCR assays should be updated to accommodate the Kamituga (sub-) clade Ib, for example using the novel assay proposed by EVD-LabNet, if this has not already been implemented.

Wastewater-based surveillance is currently used to monitor the circulation SARS-CoV-2 in Belgium, supplementing sentinel-based surveillance systems [30]. The detection of MPXV DNA in wastewater and its value for surveillance have been demonstrated in the context of the 2022-2023 mpox outbreak [31]. A pilot study could be prepared relatively quickly to investigate the feasibility of wastewater-based surveillance of mpox in Belgium, including clade-specific detection. The primary aim would be to have a wastewater-based surveillance system for mpox ready for use in case of a new outbreak. In a later stage, routine surveillance of MPXV in wastewater could be considered, given the ability to detect MPXV in wastewater even at low mpox incidence [32].

Control

Awareness should continue to be raised among clinicians about the outbreak in the DRC and the potential for travel-related cases of mpox, especially in the Brussels Capital Region and other major cities with substantial Congolese communities[6] such as Liège, Antwerp, Mons, Namur, Charleroi, Ottignies-Louvain-la-Neuve.

Unvaccinated MSM with multiple sexual partners without prior infection could be at increased risk. Making PrEV vaccination available for this group in all regions would give this group the opportunity to reduce their personal risk.

If vaccine stocks allow, the availability of vaccination should be extended to groups at increased risk of exposure such as travellers to the DRC, HCW in contact with risk groups, and sex workers (including women) in Belgium.

Communication

Awareness should be raised among travellers to the DRC about the risk of exposure to mpox via sexual contacts, especially in the province of South Kivu.

Awareness should be raised among travellers to the DRC and the Congolese community in Belgium about signs and symptoms of mpox, and seeking medical advice in case of symptoms should be encouraged, while being careful to avoid stigmatisation of the Congolese community.

Unvaccinated MSM with multiple sexual partners without prior infection could be at increased risk. Communication to raise awareness among this group about the availability and benefits of PrEV should be considered in order to increase vaccine uptake. Partner organisations such as Sensoa, Ex Aequo, …, could play an important role in this communication.

[5] Full list (n=17) as of 1 April 2023: informatiefiche_erkende_laboratoria_27102022.pdf (belgium.be)
[6] Etude de la migration congolaise (Centre) | EMN (emnbelgium.be)

ACTIONS	
Regional health agencies	Continue to perform epidemiological investigation and contact tracing.
Sciensano	Continue to monitor and report on the situation in Belgium. Monitor the situation in the DRC and any potential outbreaks in other countries, for increases in the risk to travellers, increased risk of introduction in Belgium, or evidence on severity of clade I outside of the endemic setting.
Laboratories	Laboratories should ensure that their lab protocol includes a generic MPXV PCR or a generic *Orthopoxvirus* PCR, to allow detection of MPXV clade I (including clade Ib). Clade investigation should be performed on all MPXV-positive samples. Any clade I positive result should be reported as soon as possible to Sciensano and the applicable regional health agency.
FPS Health	The applicable procedures and guidelines[7] should be reviewed and updated where necessary.
FPS Foreign affairs	The risk of risk of exposure to mpox via the sexual route should be explained in the travel advice for the DRC.
Professional networks (GP's, infectiologists, dermatologist, gynaecologist, urologist)	Raise awareness among clinicians, especially in major cities and for travellers returning from the DRC.
Travel clinics	Raise awareness of mpox, including signs and symptoms, and of risk of exposure to mpox via the sexual route in the travel advice for the DRC.
Partner organisations	Continue to raise awareness among MSM who have multiple sexual partners.
Regional health agencies, municipal authorities, and organisations close to the Congolese community	Raise awareness of mpox, including signs and symptoms, especially for travellers returning from the DRC.

[7] Apenpokken (Monkeypox) : informatie voor zorgverleners | FOD Volksgezondheid (belgium.be)

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ANNEXES

ANNEX 1: EPIDEMIOLOGY IN DRC

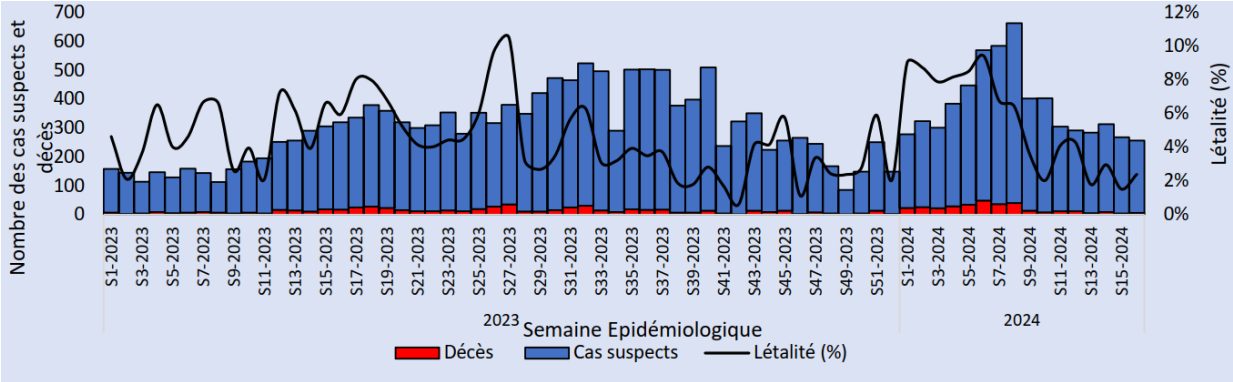

Figure 1: National number of suspected cases & deaths and observed CFR, per week [1]

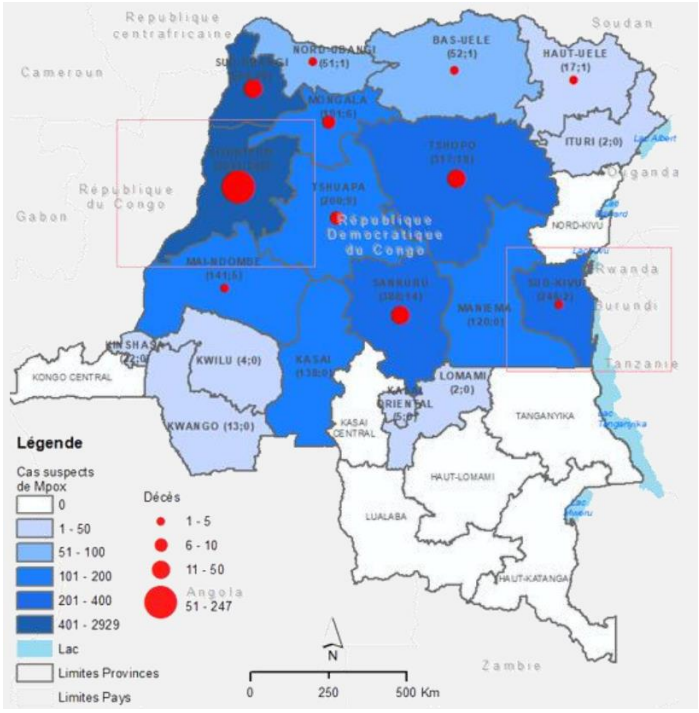

Figure 2: Geographical distribution of suspected cases and deaths reported between weeks 1-16 of 2024 [1]

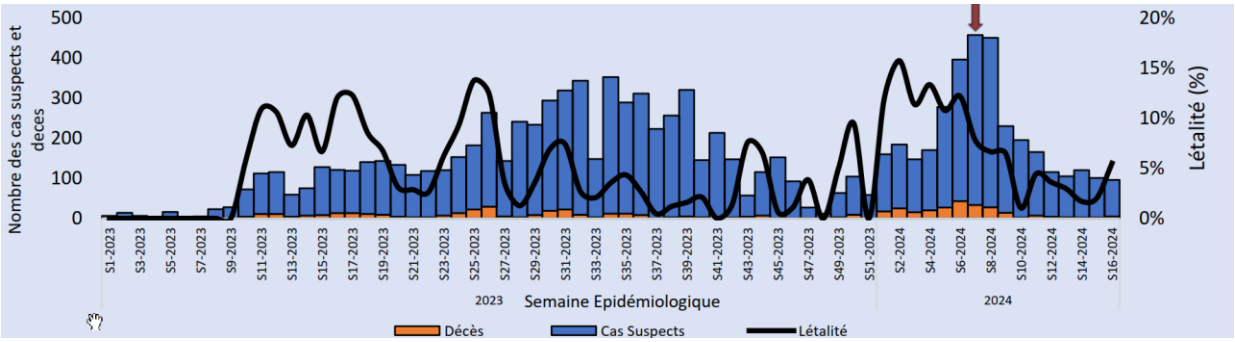

Figure 3: Number of suspected cases and deaths in Équateur province per calendar week. Red arrow indicates roll-out of control measures by the Ministry of Public Health, Hygiene and Prevention and MSF Belgium [1].

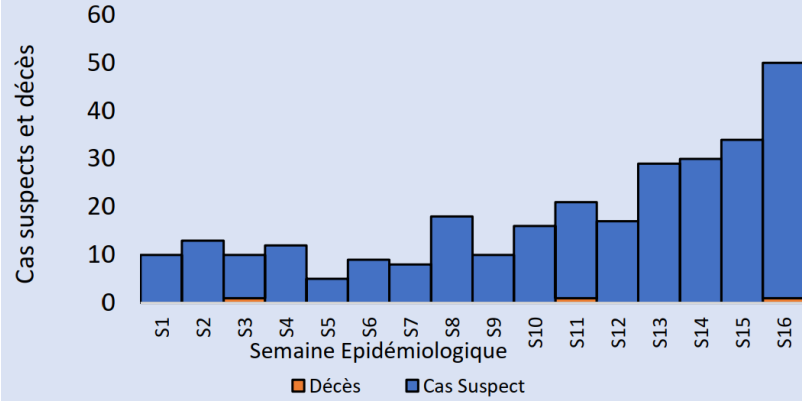

Figure 4: Number of suspected cases and deaths in South-Kivu province per week, 2024 [1]

ANNEX 2 EPIDEMIOLOGY IN BELGIUM

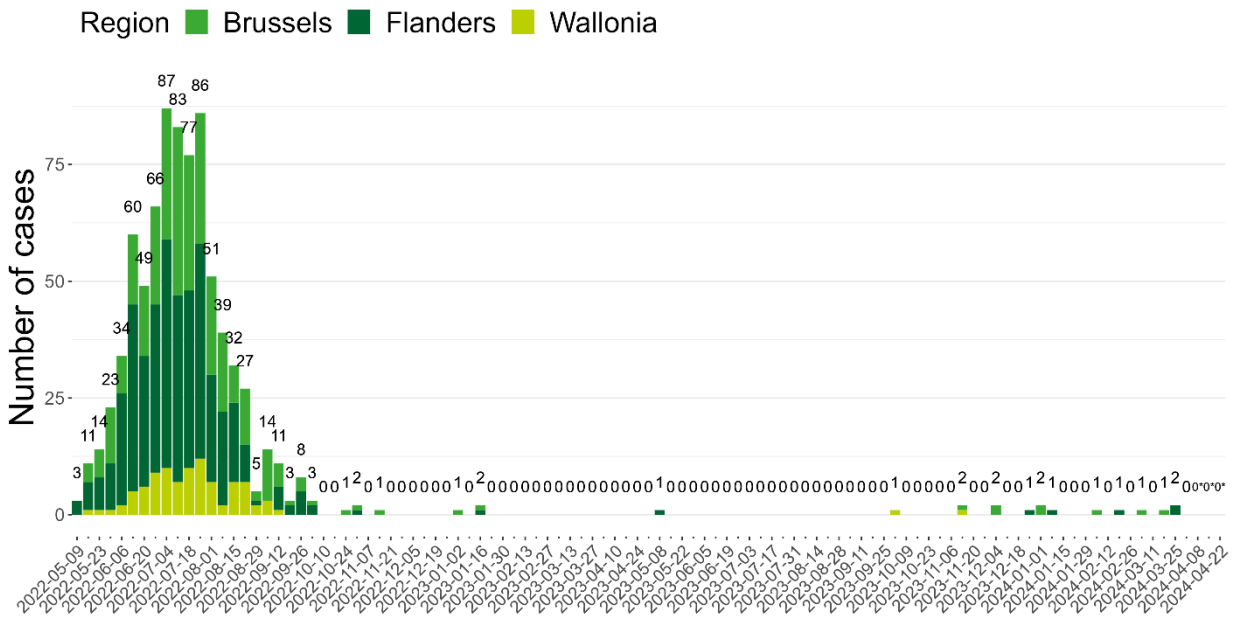

Figure 5: Number of confirmed cases in Belgium per calendar week, since May 2022.

ANNEX 3 TRAVEL CONNECTIONS

Table 1: Number of arriving passengers from selected African countries, in Belgium and in the 27 Member States of the EU.

Country	Year	EU27 countries	Belgium
Total extra-EU	**2022**	192,969,844	4,495,913
Total extra-EU	**2023**	:	5,333,422
Cameroon	**2022**	193,579	87,372
Cameroon	**2023**	:	94,189
Central African Republic	**2022**	11,600	:
Central African Republic	**2023**	:	:
Congo	**2022**	60,422	3
Congo	**2023**	:	4
Democratic Republic of the Congo	**2022**	125,017	75,457
Democratic Republic of the Congo	**2023**	:	80,145
Gabon	**2022**	53,428	:
Gabon	**2023**	:	13
Burundi	**2022**	:	:
Burundi	**2023**	:	:
Rwanda	**2022**	43,441	16,784
Rwanda	**2023**	:	6,465
Uganda	**2022**	124,297	76,275
Uganda	**2023**	:	91,923
South Sudan	**2022**	:	:
South Sudan	**2023**	:	:
Sudan	**2022**	76	:
Sudan	**2023**	:	:
Côte d'Ivoire	**2022**	280,780	36,087
Côte d'Ivoire	**2023**	:	30,814
Liberia	**2022**	49,877	41,673
Liberia	**2023**	:	50,915
Nigeria	**2022**	260,986	0
Nigeria	**2023**	:	0
Sierra Leone	**2022**	15,306	2,394
Sierra Leone	**2023**	:	1,639

Source: Eurostat (AVIA PAEXCC). NB:

Figure 6: Number passengers arriving from the DRC in Belgium, per month. Source: Eurostat (AVIA PAEXCC)