



Ebola Response in cities

Learning for future public health crises

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Acknowledgements

This paper was written by Leah Campbell, with research assistance from Christopher Adan, Moritz Matakas and George Richards. Thanks are owed to the 28 individuals who were interviewed for the Ebola in Cities initiative (see Annex A), as well as colleagues within the ALNAP Secretariat, including Paul Knox Clarke who reviewed several drafts and Alex Glynn who managed communications.

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Front cover photo: A resident walks past a mural about the dangers of the Ebola Virus painted on a wall off Tubman Boulevard in Monrovia; Photo: Morgana Wingard/ UNDP

Suggested citation: Campbell, L. (2017) Ebola Response in cities: Learning for future public health crises. ALNAP Working Paper. London: ALNAP/ODI.

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ISBN 978-1-910454-58-9

Publication and communications managed by Alex Glynn

Copy edited by Roo Griffiths

Bibliographic editing by Chloé Sanguinetti

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Summary

In November 2014, ALNAP launched a sub-group of the Urban Response Community of Practice (CoP) to gather learning from the urban aspects of the Ebola Virus Disease (EVD) response in West Africa. Informed by CoP discussions, interviews and review of literature and media articles, ALNAP has produced four brief learning reports. Three of these cover issues around **population movement**; working in a **context of quarantine**; and **communication and engagement**. This paper explores a variety of issues by looking at the case of one urban informal settlement, West Point, Monrovia, Liberia, and its experience of the EVD outbreak and response.

The EVD outbreak in West Africa was the first time EVD had infiltrated an urban area. The unprecedented scale of the outbreak combined with the dynamic urban contexts within the affected region challenged responders considerably.

The three most affected countries were Guinea, Liberia and Sierra Leone. All three have seen unprecedented urban growth in recent years. All three have a legacy of conflict and unplanned development, and they all struggle with health care and other related infrastructure, including water, sanitation and electricity.

West Point, Monrovia, is an informal settlement in Liberia that, despite being an official township of the capital city, has experienced decades of unplanned growth and expansion, particularly since internally displaced persons from the Liberian civil war began to arrive. It has significant water, sanitation, hygiene, electricity, access, land tenure, erosion and protection issues, which have been persistently present and unresolved pretty much since the settlement was established. Despite these challenges, West Point has been described as fairly cohesive, and its proximity both to the coast and to economic activity in Monrovia means many residents do have an income. At the time of the EVD outbreak, West Point was home to approximately 70,000 residents.

EVD reached Monrovia in June 2014, having arrived in the country in March. Few cases were reported in April and May, which led officials to believe the outbreak had been contained. However, over the summer, it became clear that failed messaging combined with denial, mistrust and scepticism had driven the outbreak underground, with illness and death occurring without being reported. In August, after an official visiting West Point discovered several cases of EVD deaths, the government enacted a swift plan to transform a school in the settlement into an Ebola holding centre. Within a matter of days the holding centre was opened, the community rioted, the entire settlement was put under quarantine and it was released, following long-overdue consultations between government and community leaders.

From September 2014, the response to EVD in West Point was largely community-led. While there was support from and programming by both the government and international actors, it was West Point community volunteers who tackled the denial, got cases reported and ultimately ended the crisis in the settlement, which reported its last case of EVD in December 2014. Leaders from West Point were later asked to help other parts of Monrovia still tackling the disease.

Today, though Ebola-free, West Point remains an informal settlement with great water, sanitation and hygiene, environmental, social and political challenges. The handful of upgrades and improvements it received during the response has not tackled issues that have persisted since long prior to the outbreak. And mistrust between the community and the government is likely to continue, as the future of West Point and its residents has yet to be determined.

West Point's experience of EVD sheds light on many of the issues discussed throughout this series, including the challenges posed when quarantine is enacted in a dense informal settlement; the importance of community mobilisation, particularly in an urban environment; the critical role of population movement in informing the makeup of the community and also in illustrating behaviour throughout the outbreak; and why it took so long to apply an urban response to this largely urban crisis.



Road side check Ebola check point in Freetown, Sierra Leone Photo: Flickr/ Medici con l'Africa Cuamm (2014)

Research process

In November 2014, ALNAP was contacted by a colleague who had been seconded to the UN Mission for Ebola Emergency Response (UNMEER), who explained that the Ebola Virus Disease (EVD) crisis in West Africa had distinctly urban elements and suggested that ALNAP could provide both a resource for those responding to the crisis and a place to gather learning. Following a brief consultation, ALNAP set up a sub-group of its **Urban Response Community of Practice (CoP)** called Ebola in Cities, which quickly grew to have over 260 members.

Between December 2014 and September 2015, 87 messages were sent through 26 distinct discussion threads within the Ebola in Cities sub-group. The sub-group provided a place to discuss emerging challenges and lessons, connect experts to practitioners on the ground, document learning for future urban health crises and reflect on the nature of this new global challenge and how humanitarians could prepare for it. It was intended to complement a number of other knowledge-sharing initiatives formed during the West African EVD response, including:

- **KnowledgePoint** (technical water, sanitation and hygiene advice)
- **Ebola Response Anthropology Platform**
- **Ebola Needs Analysis Project (ACAPS)**
- **BOND Ebola Response Hub**
- **Emergency Nutrition Network Forum**

In mid-2015, discussion in the group slowed down as the epidemic decelerated, but there was growing interest in documenting the various points of learning that had emerged during this urban public health crisis. ALNAP used the Ebola in Cities sub-group first to identify a number of urban issues from the epidemic, and then to identify reflections from group members, relevant documentation to draw on and individuals to interview.

From November 2015 to March 2016, ALNAP conducted 28 interviews (see Annex A) remotely with a range of colleagues with experience in the EVD response in West Africa. ALNAP also scanned media reports, grey literature, reports and evaluations of the response for mentions of urban themes.

Informed by the discussions in the Ebola in Cities sub-group, interviews and the literature, ALNAP has now produced a series of four short papers that reflect on the urban aspects of the West African EVD response in urban areas, with a view to informing response to future urban public health crises.

The other papers in this series are:

- **Responding in the context of urban quarantine**
- **Population movement**
- **Communication and engagement**

As the final report in this series, this paper provides an introduction to the EVD response in cities. It uses the example of the EVD response in West Point, Monrovia, to capture cross-cutting themes about the urban response and summarise key messages from the other three papers.

1. Introduction

The 2014/15 West African Ebola Virus Disease (EVD) outbreak was the ‘largest, most severe and most complex Ebola epidemic the world has ever seen’ (WHO, 2014b). It was the first time the disease had affected an urban centre. The 23 prior outbreaks of EVD in Africa had all been largely rural (Murray et al., 2015), and the largest outbreak, in Gulu, Uganda, had infected only 425 people (Stockman, 2014). As such, there was no expectation or experience of a massive urban outbreak.

Initially, the response employed a similar strategy to those that had worked in rural contexts, but EVD quickly spread across the urban centres of the affected countries. The scale of the epidemic as well as the dynamic urban context meant that tested strategies for ‘outbreak control’ that had been effective in rural areas were not appropriate (ACAPS, 2015c). In mid-August 2014, as it seemed that EVD was spinning out of control, the World Health Organization (WHO) gave a ‘nightmare’ (Frankel, 2014) of a projection, suggesting EVD could infect up to 20,000 people (Phillip, 2014). Organisations had ‘underappreciated the potential scale of Ebola’ (Murray et al., 2015: 4) and responders had to find ways to respond differently to this public health crisis, particularly as it unfolded in cities. Ultimately, through its year and a half duration, ‘EVD was able to quickly spread from one infection of a child in rural Guinea in December 2013 to over 28,600 cases and 11,300 deaths,¹ mainly in the three most affected countries of Guinea, Liberia and Sierra Leone’ (IOM, 2016).

While the unprecedented ‘urban-ness’ of this EVD outbreak did not go unnoticed, particularly by the media (see, for example, Ehrenberg, 2014; Frankel, 2014; Hille, 2014; Stockman, 2014; Waldman, 2015), overall this recognition did not result in an urban-appropriate response.

As part of a learning initiative spanning across the EVD epidemic in West Africa, this paper aims to share reflections and learning about the urban nature of the EVD outbreak. In doing so, it aims to improve future urban public health responses. It builds on existing learning around the EVD response, focusing on urban issues as a noted gap in the key literature on the response thus far.

2. Urbanisation in West Africa

Cities are dense, diverse and complex environments that are in a constant state of flux. This complicates humanitarian engagement with urban contexts and populations, making urban interventions challenging to strategise, design and adapt. Guinea, Liberia and Sierra Leone have experienced unprecedented urban growth in recent years that has resulted in high levels of peri-urban sprawl. A total of 97% of Sierra Leone's urban residents live in informal settlements (USAID, 2013), which are often characterised by poor infrastructure and hygiene, weak planning regulations and little capacity for infection control (UNDESA, 2014; AAPP, 2016). The capital cities of all three countries have been epicentres of intense virus transmission in the past (WHO, 2015b).

The combination of uncontrolled urban sprawl and weak health and political institutions represents a challenging context in which to respond to health crises. Responders can face a range of logistic and programmatic difficulties, as well as problems engaging with people who are often suspicious of and frustrated with existing institutions and authorities. Cities offer opportunities to pathogens like EVD. They enable an increased transmission rate and allow such pathogens to stick around for much longer and to be deadlier than in rural areas, where there is less contact between people, especially once some become ill (Shah, 2016).

Box 1. Poor health care infrastructure

Across all three affected countries in West Africa, health services and infrastructure were concentrated in the urban centres before EVD arrived. So when Ebola Treatment Units (ETUs) were set up, these also were, at least initially, concentrated in urban areas, building on existing capacity. However, these health care systems had limited capacity.

Some have pointed out that, at its peak, the EVD epidemic 'might have challenged the health systems even of wealthy nations' (DuBois and Wake, 2015: v). Saying this, Guinea, Liberia and Sierra Leone all struggled with systemic weaknesses in their health systems and basic services, including those related to capacity, supplies and funding gaps, poor infrastructure, weak information systems and other factors, which all contributed to the spread of EVD and undermined efforts to stop it (DuBois and Wake, 2015).

One interviewee explained that this lack of capacity had resulted in a poor view of the credibility of the system, so that people were not confident that it was worth seeking health care – and this affected the impact of the response. EVD also so overwhelmed the capacity of the health care system that those struggling with non-EVD-related illnesses were unable to access health care services during the response (ACAPS, 2015c).

Figure 1. Increase in population density in West Africa (Guinea, Sierra Leone and Liberia)

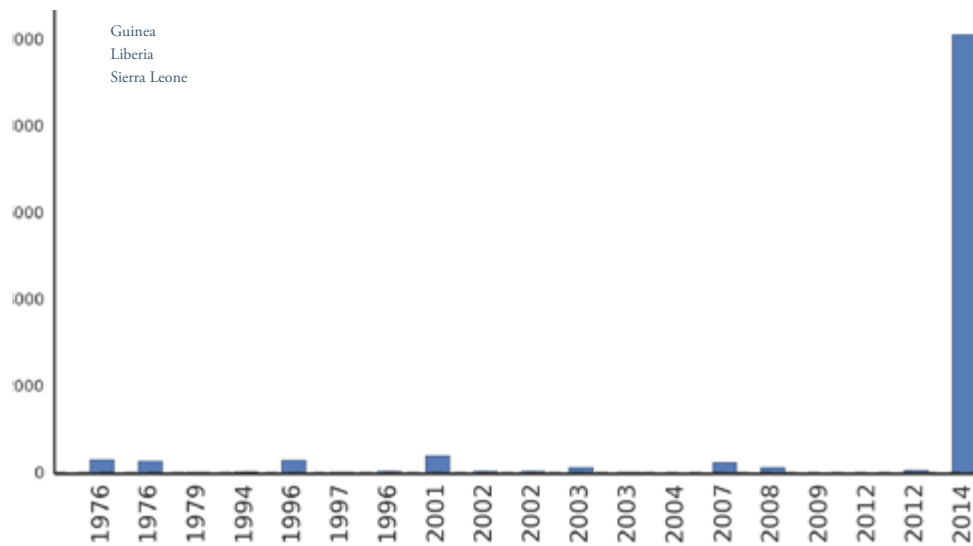
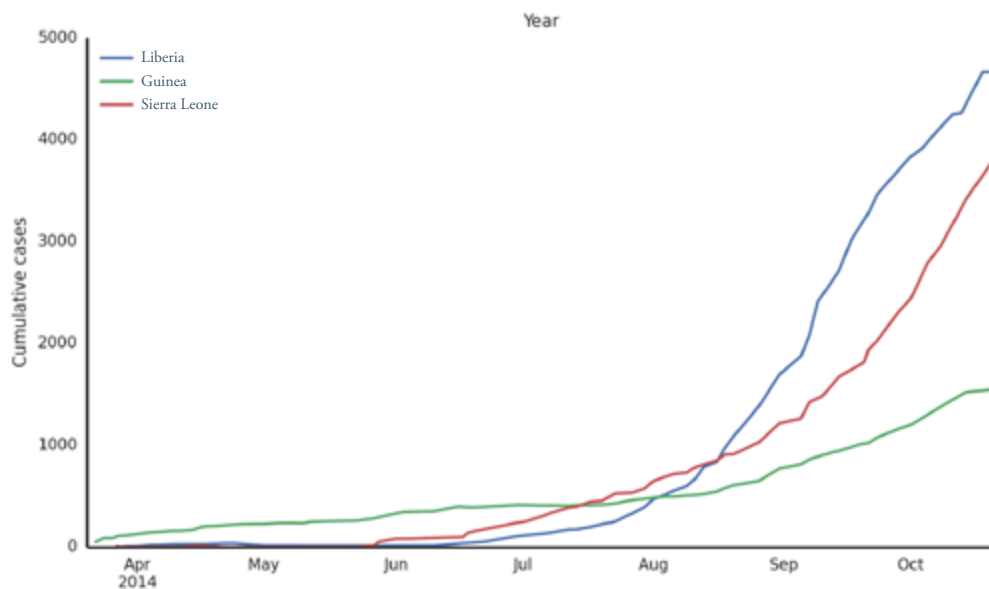


Figure 2. Proportion of the population living in urban areas



Source: Alexander et al. (2015).

Figure 1 highlights the increase in population density (A), while Figure 2 shows the proportion of the population living in urban environments (B) in Guinea, Liberia and Sierra Leone since the 1960s. The largest increase has been in Liberia, where the urban population has increased 253% since 1961.

Box 2. Poor water, sanitation and hygiene (WASH) and environmental infrastructure

According to ACAPS (2015a), only 26% of those in urban Liberia and 22% of those in urban Sierra Leone have access to improved sanitation. During a crisis, these pre-existing vulnerabilities are exacerbated. During the response to EVD, for example, 13–15% of all of Freetown’s available water was diverted for use by the ETUs. This was a significant blow to a system already struggling to meet needs. Low-income populations, many of them living in informal settlements, are also ‘more adversely affected by the direct impact of burning and burial of waste in their vicinity’ (ibid.). Several of the informal settlements in the region are formed around wharfs, and they face additional challenges given their proximity to water and the mobility of boats. Many are experiencing coastal erosion over time, and are also more likely to flood as a result of their topography.

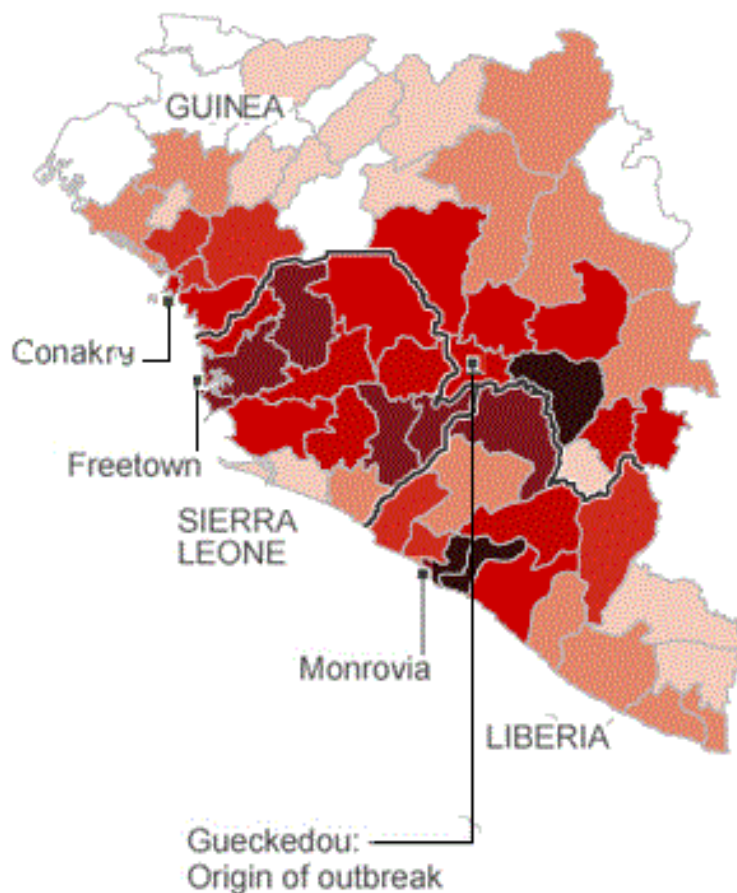
3. The Ebola epidemic in urban West Africa

The Ebola epidemic of 2014 was in many ways an epidemic of firsts (WHO, 2014b; Briand, 2016). Originating in the Forest Region of Guinea, and spreading quickly across porous international borders among a mobile population, the virus reached the capital cities of Conakry, Monrovia and Freetown within months. It was the first time EVD had affected cities, and the first time humanitarian responders and health workers had faced the unique challenges of an EVD epidemic in urban spaces. It was the first time three countries had been affected by EVD, the first time the infection had been spread through air travel, the first time a UN mission had been created to respond to a public health crisis and the first time that militaries of other countries had become involved in such a crisis (Briand, 2016). It was also the first time responders had encountered a ‘hidden caseload’ of the virus (WHO, 2014b), as people hid the scale of the outbreak. The outbreak caused fear, anxiety and confusion in countries with weak existing infrastructure and institutions that were poorly positioned to handle a crisis of such scale.

Initially, the response was guided by ‘what worked’ in previous responses to EVD – all rural. However, as it became clear that strategies designed for rural contexts were inadequate, the response approach began to shift. It focused less on slowing transmission and more on a holistic approach to ending the epidemic, and organisations were able to attune their strategies to be more congruent with local needs (WHO, 2015b). The approach to the response also shifted from ‘what has worked’ in prior EVD contexts to ‘what will work, and is acceptable, here’. This shift also meant a focus less on ‘isolation’ and more on ‘treatment’ (Briand, 2016), and a move from an approach largely focused on public health to one that encompassed a range of issues that had emerged, including livelihoods, WASH and education.

The EVD crisis in West Africa ended in March 2016. In total, over 28,000 Ebola cases were reported in Guinea, Liberia and Sierra Leone, with over 11,000 deaths and lasting economic implications (UNDP, 2015a; WHO 2016). Although the epidemic has been declared officially over, it is still important for the humanitarian community to remain vigilant and to tailor programming to local needs; in urban areas, actors should make sure their strategy incorporates the unique conditions of urban environments. The West African EVD epidemic also highlights issues and learning that can be taken forward into future public health crises in urban environments.

Figure 3. The spread of EVD across West Africa as of February 2015



Source: BBC (2016).

4. The Ebola epidemic in West Point, Monrovia

While each country, district, city and neighbourhood experienced the EVD outbreak differently, and in some ways West Point offers a more extreme example than other EVD-affected urban areas, many of the urban-specific aspects of the EVD outbreak and response can be illustrated through closer look at the case of this settlement in Monrovia, Liberia.

West Point is Liberia's largest informal settlement, home to some 70,000–80,000 residents. Drawing on media and response reports from the time, the following is an outline of how West Point experienced and responded to EVD.



West Point, Monrovia.
Photo: Mark Fischer (2014)
Flickr/Fischerfotos

4.1 Background

The West Point settlement emerged during the 1940s,² as Monrovia's first shipping port was established and a group of fisherman settled on the land adjacent (MacDougall, 2016). It was made a township of Monrovia in the 1960s (SDI, 2016).

Over the years, the settlement has seen growth both incrementally and in waves, all of which has compounded the existing vulnerabilities found here. A seminar in 1986 described West Point as having inadequate toilet and waste infrastructure, overcrowding and hygiene issues and regularly experiencing disease outbreaks (Stephens, 1991). By 1991, West Point was home to about 30,000

residents, and still facing many of the same characteristics that are present today – a dense population and a constant flow of residents from across Liberia and from other West African cities, with poor land quality and coastal erosion making it ‘unsuitable for large-scale human habitation’ (ibid.).

During the civil war in Liberia, the population of West Point surged as those the fighting had displaced moved in, including many child soldiers who would grow up in the settlement. McCoy (2014) describes it as becoming ‘one of the least hospitable places in the country’. Today, the settlement is home to ‘an array of ethnicities, religions and languages... along West Point’s single paved road... men in Islamic skullcaps and women in chadors live side-by-side with tattooed men in tank tops and women in micro shorts’ (MacDougall, 2016). While the area has been plagued with high levels of crime and violence in the past, residents feel the situation is improving, particularly because of the numerous economic opportunities nearby downtown Monrovia offers (SDI, 2016). And some have noted that tales of crime and violence in West Point may be more rumour than fact (EWER Working Group, 2012).

Over time, the make-shift housing became permanent, despite there being no indoor plumbing or running water (McCoy, 2014). ACAPS (2015a) notes that ‘the massive influx of people into



A latrine in West Point, Monrovia. Photo: Rehana Merali (2014)

Box 3. Informal settlements and persistent vulnerabilities

Snyder et al. (2014) describe informal settlements as the ‘elephant in the room’ of the EVD epidemic. Full of long-standing and deeply engrained vulnerabilities, they make for an ‘ideal breeding ground’ for such viruses (ibid.). Many of the most pressing issues that contributed to the outbreak are the sorts of long-term problems the humanitarian sector is not necessarily designed to respond to. The informal settlements of Guinea, Liberia and Sierra Leone, some of them very large and densely populated, are illustrative of both the challenges of sanitation and hygiene in dense informal settlements and the often-conflictual relationship between residents and authorities.

The informal settlements of the affected countries are high-density, overcrowded and lacking basic infrastructure, electricity and other basic amenities. They have often emerged with little planning or development (Machalaba and Porter, 2015). Sure enough, the WASH standards in informal settlements in Guinea, Liberia and Sierra Leone ‘are among the lowest, while the high population density makes the population most susceptible to water-borne diseases’ (ACAPS, 2015a).

One interviewee described the density by noting how houses seemed more than anything to be ‘stuck together’. Stockman (2014) explains that those living in poverty in the city, in dense informal settlements, ‘have the worst of both worlds’; having ‘left the safety of their farms’ in search of the amenities of modern urban living, the ‘water treatment plants, sewage systems, medicine... remain elusive’. Residents often have persistent health problems, and water delivery, safe burials, aid and service provision are all persistent challenges even in ‘normal’ times. These issues have existed, and not been addressed, for years (ACAPS, 2015a).

Monrovia and other towns over the last decade put pressure on an already failing and inadequate water and sanitation infrastructure in all urban areas’ (3). This hit West Point hard, which had little water and sanitation infrastructure to start with. Stuck between the Atlantic and the Mesurado River, ‘the slum cannot expand – it only grows more crowded’ (Mogelson, 2015). The area remains vulnerable to sea level rise, erosion and other coastal hazards (Baskin, 2017). Residents are also subjected to cyclical temporary displacement as, every once in a while, the tide rises and submerges many of the homes, which are built up right to the water’s edge. In these incidents, thousands can be displaced. When the tide recedes, residents pick a spot on the beach and rebuild. After each event, there is slightly less room, so the settlement gets denser and denser (Baskin, 2017).

The land tenure situation is complex, with most residents squatting. Although some have squatters’ permits, record-keeping is poor (SDI, 2016). Over the years, several attempts have been made to relocate residents elsewhere, but none has succeeded, ‘in part because of poor planning and the

grudging attachment of many residents who have lived there for decades' (MacDougall, 2016), and also because of the critical issue of livelihoods. Complicating the situation further is that many of West Point's residents are internally displaced persons, and, while resettlement may have some benefits for residents and the broader area, it also risks 'uprooting displaced communities once again, prolonging and exacerbating their humanitarian vulnerability' (Williams, 2011). This 'will-they, won't-they' around the settlement issue has made organisations 'reluctant to build toilets in slum communities, because of long-standing rumours that the townships will be relocated' (Jeffreys, 2009).

Before EVD arrived in West Point, only four public toilets served the population of 70,000-80,000 residents. Waste from the public toilets was scooped up and dumped on the beach or in the river, and many residents just used the beach directly as a toilet (McCoy, 2014). Most residents get water from wells or rainwater, both often contaminated, and outbreaks of cholera are frequent (Boley, 2011b). Pipes through the settlement were destroyed after a bridge collapsed in 2006 and, while drains do exist, many are constantly blocked and cannot be cleared because structures have since been built on them (Cole, 2008).

The settlement's poor health, water and sanitation infrastructure and knowledge would directly contribute to the spread of EVD once it hit West Point (Snyder et al., 2014).

4.2. EVD comes to West Point

The first cases in Liberia were confirmed on 30 March 2014. Officials initiated an initial public health campaign with messages about avoiding bush meat and staying away from people with Ebola symptoms (Mukpo, 2015a). Few cases emerged and it seemed the situation was stable, and possibly had even been contained, through April and May (Mukpo, 2015a; WHO, 2015d). However, by June, EVD had reached Monrovia, and it became clear the outbreak had not been contained but had been growing underground, with people 'getting sick and dying out of sight of the health officials' (Mukpo, 2015a: 8). Over the month it multiplied quickly, in stark contrast with the smaller, less explosive, outbreaks seen in Conakry and Freetown at this stage in the outbreak (Onishi, 2014a). 'That appearance of calm turned out to be an illusion', and the city was 'ill-prepared to cope with the onslaught of infections that rapidly followed' (WHO, 2015d).

Monrovia had the only large hospital in the country, but it had been damaged during the civil war and never fully repaired. It had no isolation ward, and staff had little knowledge of infectious disease protocols and next to no protective equipment (ibid.). Before EVD, there had been only 50 licensed doctors in the entire country of 4 million (Parshley, 2016). In this context, the number of cases grew quickly. Mogelson (2015) explains, 'For most of the summer and into the fall, hospitals were overrun, the wait for an ambulance was often many days, people were dying in the streets, and infectious corpses were left in crowded homes to rot.' On 6 August 2014, Liberia declared a State of Emergency for three months, closing markets and imposing curfews. Cremation was also made mandatory for all Ebola deaths (WHO, 2015d).

Throughout early August, West Point residents began to hear about EVD in Liberia but were sceptical. During this time, some bodies of EVD victims were dumped in the river, rather than being handed over to government collection officers (Vogt, 2014). Many West Point residents felt ‘this Ebola thing’ was a hoax (Thompson, 2014) or a ploy to attract international aid resources (Mukpo, 2015a).

The environment created a ‘hidden’ and self-fulfilling fallacy. As residents did not believe Ebola was real, they did not report illness as Ebola, and consequently fewer cases were known about, reducing belief in the population that Ebola was real. This ‘widespread denial of Ebola’s existence was a major factor in the disease’s early spread. At the time, many Liberians openly stated that they did not trust government warnings, claiming that public officials were using the outbreak as a means to pocket funds donated by the international community’ (Mukpo, 2015a: 8).

Later on in the response, in 2015, a survey by International Alert showed that initial denial of the existence of Ebola could be reduced only once people began to see for themselves ‘visual evidence of Ebola, or hear firsthand accounts from trusted sources’ (Mukpo, 2015a: 25).

Figure 4. Causal loop illustrating that the more disbelief there was about Ebola, the fewer cases were reported to authorities; the fewer known cases, the less people believed in Ebola, creating a self-fulfilling fallacy



Figure 5. Causal loop diagram showing the dynamics later in the response – once people began acknowledging cases of Ebola, this decreased denial of the disease



It was during this time that Mosoka Fallah, who had grown up in West Point and now worked for the Ministry of Health and Social Welfare, visited the settlement. Having found six bodies dead of EVD in West Point on 12 August, he notified his colleagues at the ministry: ‘We are in trouble. Ebola has come to West Point’ (Drexler, 2015). Having grown up in the area, Fallah had good relationships with residents, who disclosed the reality of what they were seeing around them. Speaking to community leaders, he began to see that these cases represented ‘the tip of the iceberg’. Concerned with an uncontrollable explosion of the virus, Fallah did something he now regrets, convincing his boss to open an isolation centre in West Point (ibid.).

This plan went ahead, and the isolation unit became the first one designated in Monrovia (Onishi, 2014a). It was hastily established in West Point’s only school, which had been closed in July when the government closed schools across the country (Mogelson, 2015). The government claimed the community leadership had agreed to open the isolation unit (Hasian Jr, 2016) and told West Point residents the unit was for them but residents ‘did not understand. They said we were trying to bring Ebola to West Point’, explained Fallah (Drexler, 2015). Indeed, given the lack of anywhere else suitable for them to go, many of the patients who ended up in the isolation unit were brought there from other counties (Mogelson, 2015). ‘As these patients began to die, health officials publicly attributed the deaths to the community’ (ibid.). Not wanting the stigma of being a hub of Ebola death, West Point residents ‘grew more distrusting and resentful’ (ibid.). Rumours began to spread about the patients being brought in from outside the area, fuelling anger and confusion as residents wanted answers about exactly what was going on (Liljas, 2014).

By around 5:30pm on Saturday 16 August 2014, people had gathered around the isolation unit. Some within the crowd tried to persuade the others that EVD was a serious risk, but these words fell on deaf ears as the group began to chant ‘No Ebola in West Point!’ (McCoy, 2014). The mood was a mixture of anger, suspicion and fear. West Point residents were upset and worried that patients with Ebola had been brought into the community (particularly as many did not believe EVD was in West Point at this time), and also were fearful and suspicious, not knowing what was happening inside. As the crowd gathered, a few patients from within the clinic left, and soon 17–29³ patients from the isolation unit either ran away or were physically removed by their families. The crowd rushed in and looted the isolation unit, removing several items likely infected with EVD, including blood-stained sheets and mattresses (ibid.).

The day after the raid, on Sunday 17 August 2014, West Point community representatives met with officials at the National Ebola Task Force headquarters in Monrovia. These representatives urged officials not to go ahead with their suggestion of quarantining the entire settlement, particularly given the devastating economic impact it could have (Mogelson, 2015).

Despite this meeting, two days later, Tuesday, on 19 August, the Liberian President Ellen Johnson Sirleaf gave the order for West Point to be barricaded in (Paye-Layleh, 2014). The entire settlement of 80,000 was to be quarantined. Lewis Brown, Minister for Information, said at the time that the decision was made ‘based on both health and security concerns’ in West Point, ‘because of its dense

population and its potential for political instability, as shown when residents recently stormed an Ebola holding centre that they did not want in the neighbourhood' (Onishi, 2014a). He also gave a statement that 17 of the escaped patients had been found and taken to another clinic, which later turned out to be false (MacDougall, 2014). Johnson Sirleaf said, 'We had to protect them from themselves,' but 'sources monitoring the security sector say the decision was less about the community's safety and more a political attempt to show the government was in control of the situation' (ibid.). The quarantine was not sanctioned by international donors, and community consent 'was neither gained nor sought' (ibid.).

4.3. West Point under quarantine

On Wednesday 20 August, security forces sealed off West Point without giving any advance warning to residents (Alfred, 2014), while ships patrolled the waterfront (Liljas, 2014).

Community representatives describe seeing soldiers beating people up (Mogelson, 2015). The tension was given extra fuel as soldiers helped the West Point commissioner evacuate several members of her own family, which 'tipped the outrage into violence' (ibid.). Some residents began to throw rocks at police; 'others tried to escape across a makeshift checkpoint' (MacDougall, 2014). Tear gas was used on the crowd (Butty, 2014a). Only heavy rain put an end to the riots (Onishi, 2014a).

At this time, 15-year-old Shakie Kamara, who was out to buy bread and tea for his aunt, was caught up in the riots (Onishi, 2014a). As soldiers fired guns into the crowd, Shakie was hit. His body was buried



Vendors struggle with plummeting sales and rising cost of transporting goods to the market in West Point after the Ebola Outbreak and quarantine took effect in Liberia. Photo: Flickr/Morgana Wingard/UNDP

without an autopsy (MacDougall, 2014). Despite initial statements from the Defence Ministry, which claimed soldiers had only shot into the air and the boy must have been harmed climbing barbed wire, the hospital medical director said he had suffered deep gunshot wounds to his legs. Without a functioning operating theatre and barely any staff or supplies, there was little the hospital could do, and Shakie died of his wounds (Onishi, 2014a).

In November 2014, the Liberian Independent National Commission on Human Rights conducted an independent investigation of the conflict that led to Shakie Kamara's death back in August. The Commission found that, contrary to statement by the Armed Forces of Liberia, security forces had 'fired with complete disregard for human life' (Onishi, 2014b). Also in November, five soldiers involved in the conflict were found guilty of charges around the death of Shakie Kamara. The punishment each received included fines and a month in detention (Butty, 2014b).

Throughout the so-called quarantine period in late August 2014, there were many anecdotal reports of people moving in and out. The only true barrier seemed to be cost. One example is of a man with a window along the edge of the quarantined area who charged a small fee to climb through his apartment (Onishi, 2014a). Many others just bribed soldiers or police. Some went in and out for work; others got out and stayed out (ibid.). As with the 'hard close' of official border crossings and checkpoints, this attempt to restrict movement was ineffective.

For those unable to get out, food prices skyrocketed within West Point (Besser, 2014; Paye-Layleh and Larson, 2014; Mogelson, 2015). While reportedly intended to keep the community safe, the quarantine actually caused people to crowd together, once they had to join in lines to wait for food aid (Onishi, 2014a; Paye-Layleh and Larson, 2014). While food was distributed, some did not have coal and water to cook the provided rice and beans with (Besser, 2014).

The quarantine also had psychological impacts. Butty (2014a) explains that, 'The quarantine made the residents of West Point feel as if they were in a high security prison, as they were cut off from their relatives on the outside.' For residents still recovering from the scars of the civil war, which lasted from 1989 to 2003, killed 150,000 people and displaced another 850,000 (Parshley, 2016), the empty streets of West Point during the quarantine conjured up painful memories (Besser, 2014). Being separated from family and community outside of the quarantined boundary compounded this.

On 30 August, after 10 days of negotiation, the quarantine was lifted. After the announcement was made by radio, West Point erupted in celebration (MacDougall, 2014; Paye-Layleh, 2014). At the time, Liberian Minister of Information Lewis Brown explained that the government now felt more confident that it could work with residents to effectively scan for those who were sick and keep the community safe (Paye-Layleh, 2014).

Media reports widely criticised the 10-day quarantine (Onishi, 2014a, 2014b). Onishi (2014a) explains that, while 'isolating communities has succeeded in some rural areas in past outbreaks in Central Africa... the quarantine of an entire urban neighbourhood, where 60,000-120,000 people are crammed into crumbling shacks, has proved to be more than just porous.'

Community representatives involved in the negotiations later explained that, in order to have the quarantine lifted, they had to ‘agree to implement vigorous containment measures in the slum: identifying sick people, removing them from the community, quarantining their houses, tracking down their recent contacts and monitoring these contacts for 21 days... previously, all this was the responsibility of highly trained specialists [but now] the job fell to the neighbourhood’ (Mogelson, 2015).

4.4. Community-led response in West Point

Several have described the quarantine as illustrative of a deep mistrust between government and communities (Onishi, 2014b; Guhathakurta and Daghli, 2015). One journalist recounts the experience of when President Sirleaf Johnson came to visit West Point. While she walked around and was sympathetic towards the people she met, a man reportedly walked behind her, tossing dollar bills from his backpack with gloved hands, to silence criticism from the loudest protesters. And when the visit was over and Sirleaf Johnson drove off, ‘her guards and entourage followed... tossing their used gloves on the ground on their way out’ (Onishi, 2014a).

Once the quarantine was lifted, international actors started entering West Point, ‘with bleach, rubber boots and information’ (Vogt, 2014). The combination of will among community leaders (and agreements made during the quarantine negotiations), resources from national and international response actors and media advocacy appears to have shifted the tide.

Mosoka, seeing how communication had fallen apart when the isolation unit opened, was eventually able to act as a go-between, helping negotiate the end of the quarantine and working with community leaders such as Archie Gbessay to organise ‘homegrown active case finding’ (Drexler, 2015). Volunteers were recruited to go door-to-door, three from each of West Point’s 35 blocks (Mogelson, 2015). While it took time to reduce the hostility around discussing EVD, and cases skyrocketed up to 80 a day at one point, ‘by the middle of September, everyone started to think, look I better be careful. Today you talk to your friend – tomorrow, you hear the guy is gone’ (ibid.). Seeing the outbreak emerge before their eyes, West Point residents began to follow hygiene advice and report dead relatives. The school-turned-isolation unit was used as a transit centre where people could be diagnosed and wait for the new West Point ambulance to take them to an ETU (ibid.). However, despite the sense that the response was finally under control, and being led by the community, some West Point residents critique how this emerged. They argue that residents stepped up in the absence of government support, and describe feeling deserted (Vogt, 2014). Community groups such as the one led by Gbessay had actually emerged in August, before the riot at the school-turned-clinic, but were not supported and engaged with until after the top-down quarantine approach had not worked (Mukpo, 2015b).

Box 4. Tension and miscommunication between government and community

While not exclusively an urban phenomenon, tension between communities and government was a feature across the West African EVD epidemic. A survey by International Alert of 200 Liberians during the response found responders scored government officials an average of 1.7/5 for trustworthiness, and many felt the government was not doing enough for the response (Mukpo, 2015a).

Miscommunication was a significant factor in increasing these tensions during the response. In West Point, residents were confused and suspected the government was bringing Ebola into their community when it opened the EVD holding centre. They chanted ‘No Ebola in West Point!’ in response, to indicate they did not want Ebola brought into their community, where they did not believe the disease existed.

Later, in an interview in September 2014, West Point Commissioner Miata Flowers claimed denial was still rampant in the area, and cited the chants of ‘No Ebola in West Point’ as evidence that residents did not believe EVD existed (Y Care International, 2014).

Of course, it is impossible now to tell the intention of these reported words. Both interpretations are possible, but they do have different implications and can help shed light on the assumptions made, by both communities and authorities, as a result of underlying tensions. Assuming the government did not have their best interests at heart, West Point residents reacted angrily to what they saw as the imposition of EVD on their community. Assuming the residents were in denial and not willing to address the situation, authorities reacted with force, putting the entire area under quarantine.

Addressing the underlying tensions between West Point or other communities and the government is critical to prevent future miscommunications.

By mid-October, one journalist described witnessing a ‘desperate push’ to address EVD in West Point, ‘with or without the government’s help’ (Vogt, 2014). Vogt highlights this as a marked change from in August, when suspicion and rumours had dominated discourse. By this time, the government was present in West Point, running the health clinic, and had also commended community efforts (Vogt, 2014). The last reported case of EVD in West Point was in December 2014 (MacDougall, 2016). A UN Children’s Fund blogger who visited West Point in February 2015 met youth actively engaged in door-to-door awareness-raising who wanted the world to know, ‘West Point is a good community, a community that doesn’t spread Ebola’ (Gupta, 2015).

Following the ‘success’ of this approach in West Point, by January 2015 the government was pushing the West Point approach across Montserrado County. Dividing the region into ‘smaller, localized teams’ (Cordier-Lassalle, 2015) was believed to better support ‘agile, customized’ solutions around the same central technical ‘pillars’ that West Point residents had been told to take on, including case and contact-tracking, support for the affected and community engagement (ibid.). Fallah organised several community meetings across Monrovia, apologising for the ‘top-down’ approach, which had been ‘wrong’ (Mukpo, 2015b). West Point ‘has been lauded for organizing itself and establishing infection control measures that drove the virus out of the community almost five months before the epidemic ended throughout the country’ (MacDougall, 2015). Throughout 2015, West Point community leaders were deployed to support other areas that were still popping up as hot spots (Mogelson, 2015). President Ellen Johnson Sirleaf acknowledged in March 2015 that the quarantine of West Point ‘did not work... it created more tension in the society’, while still commending the key role security forces played in building ETUs and throughout the EVD response (MacDougall, 2015).

On 12 May 2015, members of the Liberian armed forces who had once enforced the quarantine West Point joined residents in a football game designed ‘to help repair the rift between the security forces and the residents of West Point’ (MacDougall, 2015). These efforts were encouraged and facilitated by a former Liberian minister of public works, also a human rights lawyer, and two colleagues from the US military. At a ceremony for soldiers in February 2015, the former minister called for the soldiers ‘to return to West Point, this time armed with shovels, diggers, pens, paper’ and work with communities there to ‘restore the broken relationship’ (MacDougall, 2015).

During this time, a project also emerged to renovate the school that had been turned into an isolation unit, and then used as a transfer centre for those being tested and referred for treatment. The school’s rehabilitation ‘helped the local residents of the West Point neighbourhoods to overcome the fear and distrust which arose due to the conversion of the old school into an isolation centre and the subsequent negative attitude of the government’ (Guhathakurta and Darglish, 2015). The school reopened on 8 May 2015. However, as late as summer 2016 some reported that students were still hesitant to attend (Parshley, 2016).

While the school, the football game and the presence of soldiers working alongside residents in West Point has helped somewhat, ‘whoever shot Shokie has not been identified, and the decision-making behind the West Point quarantine and the soldiers’ behaviour have not been fully explained’, despite enquiries (MacDougall, 2015).

4.5. West Point today

Following the EVD epidemic in West Point, the settlement has seen some small improvements to its infrastructure. In addition to the rehabilitated school and ambulance, non-governmental organisations have installed a handful of public toilets and taps that provide treated water at low cost, although these still depend on the main reservoir, which can dry out (MacDougall, 2016). The volunteer groups mobilised during the response are still technically active, though members are losing motivation and report that honorariums have not been paid in several months (Parshley, 2016).

Since the EVD outbreak ended, residents have continued to negotiate with the government about possible resettlement. So far, they have successfully argued against demolishing parts of West Point because doing so would remove the (very few) public toilets available in the area, posing a public health risk (Bosworth, 2016). But the government seems determined, arguing that climate change will only further existing vulnerabilities and that, given the large size of the existing West Point population, upgrading in place is not possible and breakwater systems to protect residents would not work – thus resettlement is the only option (Baskin, 2017).

Residents argue the government is too focused on relocation, and say they need more – a hospital, better water access, space to build more toilets (MacDougall, 2016). Monrovia's Mayor Clara Doe Mvogo says residents do understand that, in time, erosion will continue and 'the ocean is going to clean that land' (MacDougall, 2016). Indeed, a government-led petition supporting resettlement found 1,779 West Point families willing to resettle (Baskin, 2017). While residents won't just 'wake up and move one day', resettlement seems inevitable (MacDougall, 2016). However, as one of the largest voting blocs in the city, any action is unlikely before elections set for 2017 (ibid.).

Overall, the situation of the whole country today is still dire. Conservative FAO reports estimate 630,000 Liberians do not have enough to eat, and '30-40% of Liberians lack access to healthcare... just the same as before the epidemic' (Parshley, 2016). The poor WASH and health care infrastructure in West Point has not improved, and, as before the EVD outbreak, the government and residents are still in conflict over potential resettlement. The infrastructure and climate vulnerabilities that date right back to the settlement's origins all remain.

5. Learning from the Ebola Response in West Point

Urban contexts are highly dense and diverse. They contain a wealth of interconnections and social dynamics that are fluid and constantly changing over time, sometimes from one day to the next. These patterns make urban environments and their populations difficult to understand, predict and articulate with, meaning urban interventions are challenging to design and strategise. These dynamics posed particular challenges for the EVD response in West Africa, as the case of West Point illustrates. In particular, the West Point example illustrates many key points from the other papers in this series, which are explored below.

5.1. Quarantine in urban areas

The case of West Point illustrates some of the challenges related to quarantine in an urban environment. In an attempt to tackle the rapid spread of EVD, the governments of Guinea, Liberia and Sierra Leone imposed quarantine both within entire areas (as in West Point) and on individual households (as in Conakry, Guinea).

When applied effectively and as a mean of last resort, the mandatory physical

separation of people who have been, or are believed to have been, exposed to a contagious disease but do not show symptoms of the illness may prove helpful to reduce the spread of infectious diseases. However, as the approach also brings about serious risks to human rights and social order by evoking fear and confusion and limiting individual liberties, international human rights law requires that quarantine meet the Siracusa Principles when restricting human rights in the name of public health or public emergency.

It is the responsibility of the government to decide when quarantine is necessary and to impose it in accordance with the Siracusa Principles. Humanitarian organisations may be asked to meet the basic needs of quarantined people by providing food, water, hygiene, information and basic health care. Humanitarian organisations may also monitor a situation of quarantine, and identify any violations of the Siracusa Principles, in order to protect the human rights and dignity of quarantined people.

In contrast with previous experiences with quarantine largely in rural areas, the urban context of the 2014/15 EVD outbreak in West Africa presented new challenges for governments and humanitarian responders, particularly in the context of quarantine. All of these challenges were seen in the case of West Point.



Photo: Anthrologica (2015)

The main challenges included the following:

- The size and scale of urban areas made it extremely difficult to contain the spread of EVD. The large number of people under quarantine, all needing support to access basic needs, emphasised the importance of good coordination between responding agencies.
- The density of dwellings in urban areas, and the difficulty involved in moving large supply vehicles into these areas, complicated quarantine logistically, particularly where large amounts of food and water needed to be transported across the city.
- Quarantine restricted the urban population's mobility, resulting in reluctance and non-compliance of those who feared losing their job and income, as shown in West Point.
- The large scale of the outbreak resulted in a huge amount of waste. The nature of EVD exacerbated this problem, as any clothing, bedding and other materials that came into contact with infected people had to be disposed of.
- Pre-existing inequalities within the cities, such as access to WASH facilities, were amplified during the public health crisis. In some cases, households lost all access to water sources and were completely reliant on water being brought to them. This was particularly challenging in hard-to-access environments such as West Point.
- Poor handling of communication on the quarantine and its top-down imposition resulted in a public backlash, non-compliance and sometimes violence, as in West Point.

Snapshot: What are the Siracusa Principles?

The Siracusa Principles on the Limitation and Derogation Provisions in the International Covenant on Civil and Political Rights (AAICJ, 1985; see also WHO, 2005; CDC, 2015) outline the circumstances in which rights may be limited during emergency situations. Where state governments choose to enforce quarantine, to conform to international law they must ensure minimum conditions are met.

According to the Siracusa Principles:

1. Quarantine must be enacted and supported in accordance with the law.
2. Quarantine must be in the interest of a legitimate objective.
3. Quarantine must be the least intrusive and restrictive option available to reach that objective.
4. Quarantine must be based on scientific evidence and be imposed in neither an arbitrary or nor a discriminatory manner.

5.2. The role of population movement

During the West African EVD outbreak of 2014/15, population mobility within and between urban and rural areas became a key challenge for humanitarian response, particularly as the virus is spread through human-to-human contact. The historical patterns of population movement in West Africa shaped the context in which the EVD outbreak occurred; the diversity of the population of West Point provides an example of this.



Photo: Flickr/ Simon Davis/DFID

Generally, movement in West Africa occurs at different scales and for different reasons. Movements in the region range from displacement as a result of conflict and disaster, to seasonal movement according to agricultural patterns, to day-to-day movement for trade, family and cultural reasons. When the EVD epidemic spread across the region in 2014/15, new movements directly resulting from the epidemic also occurred, as affected people sought health care, attended burials and celebrations, travelled home to the comfort of family and friends and fled stigma, quarantine and rights abuses. Large parts of these movements occurred within and between urban centres.

Although population movement was recognised as a critical issue, not enough emphasis was put on the drivers behind it. Instead, lack of understanding resulted in the (wrong) assumption that restrictions, such as curfews, border controls or quarantine, would stop movements. The West Point quarantine was one example of a broader trend among governments to attempt to restrict movement in order to contain the disease. However, in the EVD-affected cities of West Africa, movement increased rather than decreased during the epidemic, despite restrictions. People were moving to urban centres to seek treatment, or from urban to rural communities to die among family or to bring their dead relatives back home.

In West Point, as elsewhere, in addition to not stopping movement, restrictions led to confrontation, resentment and frustration, particularly given their socioeconomic impact. Not even the closing of the international borders in the three most affected countries of Guinea, Liberia and Sierra Leone had the hoped-for effects. National borders within West Africa are highly porous, and for the most part represent relatively recent administrative divisions, in contrast with the long-standing nature of the economic and social ties between different population groups, of people's need to access health care and other services and of seasonal labour migration patterns. This complicated the response: the disease moved with the people but the response was less mobile and monitoring or tracking efforts were almost impossible.

This constant population movement within cities had several impacts on the spread of and response to EVD. Urban populations are characterised by a high number of anonymous interactions, and, with Ebola being fundamentally a disease of interaction between people, this posed a challenge to stopping its spread. For example, taxis in Liberia typically hold seven or eight people at a time (Machalaba and Porter, 2015). Dense urban environments can become incubators of disease and pose a risk for both local and international travellers. The density of West Point, for example, created difficulties in contact tracing, as did the habits of residents, many of whom moved in and out of the area regularly for work and social reasons.

While coordination between countries did occur, the response strategy in each was different. Given the fluidity and inevitability of movement between Guinea, Liberia and Sierra Leone, more could have been done to harmonise approaches and to make national actions complement and efficient.

The West Africa EVD outbreak saw limited attempts to understand population movements, and measures failed as they ignored its whys and hows. Top-down approaches to prevent movements, such as the quarantine of West Point, resulted in clandestine movements, heightened fear and confusion and did not address the reality of people who fell ill and needed to get treatment. More promising ways forward include inter-agency and intergovernmental coordination and information-sharing, better understanding of the underlying causes of migration flows and community-engaged solutions.

Snapshot: What drives population movement in West Africa?

Labour/livelihoods

People regularly cross borders for economic reasons, including to provide seasonal waged labour, which changes in response to climate and market conditions, to purchase and to trade. The legal environment is often more favourable in one place compared with another.

Social/cultural reasons

Families in the region often span borders and move regularly to visit loved ones and attend cultural celebrations and family ceremonies such as weddings and funerals.

Crises

West Africa has experienced many crises, including civil wars, flooding and drought, which have all driven displacement and also movement to return, as well as to visit those who have moved.

5.3. Communication and engagement

During the 2014/15 West African EVD outbreak, communication and engagement with urban stakeholders proved critical elements of the response. As Serlemitos (2016) explains, communication and engagement ‘should be the steering wheel, not the spare wheel’ in an effective response. He continues, ‘Without an effective communication strategy, it does not matter how many ETUs you build, how many ambulances you deploy – no one will use

them if they don’t know about them and don’t see a benefit (that outweighs the barriers).’ However, urban environments within West Africa, with high levels of density, diversity, connectivity and change, created complex dynamics and posed a number of challenges to responders.

In urban contexts, full of social and economic as well as spatial connections, the concept of the geographically bound neighbourhood as the default ‘community’ does not present the whole story. Humanitarians need to work with a range of stakeholders, including religious, traditional, cultural and government actors. This can be a challenge in terms of decision-making but also represents an opportunity, as it implies accessing local knowledge and building ownership and local acceptance. In doing this, humanitarians need to understand the relationships between stakeholders and to consider local cultural dynamics. Both aspects were highlighted in the EVD response, where communication between different levels of authority was often unclear and limited in its effects, and the significance of culture was ignored, with devastating results. For example, the significance of culture and burials was insufficiently addressed early on in the response, leading to an increased number of transmissions as people buried their relatives in secret. During the response, and particularly in West Point, responders struggled in the context of limited cohesion, both within communities and between the population and authorities.

The response included various approaches to communicate and engage with urban populations. These ranged from social media chat groups to community radio and door-to-door canvassing. Throughout the response, it was important for messaging to be practical and relevant in order to avoid panic and the spread of misinformation. Unfortunately, in the early stage of the response, messaging often failed to understand that, where communications did not address people’s concerns appropriately, rumours and misinformation would be likely to fill the gap. Early messaging in Liberia, for example, ‘placed too much emphasis on fear. People who were already sick had a motive to hide themselves to avoid stigma, and the sense that treatment would not increase their chances of survival discouraged them from admitting themselves to ETUs’ (Mukpo, 2015a: 25).

Communication was particularly challenging because of restrictions on movement and was exacerbated by mistrust between urban populations and authorities, which limited the effectiveness of participatory approaches. Lack of prioritisation of engagement and the top-down, panic-driven, nature of the response meant it missed an opportunity to work with affected individuals and local communities. Instead of



engaging in dialogue, humanitarians had to resolve extant issues where there had been gaps around consultation and participatory decision-making. The case of West Point well illustrates this point: early opportunities for engagement were bypassed in favour of top-down decisions about opening a treatment unit, quarantining the entire area and so on.

As Featherstone (2015) explains, ‘Once Ebola had started to reach the large urban areas such as Freetown and Monrovia, the limitations of traditional approaches to community mobilization became more evident.’ The response has been criticised for treating social mobilisation as an ‘afterthought’ (Owen, 2016). Only when the response focused more on communities’ legitimate concerns, and involved them in planning, did humanitarians manage to increase the acceptance of ETUs and safe burial practices. Again in West Point, this is what made a difference. Once community volunteers were mobilised, caseloads decreased significantly in the area, to the extent that leaders were asked to share learning with other areas of the country.

The impact of putting energy into social mobilisation efforts is clear: earlier in the response (August 2014), at least 28% of Ebola transmissions occurred through unsafe and secret burial practices; later on, in early 2015, 97% of bodies were being buried in safe ways (Owen, 2016).

Opportunities were also missed when the response did not support self-mobilisation efforts although examples of community self-mobilisation had shown positive results.

A review of the 2014/15 EVD outbreak in West Africa highlights that community engagement must be a key pillar in future responses. In order to be able to respond effectively, humanitarians have to understand the structures and complexities of urban communities and leaderships and be aware of the role of mistrust in prolonging an epidemic.

Snapshot: How do urban context challenge communication and engagement?

Scale: Urban environments have more people and more perspectives.

- Communication must reach large numbers.
- Committee-style engagement approaches are not suitable.

Density: Urban populations live and communicate in close quarters.

- It is harder to target communication but there are more potential channels to use.
- Vulnerable people can be invisible in the density and ‘missed’ by engagement approaches.

Diversity: A wide range of motivations, capacities, vulnerabilities and power structures exist.

- Communication can be misunderstood, and not all have access to the same sources.
- Neighbours and leaders are not necessarily representative, and may have different interests and needs, making ‘community’-based engagement difficult.

Mobility: People and information are on the move, and constantly changing.

- Communication needs to be ongoing, with messages repeated.
- Engagement needs to account for non-geographic ‘community’ and individuals’ mobility.

6. Conclusion

The EVD outbreak in West Africa, and the particular experience of West Point, Liberia, highlights a number of critical points that can be taken forward for reference during future urban crises.

Urban areas are home to pre-existing vulnerabilities

Urban areas tend to have their own pre-existing vulnerabilities that can impact a crisis. For example, in all three affected countries, the state of the health care infrastructure, staffing and system had significant impacts on the outbreak and response. The concentration of facilities in urban centres increased the movement of infected people, who had to travel to seek care, and was a barrier to many receiving health care before, during and after the response. The low level of capacity in health care limited the ability to scale it up to address EVD. Patients from outside of West Point had to be brought in once the holding centre was established, and the death of Shakie Kamara, the young man injured by soldiers during protests after quarantine was instituted in West Point, occurred at a hospital unequipped to deal with his gunshot wounds. These examples illustrate the inadequacy of health care infrastructure in this context.

Effective response in urban contexts considers a range of interconnected issues

The EVD outbreak in West Africa occurred largely in cities, where everything is interconnected (see Campbell, 2016). This meant the outbreak was not just a health care crisis but also a WASH, livelihoods, protection and education crisis, among other things. Such issues were critically interconnected, and to be effective the response had to consider not just public health aspects but also impacts on other sectors and services. West Point, for example, has significant WASH, access, land tenure, erosion and protection issues, which have persisted over decades and which all played some role when EVD arrived in the settlement. Under quarantine, many West Point residents had no access to water or their livelihoods. Tense environmental and political dynamics informed communication between government and communities. The epidemic caused much more than a public health crisis, with disruption across a range of aspects. Failure to consider each of these aspects leaves people vulnerable. This can, and did, increase the occurrence of behaviours that worsen the epidemic, such as when people bribed their way out of quarantine to go to work.

Poor communication early on fuelled mistrust and denial

In West Point, informed by a history of mistrust of government, residents initially denied EVD was real, hid sick relatives and even threw bodies into the sea rather than handing them over to the authorities. Knowing EVD had reached the settlement, the government opened a holding centre but failed to communicate with residents, and muddled the message by using the centre for non-residents.

With no explanation as to what was really happening, mistrust and denial turned to anger, with residents fearing that the government was actually going to bring Ebola into their community.

Witnessing the riots, the government accused the West Point community of not being able to handle the situation and enacted quarantine as a measure of control. At all stages, opportunities to communicate were missed. The impact for West Point was extreme but illustrative of a broader pattern of miscommunication and poor messaging throughout the response.

Humanitarian responses in cities can be more visible, and therefore political

In the end, media advocacy helped shift the tide in West Point, with graphic images and detailed accounts in international newspapers putting pressure on the government to resolve the situation. This documentation has also enabled use West Point as an illustrative example in this series. While these are both positive impacts, it is important for responders to consider that things that happen in cities are often more visible to the press, and thus often have more political importance (and so may be more likely to generate politically led responses), than those that happen in isolated rural areas.

Population movement is unstoppable, and therefore should be taken into account

West Point, with its diverse population accumulated through decades of movement driven by conflict-induced displacement, as well as economic motivations, illustrates the impact of historical population movement growth on informal settlements. Having arrived at West Point over several decades, residents retain ties across the country and region, and therefore social and economic reasons to travel. Their day-to-day movements illustrate the impact of regular movement in and between urban areas. The example of residents bribing their way out of the quarantine to get to work or see family, shows that it is not possible to stop movement, even in extreme responses such as quarantine.

Serious thought should be given to quarantine, which has both ethical and logistical implications and may be impractical in cities

Looking at the Siracusa Principles, there are legitimate questions about how legal and ethical the quarantine was in West Point. The logistical dynamics of informal settlements, with their high density and lack of clear access – West Point has shelters built on top of drains and houses built right up to the water's edge – mean any type of quarantine is quite impractical in this type of environment. West Point also illustrates the significant impacts quarantine can have, for example on livelihoods, or creating stigma and psychological impacts.

There can be a higher potential for rumours and public disorder in urban environments

Fuelled in great part by poor communication, rumours spread fast in urban areas, and crowds of likeminded individuals can form quickly. While urban environments are not necessarily more prone to conflict, life there is fast-paced and moods can change quickly. This point is well illustrated by the riot on the school-turned-holding centre in West Point. Occurring in a dense informal settlement, this situation quickly escalated as a crowd, incited by rumours⁴, fear and speculation, gathered around the holding centre, marking the beginning of two weeks of conflict in West Point. All this showed that there is the higher potential for public disorder in a dense urban environment.

Mobilising existing community networks shouldn't be an afterthought

Community mobilisation was shown to be critically important in this response, even though conceptions of 'community' may not necessarily be the same in urban areas as they are in rural areas. In the end, community mobilisation is what turned the tide in West Point. Once residents themselves were actively involved in the response to EVD, the message got across and was ultimately so successful that the model of community mobilisation was then exported to other parts of the city. And similar learning was reported in Guinea and Sierra Leone. There are accounts from across the EVD response of social mobilisation being an afterthought. This is a shame given that even West Point had active community groups before EVD arrived; these were not effectively harnessed until after some fairly extreme alternatives had been tried.

A lack of understanding of context and culture caused problems for the response

By and large, the response was missing an effective understanding of context, and particularly of culture (Moon et al., 2015). As Stocking et al. (2015) point out, the need for effective engagement and mobilisation could have been foreseen 'had a social and political analysis been conducted to complement the epidemiological assessments' (20). This gap is partly a result of painting the crisis exclusively as a public health issue, which ignored the broader range of issues involved in the outbreak and that needed to be part of the response.

The urban context is complex, and, as WHO (2015d) acknowledges, this crisis across three countries and multiple urban environments and neighbourhoods 'was not an epidemic with three different national patterns, but likely hundreds of distinct patterns, with their own transmission dynamics, playing out within individual districts and sub-districts'. The response missed an effective understanding of these dynamics, and in doing so impacted many of the areas which have been discussed here including relationships between authorities and residents, understanding of the drivers behind movement, and ability to effectively communicate relevant and clear messages to impact the spread of EVD.

Acknowledge the nature of urban crises and act accordingly

The tenth and final issue is that, while many recognised the unprecedented nature of the outbreak occurring in urban areas, it took quite a bit of time to apply an urban-relevant response. This had implications that spanned the various other points above. Insufficient efforts were dedicated to understanding the context, which is critical in an urban response (Campbell, 2016). The response was also 'inflexible in adapting to rapidly changing conditions on the ground' (Moon et al., 2015: 2210); in urban contexts, issues are interconnected in complex, unknown ways and change rapidly, meaning a flexible, adaptive approach is required.

For the most part, the challenges West Point has experienced over the past decades remain challenges today, as is the case for much of urban West Africa. The region continues to reflect its own cultural and mobility dynamics. Long-standing vulnerabilities related to WASH, health and other basic services, land tenure issues and mistrust between government and communities persist. In Conakry, Guinea, a new measles epidemic was declared in February 2017, and in April 2017 a mass vaccination campaign began (MSF, 2017). In Sierra Leone, political and economic tensions continue, with the president having introduced austerity measures in November 2016, citing the economic impact of EVD. And in West Point, the resettlement of residents away from the coast, as erosion continues and with little hope of living conditions improving, remains an uncertain possibility.

The West African EVD outbreak was the first mass outbreak of Ebola in an urban environment, but it was not the first public health crisis in a city. The previous outbreak of Ebola in 2000 in Gulu, Uganda, was contained before it reached anywhere near the scale of this outbreak, but the example has some similar features: informal settlements, a legacy of infrastructural problems and social cohesion damaged by conflict, misconceptions and rumours. A paper reflecting on learning from the Gulu outbreak identifies community mobilisation as critical, and also notes the importance of involving traditional healers and of a decentralised and localised approach (Okware et al., 2015). Meanwhile, in 2008, WHO convened a symposium on cities and public health crises. The resulting report notes many lessons that were of relevant in the EVD response in West Africa, including the likely impracticality of quarantine in a large city; the social and economic implications of social distancing; the likelihood of increased population movement during such a crisis; and the importance of trust, clear messaging and community and stakeholder engagement (WHO, 2009).

The scale and impact of this EVD outbreak means it unquestionably represented an unprecedented situation. As such, it was difficult to know what would work, and, as a result, many of the lessons from this response emerged after much trial and error. The 2014/15 EVD outbreak in West Africa was a 'first' by many accounts, but this was not the first large urban crisis – nor the first large urban health crisis. As humanitarians, as governments and as communities, it is our responsibility to take the learning we can gain from prior experiences – from Port-au-Prince and Tacloban and Amman and now from Conakry, Freetown and Monrovia, and, though we may not know exactly what will work, in an urban crisis we can start from day one by using an urban-relevant response. We still need to learn as we go, especially as each context is different, but we cannot pretend that we do not know that urban environments are complex and changing, that challenging dynamics exist between stakeholders and that social mobilisation and understanding of context are not critical.

Endnotes

1. As of 20 January 2016.
2. Data collected by Slum Dwellers International (SDI) (2016) suggest people settled a bit later, from 1952.
3. The exact number is unknown (McCoy, 2014).
4. See CDAC Guide on how to deal with rumours in humanitarian response: <http://www.cdacnetwork.org/i/20170126102435-rdj7l/>

Annex A: List of Interviewees

| | | |
|--------------|-----------------|--------------------------|
| Jono A. | Anzalone | American Red Cross |
| Claire | Bader | Save the Children |
| Juliet | Bedford | Anthrologica |
| Aliou | Boly | IFRC |
| Catherine | Brown | Mercy Corps |
| Tala | Budziszewski | Plan International |
| Filiep | Decorte | UN-Habitat |
| Mattia Koi | Dimoh | World Vision |
| Rania | El Essawi | UNICEF |
| Fernando | Fernandez | DG ECHO |
| Rosalia | Gitau | OCHA |
| Lizz | Harrison | YCI |
| Brian | Kanaahe Mwebaze | ASEOWA |
| Daniel | Kettor | Restless Development |
| Anika | Krstic | ACF |
| Antony | Lamba | UN-Habitat |
| Glenn | Laverack | Independent |
| Prince Jacob | Macaulay | Adam Smith International |
| Erma | Manoncourt | Independent |
| Erin | Polich | GOAL |
| Linda | Poteat | UNMEER |
| Durga | Rai | Oxfam GB |
| Helen | Seeger | Plan International |
| Josep | Serra-Bob | WHH |
| Annie | Singkouson | PSI |
| Corrie | Sissons | Oxfam |
| Valerie | VanZutphen | WHH |
| Daniel | Youkee | King's College |

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