Key considerations: Risk communication and community engagement for mpox vaccination in eastern DRC



Social Science in Humanitarian Action Platform

This brief presents social and political considerations for the design and implementation of vaccination-related risk communication and community engagement (RCCE) strategies for mpox in the eastern Democratic Republic of the Congo (DRC). A nationwide outbreak of mpox (clade I) was declared in late 2022 and now affects 23 of its 26 provinces.¹ Notably, the outbreak is characterised by widespread human-to-human transmission unlike previous outbreaks primarily involving animal-human contact.²

While mpox hotspots are emerging around the country, this brief focuses on eastern DRC where complex political history and ongoing armed conflict – on top of poor infrastructure and rural isolation of many communities – present significant challenges. These challenges demand carefully designed and tailored strategies. Furthermore, a mutated, more virulent mpox strain has also emerged in the eastern province of South Kivu. Although little remains known about transmission dynamics in the outbreak overall, sexual transmission of the new strain is of concern, putting stigmatised populations such as sex workers and others at risk.³ Overall, however, children are the most affected population, with transmission driven by close physical contact.¹ Along with pregnant women and people with compromised immunity (e.g., people with HIV/AIDS), children are also at higher risk of complications and death.¹

The World Health Organization (WHO) recommends targeted vaccination approaches in the context of mpox outbreaks, including as postexposure prophylaxis for these populations.⁴ The DRC Ministry of Public Health has announced intentions to vaccinate both children and adults with the LC16 and MVA-BN mpox vaccines, respectively, under a temporary emergency use authorisation as these vaccines are not yet approved in the country.¹ Efforts are now mobilising to design vaccine and related RCCE interventions.

This brief draws on a SSHAP roundtable discussion on mpox in the DRC (May 2024),⁵ consultation with social science experts and health and humanitarian actors active in or knowledgeable about the region and outbreak, and academic and grey literature.

Key considerations

- Prioritising evidence-based RCCE supports effective targeting and adaptation of interventions. Local health actors should be supported with real-time epidemiological data. These data are crucial to understand who is at risk and thus can inform how and where to target and adapt RCCE efforts for specific populations and local social contexts.
- Working with trusted local actors who can navigate complex social and political dynamics to lead RCCE and vaccination efforts can support trust and effectiveness. Failure of the government and international humanitarian and peace actors to protect conflict-affected populations has understandably eroded people's trust in 'outsiders'.
- Acknowledging broader concerns and supporting local people's priorities beyond mpox vaccination can improve trust and deliver better health, safety and well-being outcomes. In contrast, previous Ebola and COVID-19 responses were experienced by many as grossly misaligned with local priorities, leading to disengagement and pushback.
- Prioritising community-led security solutions for response activities demonstrates commitment to the interests of local people. Conversely, securitised response activities involving state armed forces, police or other armed actors can be seen as response 'siding' with groups perceived or experienced as exploitative, abusive and/or linked to conflict.

- Involving communities in discussion and decision-making on vaccination and RCCE strategies can support trust and engagement. Clarifying reasons for targeted approaches to vaccination and how to engage diverse community groups is important. Past failures to do this have fuelled rumours about ulterior motives and nefarious intentions.
- Delivering inclusive RCCE which corresponds with and is sensitive to diversity within communities can support wider reach. Utilising locally spoken languages and culturally sensitive approaches can reach more and diverse residents who may be from across the DRC and neighbouring countries while building trust.
- Carefully tailored RCCE strategies for children and potentially pregnant women whose vaccination is likely to elicit communal anxiety – can mitigate and address concerns. These strategies should include honest dialogue on what is known on the safety and efficacy of available vaccines among these groups, any plans to undertake related research and how outcomes will be transparently monitored.
- Avoiding and countering framing that mpox is a primarily sexually transmitted disease is important to mitigate stigma and a false sense of security. Conversely, too much focus on sexual transmission and/or key populations at high risk for mpox (e.g., sex workers) can exacerbate stigma against them, create false security among others and deter vaccination.
- Implementing targeted and discreet engagement with stigmatised groups at risk of mpox will help reach them and mitigate stigma. Identify and work with people and networks trusted by the stigmatised groups, recognising that these populations are diverse (e.g., sex workers range from professionals to those engaged in occasional transactional sex).
- Prioritising engagement of local healthcare workers in RCCE and vaccination enhances protection and trust. Health practitioners (including formal and informal, biomedical and traditional) face increased infection risk and are often trusted community liaisons. Prioritising their vaccination and meaningful involvement in response can improve overall effectiveness.
- Integrating mpox RCCE and vaccination into existing services can help reach vulnerable populations. For example, people with HIV/AIDS and pregnant women who are more vulnerable to complications from mpox can be reached through existing HIV/AIDS programmes and prenatal care services. Integrating mpox RCCE and vaccination with routine immunisation services, which should also be promoted, can also support engagement and uptake.
- Implementing broadcasted and mobile or pop-up RCCE and vaccination activities improves access for remote and displaced populations. Radio call-in programmes provide anonymous dialogue opportunities, while mobile activities sensitive to people's realities (e.g., scheduled around working and caring patterns) can help reach those unable or unwilling to travel due to resource constraints, safety concerns or alternative priorities.
- Closely monitoring political and conflict developments allows for timely adaption of response activities. Global, national and local events such as elections or outbreaks of violence or other diseases can shape how people perceive mpox response and vaccination. For example, responsive adaptation could identify, trace and respond to narratives and rumours linking conflict dynamics to vaccination.
- Continuously updating RCCE to incorporate new knowledge on vaccine safety and efficacy supports trust and informed decision-making. This is particularly important given the novel mpox strain and the unique features of the current outbreak (i.e., wide community spread) and because the vaccine efficacy and safety profile is not yet fully established.
- Engaging communities in research design and decision-making mitigates concerns about experimentation and builds trust. The novel features of the outbreak may necessitate research alongside vaccination and other response efforts. This requires transparent communication about research activities involving communities in discussions about ethics, protocol design and implementation.

Social context and mpox vaccination efforts

This section explores important aspects of the social, economic and political context that shape how people in the affected areas perceive, access and engage with mpox vaccination efforts.

Limited availability and access to quality healthcare

Weak formal health system. The availability of formal healthcare across the DRC is limited. This is particularly the case in remote areas, such as those affected by the current mpox outbreak, where facilities are particularly sparse. Additional challenges include a lack of medical supplies and equipment, and limited financial resources for medicines, paying staff and the costs of running facilities.⁶ Conflict exacerbates these challenges in South Kivu where healthcare workers fear attacks.⁷ For these reasons some people lack confidence in the formal public health system.⁸

Limited financial resources among the population. Many people struggle to afford user fees, transportation and other costs associated with accessing formal healthcare services.⁶ Thus treatment for emergency or routine-yet-priority health concerns – such as malaria, respiratory or diarrhoeal diseases, and HIV/AIDS – can be financially burdensome and out-of-reach for many. People may therefore feel suspicious of the motives of those offering free and accessible vaccine services for mpox. Levels of suspicion can be heightened if populations do not perceive mpox as a risk to them or their family members.

Private healthcare. In part due to the limitations of the formal health system, the first recourse to healthcare or health advice for many people is to the more accessible and affordable informal medicine sellers, herbal or spiritual healers, and/or to self-medicate with natural remedies.⁸ This is especially true among poorer groups. In addition to costs, preferences for traditional care or concerns about the quality of public sector care can lead others to avoid this formal health system.⁸ This is further compounded by fear of discrimination at health facilities for some groups. Informal or customary providers are often more trusted and accessible, and it is therefore important to engage them in RCCE for mpox vaccination.

Implications for RCCE and mpox vaccination

- Efforts involving RCCE can be adjusted to clearly communicate mpox risk and the need for vaccination as well as other protective actions, while recognising and discussing these within the context of other local community health priorities. For instance, balancing communication about mpox vaccination with continued emphasis on the importance of routine immunisation can help ensure that a focus on the mpox outbreak does not inadvertently reduce uptake of other critical immunisations.
- Information, support or resources available for accessing quality prevention and care for other health issues can be highlighted through mpox RCCE activities, demonstrating care towards communities.
- Engaging both local formal *and* informal healthcare workers in community engagement activities around mpox vaccination is important to ensure information about vaccination is widely available, understood and trusted.⁹

Stigma and discrimination

Sexual transmission and stigma. Sexual contact appears to be a significant transmission pathway in South Kivu.¹ Sexual transmission is not currently available on case investigation forms and requires specific additional investigation for which resources are currently very limited. Thus, the proportion of cases resulting from sexual transmission is currently unknown. Nevertheless, sex workers in and around mining towns appear to be particularly vulnerable to infection.¹ It is not clear if transmission is occurring significantly among men who have sex with men (MSM) at this stage. MSM-associated transmission was reported in the DRC earlier in the

outbreak.¹⁰ Also, mpox was associated with MSM in the media and by global health actors of the 2022-2023 global outbreak.¹¹ These reports may fuel local misconceptions that the disease primarily affects MSM. Participants at the SSHAP roundtable discussion (May 2024)⁵ indicated that sex workers and MSM face stigmatisation in the DRC, including in healthcare settings,^{12,13} and that this stigmatisation may discourage these groups from seeking care and prevention.

Gender and power dynamics. Participants at the SSHAP roundtable discussion (May 2024)⁵ indicated that women in affected mining communities may be engaged in transactional sex to different degrees. Some women may engage in transactional sex on a more full-time and formalised basis (e.g., deployed to towns by 'godmothers'), while other women may engage only occasionally to supplement their income from other livelihoods, often mining-related activities. The mining jobs for women may be the lower-paid and low-status mining tasks, such as stone crushing. Women known to engage in transactional sex may be excluded from joining women's groups. The generalised lower income and status of women, and the even lower status of those women engaged in sex work, can increase vulnerability to stigma and discrimination associated with mpox and mpox vaccination.

Implications for RCCE and mpox vaccination

- People may not feel comfortable seeking vaccination against mpox as they worry others will know or assume they are engaged in transactional sex or MSM and discriminate against them.
- Any RCCE activities that overly reinforce an association between mpox and these groups or sexual transmission as the primary mode of transmission risk exacerbating these associations and barriers to vaccination.
- Overly focussing on MSM, transactional sex and sex work can create a false sense of security among people not in these groups, leading to a misconception that they are not vulnerable to the disease and therefore they may also avoid vaccination.

Diverse populations

Potential intercommunal tensions. The DRC is home to over 250 ethnic groups. There may be intercommunal tensions, especially between groups considered 'native' and 'non-native' – distinctions rooted in colonial legacies.¹⁴ These tensions may be triggered by competition for resources, political influence or access to land, as well as broader conflict dynamics including the actions of the national army and/or other armed groups.¹⁴ For example, the Banyamulenge – a minority group in South Kivu that has been there since the early 1800s – are nevertheless perceived as Tutsi 'outsiders' from Rwanda by other local groups, such as the Babembe, the Bafuliro, the Banyindu and the Bavira.¹⁵ Disputes over land, political representation and rights have led to violent attacks, property destruction and displacement.¹⁵

Experts consulted for this brief emphasised that similar but lesser publicised tensions exist in other parts of South Kivu. For instance, land conflicts have emerged between different Barega clans over the management of hills and mining sites in the Mwenga territory, particularly around Kamituga, which has been highly impacted by mpox. Furthermore, there are tensions between the local Barega populations of Mwenga and Shabunda and the Bashi people who have migrated from Walungu, Kabara and Bukavu to work in in these areas. These localised conflicts over resources and economic opportunities illustrate the complex dynamics that can affect community relations and potentially impact health interventions.

Intercommunal tensions could be exacerbated by poorly planned infectious disease response, such as RCCE or vaccination strategies perceived to unfairly favour certain groups, or if vaccination of specific groups is misinterpreted as a form of targeted harm.

Diverse cross-border communities. Some mpox-affected areas, such as the mining towns of South Kivu province, are characterised not only by ethnic diversity but also by a diversity of residents and visitors hailing from across the DRC and neighbouring countries. Migrants may be attracted to livelihood activities (e.g., mining, agriculture, markets, sex work) or other social

activities, or they may be fleeing conflict. This can mean the presence of a mix of people with different linguistic, cultural and religious backgrounds, and different understandings, perceptions and experiences of infectious disease outbreaks and outbreak response, including vaccination.

Implications for RCCE and mpox vaccination

- Understanding local communities, including preexisting tensions between ethnic or migrant groups, is important to ensure RCCE and vaccination activities do not inadvertently inflame these tensions by being perceived to favour or target certain groups. This requires transparent and inclusive engagement with all groups.
- It is important to work with local actors to understand local populations, including different migrant, labour or other social cohorts, and the languages, communication and engagement channels are most relevant to them. For example, in addition to RCCE activities in Kiswahili and Kibembe (languages widely spoken among people in eastern DRC), Lingala, Tshibula, Kinyarwanda and Kirundi may also be important, depending on local demographics.
- Dialogue-based engagement with different groups can help identify different understandings, perceptions, practices and priorities that may be emerging among local cohorts around mpox and mpox vaccination. This can help RCCE actors to tailor activities to meet diverse population needs.

Conflict and mistrust

Barriers to health and humanitarian actors. Violent conflict and instability in eastern DRC, including in South Kivu, has made it difficult for health and humanitarian actors to operate due to direct threats and general security concerns. Local people may also hesitate to travel to access care or vaccination for mpox or any other health concern. Many rural areas are effectively controlled by armed groups, with whom few humanitarian actors have been successful in negotiating access to populations in these areas. Indeed, many humanitarian agencies have ceased operations altogether.¹⁶ These conditions challenge mpox responders in this region, including those engaged in RCCE and vaccination activities. For more detail on this, see the next section on lessons learned from Ebola and COVID-19 responses.

Mistrust of external and/or militarised actors. Long-term conflict and the failure of domestic and external actors to provide meaningful protection for local people has led to the mistrust of many international actors, including humanitarian organisations.¹⁷ The UN's 'stabilisation mission' MONUSCO is perceived by many as having failed to protect the population, acting more as an additional layer of policing and/or pursuing its own economic interests.¹⁸ It is currently in the process of withdrawing from the country. Furthermore, international actors including governments and corporate entities have also contributed to destabilisation through exploitation of the region's mineral wealth, which has fuelled the conflict.¹⁹ Congolese people engaged in health or humanitarian work from different parts of the country may also be presumed to be pursuing their own interests, and they may not be trusted locally.⁹ External RCCE and vaccination actors are likely to be met with similar mistrust from local people in conflict-affected areas in the DRC, particularly if they lack appropriate knowledge or experience, including of the region or even country.

Implications for RCCE and mpox vaccination

- In conflict-affected areas, there is a need to meaningfully engage and work through local actors in RCCE and vaccination activities to maximise trust and demonstrate the good faith of these activities. In general, local and national staff should be prioritised unless international capacity is specifically requested.
- Local facilitators and 'moral authorities' such as faith leaders may be particularly important to mediate access to populations in unstable and hard to access areas with limited state presence.

• Activities conducted with the presence or collaboration of police, army or non-state armed actors should be carefully considered as this may lead to perceptions of responders as aligned with conflict actors. This should be avoided where possible and/or replaced with community-led security solutions.

Lessons from Ebola and COVID-19 responses in the DRC for RCCE for mpox vaccination

This section looks at the implications and lessons for mpox vaccination from past experiences with Ebola and COVID-19 vaccination and broader responses in the region.

The DRC is prone to outbreaks of infectious disease due to its limited and fragile health system, widespread poverty and persistent conflict. For instance, it experienced the world's second largest recorded Ebola outbreak from 2018-2020, with North Kivu in eastern DRC bearing the brunt. This also makes it particularly experienced in outbreak response, with lessons to draw upon for a more effective mpox response from recent Ebola vaccine trials and COVID-19 vaccination and response. Although mpox now primarily impacts South Kivu, the regions face similar challenges with respect to similar histories of instability.

Outbreak vaccination may not align with local priorities

Both Ebola and COVID-19 vaccines have been challenged in the DRC because the populations have more urgent priorities. For instance, ethnographic research during Ebola vaccine trials in eastern DRC showed that many people were suspicious of the Ebola response and vaccine trials.²⁰ This was in part due to the fact that security was a far more pressing issue for them, something both domestic and international actors had failed to address.²¹ This quote from an anthropological study research participant illustrates this discrepancy:

'Look at how the whole republic and the whole world mobilised for the Ebola response, but when you come back to the massacres that are happening here, you see that no one is interested. So when they bring another vaccine here, the rumours are more believable than the truth'.²⁰

Furthermore, Ebola vaccine trials were paused to prevent COVID-19 at a time when COVID-19 had not yet impacted locally and was perceived as a European or 'white' disease. This pause led to some people feeling Congolese lives were not a priority. It also led to rumours that the pause was being used to secretly swap second doses of Ebola vaccine for experimental COVID-19 vaccines to be tested on Africans.²² Additionally, and as noted above, other routine and emergency healthcare, or socioeconomic support, may be more pressing concerns for people. However, free healthcare – offered as an incentive for volunteers to participate in the second Ebola vaccine trial – was a considerable draw, in addition to protection from Ebola.²³ Free primary healthcare policies were also enacted in affected health zones in North Kivu and Equateur during the Ebola outbreak in 2020, and these supported access to routine care and immunisations to continue.^{24,25}

Implications for RCCE and mpox vaccination

 Honest dialogue that recognises and aims to support the community's and people's multiple needs and priorities alongside vaccine engagement is important for building trust in vaccination efforts and supporting broader well-being. Honest dialogue includes open conversations about security concerns and highlighting and supporting access to other priority resources, such as healthcare.

Opaque vaccine protocol discussion and decision-making damages trust

During the DRC's 10th Ebola epidemic (2018-2020), two vaccine trials using two different vaccines with individual protocols were carried out in different locations.²⁰ In the initial trial, which was conducted as a ring vaccination (a strategy that focuses on those at highest risk of

contracting the virus) in the outbreak's epicentre in the Grand Nord, only close contacts of people with confirmed Ebola were offered a vaccine.

Participation was voluntary in the second trial, which was carried out in peripheral neighbourhoods of Goma – the 'crossroads' between the city and the Grand Nord. These multiple vaccines and their different eligibility requirements led to fierce debate in the DRC about the ethics of introducing another trial when a vaccine had already been tested and approved.²⁰ But beyond the question of experimentation, it was not clear for many why certain decisions had been made or what the overall strategy was.

In the Grand Nord, lack of clarity around the narrow eligibility led many to feel that life-saving care was witheld from them.²⁰ In contrast, rumours circulated in Goma about why these neighbourhoods and Goma itself had been chosen.²⁰ The rumours ranged from speculation that the trial was a political tool to target the Nande ethnic group to concerns that poor peripheral neighbourhoods were being exploited while affluent central areas were spared.²⁰ This reflected community engagement, which primarily focused on explaining how the vaccine worked rather than discussing eligibility, decision-making around the design of vaccine intervention or the introduction of a second vaccine.

Implication for RCCE and mpox vaccination

 Activities involving RCCE that encourage dialogue and involve communities in decisionmaking about protocol design and strategy, including elibility for vaccination and delivery locations, and the ethical implications of these decisions can promote public confidence in vaccination.²⁶

Outbreak vaccination campaigns are inseparable from local and global politics

'Resistance' is a result of neglect, exploitation and inequality. While many eligible people have taken up Ebola and COVID-19 vaccines in the DRC, there has been widespread mistrust of the vaccines. There was also widespread critique of the broader Ebola (2018-2020) and COVID-19 responses, and the dynamics in which they were embedded, particularly in conflict-affected eastern areas.^{9,21} This led to violence against Ebola treatment centres and other health centres, healthcare workers, caregivers and officials.^{17,21} This backlash, widely framed as 'resistance', rather reflects how these responses emerged into and interacted with local and global political realities.

People in eastern DRC have a deep mistrust of outsiders and externally led interventions.²⁷ This mistrust follows experiences of historical exploitation combined with ineffective governance and protection by local and national governments, as well as by international humanitarian and peace actors.²⁷ Also, this mistrust was – and remains – fertile ground for anxieties, suspicions and rumours about the objectives of health interventions, such as vaccinations. For example, the highly visible and well-funded Ebola response (2018-2020) and its high-paid international and Kinois (people from Kinshasa, the capital of the DRC) staff starkly contrasted with the insecurity and poverty faced by local people.^{21,28} Locals recruited for the response efforts reported poor treatment.⁹ This inequality fuelled the widespread conclusion that responders had motives to profit from 'Ebola business' - from which a local clientelist system did spring - and even to prolong the outbreak.^{17,21} Fortunately, responses to subsequent outbreaks avoided these mistakes (see Box 1). Similar perceptions were observed during COVID-19, with rumours circulating that COVID-19 had been created by pharmaceutical companies to then profit from COVID-19 vaccines.²² Perceptions of corruption and the misuse of funds among officials that had been intended for the COVID-19 response fed perceptions of exploitation and led to a violent backlash.¹⁷ Such events have fuelled other rumours, including that Ebola and COVID-19 vaccines were designed to exterminate or sterilise people.²³

Box 1. Evolution of Ebola response in the Democratic Republic of Congo (DRC)

Experts consulted for this brief familiar with this (2018-2020) and subsequent Ebola outbreaks in the region (in 2021 and again in 2022) indicated that a shift to more community-driven responses in later outbreaks led to greater success. These more recent approaches relied less on large numbers of international staff and more on local capacity. This resulted in fewer issues stemming from mistrust and improved vaccine acceptance. This evolution in strategy over the past five years demonstrates the value of locally led responses.

Securitisation can influence trust. By partnering with state authorities and security forces, which civilians already distrusted, Ebola responders in eastern DRC came to be perceived as de facto conflict actors. For example, Ebola response convoys were escorted by the same military vehicles seen at massacre sites, and the forcible taking of patients to treatment centres evoked kidnappings by armed forces.²⁷ Less militarised security actors, such as police, can also be perceived negatively by local people. During COVID-19, for instance, there were reports of police brutality to enforce COVID-19 restrictions on people in Bukavu and Goma and along the border with Uganda.¹⁷ How people perceive response activities, and their trust in vaccination, can be significantly influenced by who provides security for vaccination and other outbreak response activities and how this is done.

'Public authority' can influence perceptions and behaviour. People or groups with 'public authority' can influence how people perceive and engage with vaccine interventions. When elections were postponed in Ebola-affected areas in 2019, many people in the Grand Nord concluded that this was an attempt to keep them from voting for an opposition politician. This added fuel to rumours that Ebola was fabricated to serve the political and economic interests of the elite.²⁰ The former Minister of Health, Oly Ilunga Kalenga, also cast public doubts on the safety of Ebola vaccines and the intentions of government officials and global allies.²⁰ At the local level, the involvement of a local doctor, who was also a politician, in the response gave the impression that only people who supported him politically would benefit from the response.²⁷ Other people and groups with public authority, including militias, local organisations, chiefs, faith leaders and traditional healers, also channelled and mediated particular narratives.¹⁷ These people and groups may be much more influential than politicians or government officials, particularly where there is limited to no state presence.

Implications for RCCE and mpox vaccination

- RCCE should acknowledge and address historical and current experiences of exploitation, inequality and ineffective governance that have eroded trust. This requires listening to and acknowledging people's concerns, being transparent about the objectives and limitations of vaccination efforts, and demonstrating a commitment to equitable access and benefits.
- Careful consideration must be given to the roles and conduct of security forces in vaccination efforts. Minimising overt militarisation and prioritising community-led security solutions may help build trust. Where formal security is necessary, forces must be well-trained in respectful conduct. Monitoring and accountability for any abuses are critical.
- Engaging diverse local 'public authorities' as partners in shaping and communicating
 vaccination messages can enhance legitimacy, reach and uptake. However, RCCE actors
 must be aware of how different authorities are viewed by diverse groups to ensure
 engagement does not fuel perceptions of exclusion or politicisation. Emphasis should be on
 empowering authorities seen as legitimate and trusted by diverse local populations.
- International and national actors involved in RCCE and vaccination must be aware of how they may be perceived based on prior interventions, and they must take steps to both acknowledge and distance themselves from those legacies where needed. There is also a need to diversify staff and leadership, ensure fair compensation and treatment of local workers, and demonstrate transparency and accountability – especially around funding and resource allocation.

Tailoring RCCE for mpox vaccination helps reach vulnerable populations

This section explores the question of how populations that are particularly vulnerable to mpox infection can be effectively engaged, including for potential vaccination. For many people in these groups, biomedical vulnerability is compounded by conditions of social vulnerability (e.g., poverty and/or stigmatisation), and they will have multi-dimensional needs.

Importantly, RCCE activities can provide information to communities and offer valuable opportunities to gather community perspectives and feed these community needs, concerns and realities 'upwards' to decision-makers.

Community-level engagement

Community-level RCCE activities include radio programmes and open community meetings, which not only provide information but also act as a space for dialogue and feedback. These activities can support broader awareness of mpox, related mpox vaccination interventions and other critical preventative measures people can take. They also provide responders with invaluable information on community perspectives that can be used to further tailor response activities beyond vaccination. These activities could include a broad base of community groups. The design of the activities should avoid further stigmatisation of certain populations, such as sex workers or MSM, such as through emphasising the multiple mpox transmission pathways.

Working with trusted local actors. Given the mistrust in outsiders, trusted local actors should be engaged to lead RCCE activities and be involved in vaccination as much as possible. Trusted local actors include chiefs, faith leaders, community organisations (such as *mutualités tribales*) and women's groups. In addition to being trusted, research indicates that local actors are capable of navigating complex social and political dynamics such as those in eastern DRC.^{9,18,29}

In addition to community-level activities, tailored and discreet RCCE efforts are needed to reach people in specific groups vulnerable to mpox who may not be easy to engage through generalised channels. Considerations for reaching these groups are detailed below.

Children and pregnant women

Children are disproportionately affected by the mpox outbreak in the DRC, and they are also at the highest risk of facing complications and death.¹ This is particularly true among young children.¹ Pregnant women are also at high risk for adverse pregnancy outcomes, particularly from clade I strains, such as those circulating in the DRC.^{30,31} Previous studies have demonstrated vertical transmission from mother to fetus, leading to fetal deaths.³¹ Cases of miscarriage have also been reported in pregnant women infected with the novel strain in South Kivu.³² Despite these realities, relatively little attention has so far been paid to engaging children and pregnant women in the context of the outbreak, and some key challenges lie ahead.

Vaccination in children and pregnant women may elicit significant anxiety. There are limited data about the safety and efficacy of existing vaccines for mpox in children and pregnant women.³³ Although a recent trial in the UK found the MVA-BN vaccine in children to be safe and effective, the scale of the study was small, and researchers noted larger and more systematic trials are necessary to fully assess its safety and effectiveness in children.^{34,35} Furthermore, the DRC plans to use a different vaccine – the LC16 – for children, and it is unclear if pregnant women will be targeted for vaccination at all. To address knowledge gaps, the Institut National de Recherche Biomédicale (INRB) is coordinating development of clinical study protocols for mpox vaccines, with a focus on vaccine efficacy in children.

Given these circumstances, it is likely that vaccination against mpox in the DRC will be seen as experimental and may elicit similar anxieties as the Ebola trials, particularly about the vaccination of children and potentially pregnant women. These concerns may extend to broader

gendered anxieties, including fears about vaccines affecting fertility. Anxieties may be heightened particularly in regions where mistrust in government and international actors and medical interventions is high. This will require careful RCCE with caregivers and other community members, space for transparent dialogue and the co-development of locally appropriate approaches to the vaccination of children and potentially pregnant women.

Effectively engaging children in RCCE. Consider integrating child-centred approaches which are age and context appropriate. For younger children, storytelling, theatre, art activities and simple, clear messages delivered through trusted adults can be effective. Older children and adolescents can be more actively involved through health literacy initiatives, peer-based approaches and even as co-creators of RCCE materials. School-based programmes can be effective; however, community-based approaches will also be important particularly where school attendance is low or routinely disrupted by conflict or displacement. These approaches can include mobile RCCE and vaccination activities, or activities in displacement camps. Where possible, integrating these activities with routine vaccination efforts can be effective. The routine vaccination efforts should not be deprioritised, particularly in a context of low measles, mumps and rubella (MMR) immunisation and recent measles outbreaks. Children's involvement must respect their rights, ensure their safety and recognise their potential as agents of change within their families and communities.³⁶ Close non-sexual physical contact is likely the driving transmission pathway among children. Teenagers may also be at risk of sexual transmission, which may require additionally sensitive and tailored approaches.

Reaching pregnant women. While it is unclear if vaccine plans in the DRC will target pregnant women, RCCE strategies and potential vaccination services can be integrated into routine prenatal care. Engaging with local midwives, community health workers, women's groups and influential community leaders can support both prenatal care and mpox protection for pregnant women and their babies.

Sex workers

Sex workers in the DRC range from professionals to those engaged in occasional sex work or transactional sex to supplement incomes or to access food, job opportunities or other resources.³⁷ Sex workers can be very mobile, moving across regions and borders to work,³⁸ or they may live at home with families.³⁹ Targeted engagement in and around mining areas could be achieved by working with 'godmothers' or mining site managers, or through networks of women involved in livelihood activities, such as food selling or stone crushing. Women in low-paid work are more likely to engage in transactional sex work.

Activities involving RCCE should protect the anonymity of sex workers to shield them from stigma and discrimination. Such activities could also facilitate information about – or access to – other resources and support relevant to this group, including broader sexual and reproductive health counselling and care. See Box 2 for an example of successful previous engagement.

Men who have sex with men (MSM)

Like sex workers, MSM (some of whom are themselves sex workers) face high levels of stigma, but they face the added layer of being criminalised in the DRC. Due to this, organisations that work with MSM are scarce and difficult to identify and engage, particularly in rural areas.¹³ Overall, mpox engagement needs to support the discretion of this group. MSM might be reached with more generalised engagement in spaces that work for men broadly, such as barber shops or tea shops, or through work-related networks, particularly in mining areas. Radio programmes that provide public health information on vaccination and have anonymous call-in opportunities can also provide an opportunity for MSM to access information and ask questions.

Box 2. Learning from 'moonlight' engagement to reach men who have sex with men (MSM) and female sex workers to reduce the risk and impact of HIV/AIDs

The Projet Intégré de VIH/SIDA au Congo was a reportedly successful programme that ran from 2010 to 2017 and engaged female sex workers and men who have sex with men (MSM) to reduce the risk. and impact of HIV/AIDS in the Democratic Republic of Congo, including in South Kivu.¹³

The approach involved mobile engagement, counselling and rapid HIV testing services offered at night and in 'hotspots' frequented by these groups, including bars, nightclubs and other areas identified through mapping exercises with members of these communities.

Sex workers and MSM were also recruited as peer educators who could then provide support and information to peers, including referring them to 'friendly' clinics - or at least those that were the 'least discriminating'. This helped to build trust.

Similar approaches could be adapted to engage these populations around mpox risk, prevention and treatment, although conflict and insecurity are likely to limit what is possible.

People with HIV/AIDS

People with HIV/AIDS and others with suppressed immune systems may be more susceptible to mpox and to severe complications and death.¹ The conflict and instability that characterise eastern DRC present a barrier for people to access information, testing, treatment and continuity of care. This exacerbates their vulnerability, which is further compounded by the higher prevalence of HIV/AIDS in this region. While MSM and sex workers are disproportionately affected by HIV/AIDS in the DRC, other groups are also affected and so efforts must aim to engage them as well.¹ Integrating mpox RCCE activities and vaccination information and services into existing HIV/AIDS services and programmes may help to reach these groups, making vital information and opportunities for engagement available to them.

Healthcare workers

Healthcare workers, including formal biomedical practitioners, informal providers and traditional healers, are at high risk of contracting mpox due to their interactions with infected patients. Prioritising their vaccination and providing clear information about mpox vaccines, their safety and roll-out strategies (e.g., eligibility, locations) can protect both healthcare workers and the wider community.

Moreover, meaningfully involving all types of local healthcare providers in response decisionmaking, RCCE and vaccine roll-out can improve community confidence and overall effectiveness.⁹ Examples include integrating counselling on mpox and mpox vaccination into different healthcare settings, including helpful traditional healing practices and even involving healthcare workers directly in community vaccination efforts. At the same time, it will be important to have discussions about the limits of both biomedical and traditional practices with respect to mpox.

References

- 1. World Health Organization. (2024, June 14). *Mpox—Democratic Republic of the Congo*. https://www.who.int/emergencies/disease-outbreak-news/item/2024-DON522
- 2. Mbala-Kingebeni, P., Rimoin, A. W., Kacita, C., Liesenborghs, L., Nachega, J. B., & Kindrachuk, J. (2024). The time is now (again) for mpox containment and elimination in Democratic Republic of the Congo. *PLOS Global Public Health*, *4*(6), e0003171. https://doi.org/10.1371/journal.pgph.0003171
- Masirika, L. M., Udahemuka, J. C., Schuele, L., Ndishimye, P., Otani, S., Mbiribindi, J. B., Marekani, J. M., Mambo, L. M., Bubala, N. M., Boter, M., Nieuwenhuijse, D. F., Lang, T., Kalalizi, E. B., Musabyimana, J. P., Aarestrup, F. M., Koopmans, M., Munnink, B. B. O., & Siangoli, F. B. (2024). Ongoing mpox outbreak in Kamituga, South Kivu province, associated with monkeypox virus of a novel Clade I sub-lineage, Democratic Republic of the Congo, 2024. *Eurosurveillance*, *29*(11), 2400106. https://doi.org/10.2807/1560-7917.ES.2024.29.11.2400106
- 4. World Health Organization. (2022, June 14). *Vaccines and immunization for monkeypox: Interim guidance*. https://iris.who.int/bitstream/handle/10665/356120/WHO-MPX-Immunization-2022.1-eng.pdf
- 5. Hrynick, T., & Schmidt-Sane, M. (2024). Roundtable Report: Discussion on mpox in DRC and Social Science Considerations for Operational Response. Social Science in Humanitarian Action Platform (SSHAP). www.doi.org/10.19088/SSHAP.2024.014
- Issa, M. (2023). The pathway to achieving universal health coverage in the Democratic Republic of Congo: Obstacles and prospects. *Cureus*, 15(7), e41935. https://doi.org/10.7759/cureus.41935
- Altare, C., Malembaka, E. B., Tosha, M., Hook, C., Ba, H., Bikoro, S. M., Scognamiglio, T., Tappis, H., Pfaffmann, J., Balaluka, G. B., Boerma, T., & Spiegel, P. (2020). Health services for women, children and adolescents in conflict affected settings: Experience from North and South Kivu, Democratic Republic of Congo. *Conflict and Health*, *14*(1), 31. https://doi.org/10.1186/s13031-020-00265-1
- 8. Laokri, S., Soelaeman, R., & Hotchkiss, D. R. (2018). Assessing out-of-pocket expenditures for primary health care: How responsive is the Democratic Republic of Congo health system to providing financial risk protection? *BMC Health Services Research*, *18*(1), 451. https://doi.org/10.1186/s12913-018-3211-x
- Claude, K. M., Underschultz, J., & Hawkes, M. T. (2019). Social resistance drives persistent transmission of Ebola virus disease in Eastern Democratic Republic of Congo: A mixed-methods study. *PLOS ONE*, *14*(9), e0223104. https://doi.org/10.1371/journal.pone.0223104
- Kibungu, E. M., Vakaniaki, E. H., Kinganda-Lusamaki, E., Kalonji-Mukendi, T., Pukuta, E., Hoff, N. A., Bogoch, I. I., Cevik, M., Gonsalves, G. S., Hensley, L. E., Low, N., Shaw, S. Y., Schillberg, E., Hunter, M., Lunyanga, L., Linsuke, S., Madinga, J., Peeters, M., Cigolo, J.-C. M., ... Lushima, R. S. (2024). Clade I–associated mpox cases associated with sexual contact, the Democratic Republic of the Congo. *Emerging Infectious Diseases*, *30*(1), 172–176. https://doi.org/10.3201/eid3001.231164
- 11. Kunnuji, M., Schmidt-Sane, M., Adegoke, O., Abbas, S., Shoyemi, E., Lawanson, A., Jegede, A., & MacGregor, H. (forthcoming). *Mpox and the MSM community in Nigeria: Exploratory insights from gay men and persons providing healthcare services to them.*
- 12. Shen, Y., Franks, J., Reidy, W., Olsen, H., Wang, C., Mushimbele, N., Mazala, R. T., Tchissambou, T., Malele, F., Kilundu, A., Bingham, T., Djomand, G., Mukinda, E., Ewetola, R., Abrams, E. J., & Teasdale, C. A. (2023). Pre-exposure prophylaxis uptake concerns in the Democratic Republic of the Congo: Key population and healthcare workers perspectives. *PLOS ONE*, *18*(11), e0280977. https://doi.org/10.1371/journal.pone.0280977
- 13. Mulongo, S., Kapila, G., Hatton, T., Canagasabey, D., Arney, J., Kazadi, T., Scott, L. M., & Colfax, G. (2015). Applying innovative approaches for reaching men who have sex with men and female sex workers in the Democratic Republic of Congo. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, *68*, S248. https://doi.org/10.1097/QAI.00000000000449
- 14. Ntanyoma, D. R. (2023, July 10). DRC violence has many causes the UN's narrow focus on ethnicity won't help end conflict. The Conversation. http://theconversation.com/drc-violence-has-many-causes-the-uns-narrow-focus-on-ethnicity-wont-help-end-conflict-208774
- 15. Ntanyoma, R. D., & Hintjens, H. (2022). Expressive violence and the slow genocide of the Banyamulenge of South Kivu. *Ethnicities*, 22(3), 374–403. https://doi.org/10.1177/14687968211009895

16. Medecins Sans Frontieres. (2024, May 24). Civilians caught in crossfire in North and South Kivu [Interview]. https://www.msf.org/drc-civilians-caught-crossfire-north-and-south-kivu

- Kirk, T., Green, D., Allen, T., Carayannis, T., Bazonzi, J., Ndala, J., Stys, P., Muzuri, P., Nyenyezi, A., Vlassenroot, K., Nyuon, A. D. A., Macdonald, A., Owor, A., Storer, L., Okello, J., Hopwood, J., Porter, H., Oryem, R., Parker, M., & Akello, G. (2021). Crisis responses, opportunity, and public authority during Covid-19's first wave in Uganda, the Democratic Republic of Congo, and South Sudan. *Disasters*, *45*(Suppl 1), S195–S215. https://doi.org/10.1111/disa.12513
- 18. Nsokele, C. M., & Kika, F. K. (2024). Local knowledge and information initiatives in the conflict-affected eastern Democratic Republic of Congo. *Development in Practice*, *0*(0), 1–15. https://doi.org/10.1080/09614524.2024.2349056
- 19. Rapanyane, Makhura. B. (2022). China's involvement in the Democratic Republic of Congo's resource curse mineral driven conflict: An Afrocentric review. *Contemporary Social Science*, *17*(2), 117–128. https://doi.org/10.1080/21582041.2021.1919749
- James, M., Kasereka, J. G., & Lees, S. (2021). The politics of the second vaccine: Debates surrounding Ebola vaccine trials in eastern Democratic Republic of the Congo. *Journal of Humanitarian Affairs*, 3(3), 4–13. https://doi.org/10.7227/JHA.069
- 21. Bisoka, A. N., Vlassenroot, K., & Ramazani, L. (2021). From biolegitimacy to antihumanitarianism: Understanding people's resistance to Ebola responses in the Democratic Republic of the Congo (Issue 8; Congo Research Briefs). https://www.gicnetwork.be/wp-content/uploads/2021/05/UVC Congo-Research-Briefs-8-f.pdf
- James, M. V., & Lees, S. S. (2022). "Are you sure it's not the Corona vaccine?" An Ebola vaccine trial during COVID-19 in DRC. *Medical Anthropology*, 41(5), 503–517. https://doi.org/10.1080/01459740.2022.2097908
- James, M., Kasereka, J. G., Kasiwa, B., Kavunga-Membo, H., Kambale, K., Grais, R., Muyembe-Tamfum, J.-J., Bausch, D. G., Watson-Jones, D., & Lees, S. (2023). Protection, health seeking, or a laissez-passer: Participants' decision-making in an EVD vaccine trial in the eastern Democratic Republic of the Congo. *Social Science & Medicine (1982)*, *323*, 115833. https://doi.org/10.1016/j.socscimed.2023.115833
- 24. Hung, Y. W., Law, M. R., Cheng, L., Abramowitz, S., Alcayna-Stevens, L., Lurton, G., Mayaka, S. M., Olekhnovitch, R., Kyomba, G., & Ruton, H. (2020). Impact of a free care policy on the utilisation of health services during an Ebola outbreak in

the Democratic Republic of Congo: An interrupted time-series analysis. *BMJ Global Health*, 5(7), e002119. https://doi.org/10.1136/ bmjgh-2019-002119

- 25. Wisniewski, J., Worges, M., & Lusamba-Dikassa, P.-S. (2023). Impact of a free care policy on routine health service volumes during a protracted Ebola virus disease outbreak in the Democratic Republic of Congo. *Social Science & Medicine*, 322, 115815. https://doi.org/10.1016/j.socscimed.2023.115815
- Mansaray, A., Bangura, M., Watson-Jones, D., Greenwood, B., Burns, R., Susan Lees, S., Faye, F., Leigh, B., & Enria, L. (2024). Engaging the public in decisions about emergency vaccine deployment strategies: Lessons from scenario-based discussions in Sierra Leone. *Global Public Health*, *19*(1), 2334887. https://doi.org/10.1080/17441692.2024.2334887
- 27. Sweet, R., & Kasali, N. (2024). Public health intervention amidst conflict: Violence, politics, and knowledge frames in the 2018-20 Ebola epidemic in Democratic Republic of the Congo. Social Science & Medicine, 350, 116854. https://doi.org/10.1016/j.socscimed.2024.116854
- 28. Groupe d'étude sur le Congo (GEC). (2020). Ebola en RDC : système de santé parallèle, effet pervers de la Réponse.
- 29. James, M. (2022). Humanitarian shapeshifting: Navigation, brokerage and access in Eastern DR Congo. Journal of Intervention and Statebuilding, 16(3), 349–367. https://doi.org/10.1080/17502977.2021.2002591
- 30. Schwartz, D. A., & Pittman, P. R. (2023). Mpox (Monkeypox) in pregnancy: Viral clade differences and their associations with varying obstetrical and fetal outcomes. *Viruses*, *15*(8), 1649. https://doi.org/10.3390/v15081649
- 31. Velázquez-Cervantes, M. A., Ulloa-Aguilar, J. M., & León-Juárez, M. (2023). Mpox and pregnancy: A neglected disease and its impact on perinatal health. *Revista Clinica Espanola*, 223(1), 32–39. https://doi.org/10.1016/j.rceng.2022.09.002
- 32. Masirika, L. M., Nieuwenhuijse, D. F., Ndishimye, P., Udahemuka, J. C., Steeven, B. K., Gisèle, N. B., Musabyimana, J. P., Daniel, B. N., Kiluba, T. K. wa, Mweshi, F. K., Ngabo, P., Tambala, T., Divin, M. M., Chance, B. M., Mambo, L. M., Schuele, L., Mbiribindi, J. B., Martinez, G. S., Kelvin, D. J., ... Siangoli, F. B. (2024). Mapping the distribution and describing the first cases from an ongoing outbreak of a new strain of mpox in South Kivu, Eastern Democratic Republic of Congo between September 2023 to April 2024 (p. 2024.05.10.24307057). medRxiv. https://doi.org/10.1101/2024.05.10.24307057
- 33. Sanchez Clemente, N., Coles, C., Paixao, E. S., Brickley, E. B., Whittaker, E., Alfven, T., Rulisa, S., Agudelo Higuita, N., Torpiano, P., Agravat, P., Thorley, E. V., Drysdale, S. B., Le Doare, K., & Muyembe Tamfum, J.-J. (2024). Paediatric, maternal, and congenital mpox: A systematic review and meta-analysis. *The Lancet Global Health*, *12*(4), e572–e588. https://doi.org/10.1016/S2214-109X(23)00607-1
- 34. Ladhani, S. N., Dowell, A. C., Jones, S., Hicks, B., Rowe, C., Begum, J., Wailblinger, D., Wright, J., Owens, S., Pickering, A., Shilltoe, B., McMaster, P., Whittaker, E., Zuo, J., Powell, A., Amirthalingam, G., Mandal, S., Lopez-Bernal, J., Ramsay, M. E., ... Cohen, J. (2023). Early evaluation of the safety, reactogenicity, and immune response after a single dose of modified vaccinia Ankara–Bavaria Nordic vaccine against mpox in children: A national outbreak response. *The Lancet Infectious Diseases*, 23(9), 1042–1050. https://doi.org/10.1016/S1473-3099(23)00270-0
- 35. Turtle, L., & Subramaniam, K. (2023). Modified vaccinia Ankara–Bavarian Nordic vaccine against mpox in children. *The Lancet. Infectious Diseases*. https://doi.org/10.1016/S1473-3099(23)00345-6
- 36. Reilly, E., Serlemitsos, E., & Bilakwate, J. (2024). Key considerations: Child engagement in the context of disease outbreaks in Eastern and Southern Africa. Social Science in Humanitarian Action Platform (SSHAP). https://www.ids.ac.uk/publications/key-considerations-child-engagement-in-the-context-of-disease-outbreaks-in-eastern-andsouthern-africa/
- 37. Mwapu, I., Hilhorst, D., Mashanda, M., Bahananga, M., & Mugenzi, R. (2016). Women engaging in transactional sex and working in prostitution: Practises and underlying factors of the sex trade in South Kivu (10; Researcher Livelihoods and Services Affected by Conflict). Secure Livehoods Research Consortium. https://edepot.wur.nl/401353
- 38. Bashwira, M.-R., & Haar, G. van der. (2022). Necessity or choice: Women's migration to artisanal mining regions in eastern DRC. In *The (in)visibility of women and mining*. Routledge.
- Maclin, B., Kelly, J., Kabanga, J., & VanRooven, M. (2015). 'They have embraced a different behaviour': Transactional sex and family dynamics in eastern Congo's conflict. *Culture, Health & Sexuality*, *17*(1), 119–131. https://doi.org/10.1080/13691058.2014.951395



Anthrologica















Authors: This report was written by Tabitha Hrynick (Institute of Development Studies, IDS), Godefroid Muzalia (Groupe d'Etudes sur les Conflits et la Sécurité Humaine, GEC-SH) and Myfanwy James (London School of Economics and Political Science, LSE).

Acknowledgements: In addition to drawing on the contributions and inputs from participants of the SSHAP Roundtable on Mpox in DRC, this brief was reviewed by Modeste Deffo (International Federation of the Red Cross and Red Crescent, IFRC), Luisa Enria (London School of Hygiene and Tropical Medicine, LSHTM), Dr Emilia Sana (Centre d'opérations d'urgence de santé publique (COUSP), Insitut National de Santé Publique (INSP) and Integrated Outbreak Analytics (CIA), Simone Carter (Integrated Outbreak Analytics, CAI) and Hayley MacGregor (IDS). The brief was edited by Georgina Roche and Harriet MacLehose (SSHAP editorial team).

Suggested citation: Hrynick, T., Muzalia, G., and James, M. (2024). Key considerations: Risk communication and community engagement for mpox vaccination in eastern Democratic Republic of the Congo Social Science in Humanitarian Action (SSHAP). www.doi.org/10.19088/SSHAP.2024.024

Published by the Institute of Development Studies: July 2024

Copyright: © Institute of Development Studies 2024. This is an Open Access paper distributed under the terms of the Creative Commons Attribution 4.0 International licence (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original authors and source are credited and any modifications or adaptations are indicated.

Contact: If you have a direct request concerning the brief, tools, additional technical expertise or remote analysis, or should you like to be considered for the network of advisers, please contact the Social Science in Humanitarian Action Platform by emailing Annie Lowden (a.lowden@ids.ac.uk) or Juliet Bedford (julietbedford@anthrologica.com).

About SSHAP: The Social Science in Humanitarian Action is a partnership between the Institute of Development Studies, Anthrologica, CRCF Senegal, Gulu University, Le Groupe d'Etudes sur les Conflits et la Sécurité Humaine (GEC-SH), the London School of Hygiene and Tropical Medicine, the Sierra Leone Urban Research Centre, University of Ibadan, and the University of Juba. This work was supported by the UK Foreign, Commonwealth & Development Office and Wellcome 225449/Z/22/Z. The views expressed are those of the authors and do not necessarily reflect those of the funders, or the views or policies of the project partners.

- (X) @SSHAP_Action
- info@socialscience.org
- www.socialscienceinaction.org
- SSHAP newsletter

