

## Collective responsibility and counter-terrorism

Miller, S.R.M.; Feltes, J.

10.4337/9781800373075.00010

**Publication date** 

**Document Version** Final published version

Published in Counter-Terrorism

**Citation (APA)**Miller, S. R. M., & Feltes, J. (2021). Collective responsibility and counter-terrorism. In S. Miller, A. Henschke, & J. Feltes (Eds.), *Counter-Terrorism: The Ethical Issues* (pp. 35-45). Edward Elgar Publishing. https://doi.org/10.4337/9781800373075.00010

#### Important note

To cite this publication, please use the final published version (if applicable). Please check the document version above.

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

Takedown policy

Please contact us and provide details if you believe this document breaches copyrights. We will remove access to the work immediately and investigate your claim.

# 3. Collective responsibility and counter-terrorism

## **Seumas Miller and Jonas Feltes**

## 1. INTRODUCTION

A terrorist attack of any significance, such as the 9/11 attack on the Twin Towers in New York and other sites in the US, is rarely committed by a lone actor but rather involves the actions of multiple actors who are working towards a common goal. Thus, such a terrorist attack can be characterized as a joint action performed by the members of a group of actors – in this case, terrorists. Roughly speaking, a joint action is an action comprised of a set of individual actions, each of which is directed to the same end (a collective end, in our parlance). Thus, two men lifting a crate onto a truck is a joint action; each lifts his side of the box and, in doing so, each has as an end to relocate the crate from the ground onto the truck. Moreover, each does his part believing that the other will do his part; there is interdependence of action. However, some joint actions, such as a large number of workers building, for example, the Great Wall of China or soldiers fighting a war, are far more complex and take place over a far longer period of time.<sup>1</sup>

What of those combating terrorist attacks? The countermeasures against terrorist attacks also should be regarded as the joint actions of multiple members of various groups of actors having as their collective end to prevent or respond to these attacks.

However, whenever agents cooperate to realize a collective end, questions of responsibility arise – not only with regard to causal responsibility but especially concerning *moral* responsibility. Here, it is necessary to take a step back and investigate the following questions: Who is (morally) responsible for the consequences that result from an action performed by members of a group of actors? Can a group itself be held responsible for a specific action? Or is it only the members of a group that are the bearers of responsibility for a joint action to which they contribute? On the view defended here, it is the latter: only individual persons, and not collective entities per se, can properly be held morally responsible for actions (joint or otherwise). The second section

of this chapter provides an analysis of the notion of the moral responsibility of members of groups who perform joint actions. According to this analysis, the so-called collective responsibility of a group is to be understood in terms of the joint responsibility of the individual persons who comprise that group.<sup>2</sup> In the third section, we apply this notion of joint responsibility to terrorist groups that perform a terrorist attack and to the members of security agencies and others who would seek to prevent or respond to such an attack.

#### 2. COLLECTIVE MORAL RESPONSIBILITY

There are at least four senses of responsibility that apply to single individuals and groups of individuals alike. A single person who intentionally performs an action (and whose intention is under their own control) is responsible for that action.<sup>3</sup> However, since many actions are not morally significant, this notion of responsibility is not yet moral responsibility. Let us refer to this first sense of responsibility as *natural* responsibility and, in the case of a single person's action, *individual* natural responsibility. Likewise, persons who perform a joint action are responsible for that action in the sense of natural responsibility. However, since a joint action is performed by multiple persons, this is *collective* natural responsibility. Accordingly, to say that they are collectively responsible for the action is just to say that they performed the joint action. That is, they each had a collective end, each intentionally performed their contributory action, and each did so because each believed the other would perform their contributory action, and that therefore the collective end would be realized.

Our second sense of responsibility is *institutional* responsibility. If a role occupant has an institutionally determined obligation to perform an action – for example, a police officer might have an obligation to make an arrest – then the person is (individually) *institutionally* responsible for making the arrest. Likewise, if the occupants of an institutional role (or roles) have an institutionally determined obligation to perform some joint action, then those individuals are *collectively* institutionally responsible for its performance, in our second sense of collective responsibility. Here, there is a *joint* institutional obligation to realize the collective end of the joint action in question. In addition, there is a set of derived *individual* obligations; each of the participating individuals has an individual obligation to perform their contributory action (the derivation of these individual obligations relies on the fact that, if each performs their contributory action, then it is probable that the collective end will be realized).

The third sense of responsibility is *moral* responsibility. If a person intentionally performs a morally significant action, then they are (individually) *morally* responsible for the action.<sup>4</sup> Likewise, if a group of persons performs a morally significant joint action, then they are *collectively* morally responsible.

sible for it. Moreover, as suggested above, collective moral responsibility for outcomes that are intended, or otherwise aimed at, is a species of *joint* responsibility. Accordingly, each agent is individually morally responsible, but conditionally on the others being individually morally responsible; this interdependence in respect of moral responsibility exists because the action of each is performed in the service of a collective end.

Thus, we can make the following claim about collective moral responsibility: if multiple persons are collectively (that is, jointly) – naturally or institutionally – responsible for the realization of an end (an outcome), and if the end, and therefore outcome, is morally significant, then – other things being equal – the persons are collectively (that is, jointly) morally responsible for that outcome, and can reasonably attract moral praise or blame, and (possibly) punishment or reward, for bringing about the outcome.

Here, we need to be more precise about what persons who perform morally significant joint actions are collectively morally responsible for. Other things being equal, each person who intentionally performs a morally significant *individual* action has *individual* moral responsibility for the action. So, in the case of a morally significant joint action, each person is *individually* morally responsible for performing *their contributory* action, and the *other* persons are *not* morally responsible for their individual contributory action. In addition, however, the contributing persons are *collectively* morally responsible for the outcome or *collective end* of their various contributory actions. To say that they are collectively morally responsible for bringing about this (collective) end is just to say that they are *jointly* morally responsible for it. Thus, each person is individually morally responsible for realizing this (collective) end, but conditionally on the others being individually morally responsible for realizing it as well.

## 2.1 Layered Structures of Joint Action

In our discussion above, we distinguished between natural, moral and institutional responsibility and, more specifically, between collective natural, collective institutional and collective moral responsibility. Let us now focus attention on collective institutional responsibility in particular. For our purposes here, an institution can be understood as an organization or system of organizations constituted at least in part by a structure of roles and by some collective end(s) served by that structure of roles (Miller 2010).<sup>5</sup> For instance, a military organization fighting a battle might consist of officers, infantry soldiers, tank crews, pilots and so on, and have as a collective end to win the battle. Notice that the joint actions performed by the occupants of such organizations often consist of *layered structures of joint actions* (Miller 1992, pp. 275–97; 2001, Ch. 5). For instance, the members of the organization's infantry platoon might have as

their collective end to take and hold the ground occupied by the enemy (joint action  $j_1$ ), the members of the tank crews might have as their collective end to destroy the enemy gun emplacements (joint action  $j_2$ ), and the pilots comprising the squadron might have as their collective end providing air cover for the infantry and tanks (joint action  $j_3$ ).

Let us refer to the large-scale, complex joint action that consists in winning the battle as J. J consists of the actions of all the above – that is, infantry, tank crews and pilots. Moreover, J consists in the subsidiary joint actions,  $j_1, j_2$  and  $j_3$ ; the collective ends of each of these subsidiary joint actions – for example, to take and hold ground – ultimately serves the collective end of J, that is, to win the battle. Other things being equal, we can now say that all or most of the members of the above military units have, at least in principle, collective responsibility – that is, joint natural responsibility – for winning the battle (supposing they do win it) by way of their participation in a layered structure of joint actions. Of course, things might not be equal if, for instance and as mentioned above, many of these persons did not perform their actions having as at least one of their ends to win the battle, but rather, for instance, to simply avoid being shot for desertion.

However, institutional role occupants have more than simply natural responsibility (individual or joint) for their actions and omissions. Institutional role occupants are governed by sanction-backed regulations and laws that both constrain and enable the actions that they (institutionally, for example, legally) ought, and ought not, to perform qua institutional role occupants (for example, in the case of a military organization, the laws of war). If the occupants of institutional roles have institutional responsibilities with respect to their performance of joint actions (or joint omissions), then these responsibilities are collective institutional responsibilities. Note that in some cases these collective institutional responsibilities will be prospective, such as in cases where there is a *joint* institutional duty to realize the collective end of some joint action. Here, the individual duty of each to perform their contributory action is interdependent with the individual duty of each of the others to perform theirs. On the other hand, as was mentioned above, collective institutional responsibility can also be retrospective, such as in cases where the institutional actors have failed to do their joint duty. Note also that, while institutional responsibilities are often congruent with moral responsibilities, this is not necessarily the case. In apartheid South Africa, police were legally, that is, institutionally, required to enforce morally repugnant laws and policies, such as the Group Areas Act and the forcible removal of blacks to desolate so-called homeland areas. Such lawful actions resulted in the armed struggle of the African National Congress and, in particular, of its armed wing, Umkhonto we Sizwe (Spear of the Nation).

## 2.2 Chains of Responsibility

Let us now turn to the application of our theory of collective responsibility as joint responsibility to morally significant diachronic institutional action. Consider a team of detectives investigating a terrorist bombing. Let us assume that the team is engaging in a joint institutional action, namely, that of determining the identities of the terrorists. Members of the team gather physical evidence and interview witnesses and, in particular, any suspects. Moreover, they do so having as a collective end to determine the factual guilt or innocence of these suspects. At some point the detectives complete this process and provide a brief of evidence to the prosecutors according to which, and based on all the evidence, certain identified individuals perpetrated the terrorist bombing. So far so good, but the criminal justice processes do not terminate in the work of the detectives for there is now the matter of the trial; that is, the determining by the members of a jury of the legal guilt or innocence of the suspects. Let us assume that the members of the jury perform the joint (epistemic) action (Miller 2018a, pp. 300-318) of deliberating on the *legal* guilt or innocence of the suspects, and jointly reach the verdict of guilty. The question that now arises concerns the institutional relationship between the joint institutional action of the detectives and the joint institutional action of the members of the jury. It is here that the notion of a chain of institutional responsibility is illuminating (Miller 2014, pp. 21–39).

Let us assume in what follows that the collective end of the criminal justice process comprised of both the investigating detectives *and* the members of the jury (as well as others, but here we simplify) is that the factually guilty be found legally guilty (and the factually innocent not be found legally guilty). Note that from the perspective of this larger institutional process, the collective end of the detectives (that of determining the factual guilt or innocence of a suspect) is merely *proximate* whereas that of the members of the jury is *ultimate* (it is, of course, only penultimate from the perspective of the criminal justice system more broadly conceived, given the need for sentencing and incarceration).

Moreover, in all this there is an institutional division of labour and segregation of roles that involves each type of institutional actor – for example, investigator, prosecutor, judge, jury and others – making a contribution to the further (collective) end of identifying and appropriately punishing the guilty and exonerating the innocent. However, unlike many institutional arrangements, the criminal justice process is predicated on strict adherence on the part of institutional actors to the segregation of roles on pain of compromising this further end. We emphasize that this segregation of roles is consistent with all of these actors, each with their own different and segregated role, having a common further aim; agents can have a common aim and yet it is a requirement that each is to make a different and distinct contribution to that aim, and

not perform the tasks assigned to the others, and do all this in the service of that common aim.

#### 3. TERRORISM AND COUNTER-TERRORISM

## 3.1 Collective Responsibility of Terrorists

Whatever the political aims of terrorist groups, and these are multiple and – presumably at least in some cases (for example, those directed at colonial powers) – morally worthy, their methods typically (if not by definition) comprise the murder of innocent persons, including children (in the case of extremist jihadist groups, such as al-Qaeda and the Islamic State), and therefore are morally objectionable. The possibility of morally worthy ends being pursued by morally objectionable means can give rise to moral dilemmas; do the ends justify the means? Accordingly, there is at least the notional possibility that some terrorist attacks are morally justified. That said, in the case of extremist jihadist groups, such as Islamic State, there is no moral dilemma. First, the end of establishing an authoritarian, indeed fascist, state (the so-called caliphate) in which human rights (for example, those of women and unbelievers) are violated is morally unacceptable. Second, the means to that end include large-scale atrocities, such as genocide and enslavement, for example, against the Yazidis (Spencer 2014) is morally unacceptable.

The preparedness of members of the Islamic State, al-Qaeda and other extremist jihadist groups to commit suicide, and thereby supposedly achieve martyrdom, is an enormous advantage for a terrorist organization. Moreover, this role is greatly facilitated not only by real and perceived injustices, and existing national, ethnic and religious conflict, but also by global financial interdependence and modern technology, such as the global communication system and the new chemical and biological weapons of mass destruction that these groups have been seeking to develop. Perhaps al-Qaeda's success is not dependent on widespread political and popular support for its goals, although it is certainly reliant on disaffection, including with US policies. Rather, its success might largely be a function of the psychological preparedness and logistical capacity to perpetrate acts of terror, coupled with the technological capacity to communicate those acts worldwide, and thereby wreak havoc in a globally economically interdependent world. Its methods have proved extraordinarily effective in relation to the goal of destabilization. The terrorist group from the medieval past has identified the Achilles heel of the modern civilized world.

At any rate, from the perspective of this article, the members of the Islamic State and al-Qaeda bear collective *natural* responsibility for these various attacks and their intended (and perhaps foreseeable) outcomes, and, since these

attacks are clearly morally significant – indeed, morally blameworthy – the members of these groups are collectively morally responsible – indeed, collectively morally culpable – for these attacks. They are morally culpable because, as already mentioned, their methods clearly involve the intentional killing of the innocent, and are not constrained by principles of the proportional use of force or minimally necessary force. Indeed, the collective end of people like Osama bin Laden, Abu Bakr al-Baghdadi (the former leader of the Islamic State) and their followers and successors has been to maximize the loss of human life (albeit apparently in the service of their ultimate collective end of establishing a caliphate and so on). It remains an open question whether this is so for *all* forms of terrorism.

It is obvious that terrorist attacks are typically joint actions and, therefore, in light of our discussion in Section 2, the perpetrators of these attacks are collectively, that is, jointly, morally responsible for these attacks and the murder of the victims of the attack. For example, the terrorists who hijacked American Airlines Flight 11 and crashed the plane into the North Tower of the World Trade Center in New York performed a joint action. At least one terrorist operated the controls of the plane, while another navigated, and the remaining terrorists, by violence and the threat of violence, prevented the cabin crew and passengers from intervening. Each performed a contributory action, or actions, in the service of the collective end of crashing the plane into the building and killing passengers, office workers and themselves. Accordingly, the terrorists are collectively, that is, jointly, morally responsible for the murder of the passengers and of the occupants of the World Trade Center.

Further, since these members of these terrorist groups perform tasks as members of organizations (even if, to some extent, loosely organized organizations), the notion of a layered structure of joint action becomes relevant. Thus, the Islamic State's successful attack on the city of Mosul in Iraq was a manifestation of a layered structure of joint action (see Section 2 above). This is because it was a complex cooperative enterprise and, therefore, those who participated in it can, at least in principle, be ascribed collective, that is, joint, natural responsibility for the outcomes aimed at, and in fact realized, in undertaking that enterprise. Moreover, since the enterprise was morally significant, they can also be ascribed collective, that is, joint, moral responsibility for these outcomes. Note that such structures involve: (1) a possibly indirect and minor causal contribution from each of the individuals jointly being ascribed responsibility; (2) each individual having an intention to perform their contributory (causally efficacious) action; (3) each individual having as an ultimate end or goal the outcome causally produced by their jointly performed actions; (4) some individuals – for example, those holding leadership roles – having a greater degree of moral responsibility than others; and (5) some having diminished moral responsibility by virtue of, for instance, being coerced into participating.

Naturally, here, as elsewhere, important questions arise in relation to those who assist terrorist organizations without being members of them – for example, providers of financial assistance – or who act in their name without being members – for example, some 'lone-wolf' terrorists. These latter actors may or may not fall within the ambit of a layered structure of joint actions and, therefore, are outside the reach of the collective responsibility therefrom derived. However, even if they do not, they are likely to be able to properly be ascribed moral responsibility, indeed moral culpability, for their actions and, therefore, justifiably be investigated, tried and punished as criminals.

#### 3.2 The Web of Prevention

As mentioned above, the investigation of terrorist attacks and the like typically involves joint action on the part of institutional actors, such as police, and, therefore, collective, that is, joint, institutional and moral responsibility, including in the context of a chain of responsibility. However, counter-terrorism (CT) writ large, so to speak, involves cooperation between multiple security and other state agencies, financial institutions and other businesses, and members of the public. Indeed, it involves what has in other contexts been termed a 'web of prevention'. As such, it involves multiple, coordinated, layered structures of joint action, that is, *iterated* layered structures of joint action. Moreover, since the web of prevention also has a diachronic dimension that consists of the operation of institutional processes in which multiple institutional actors function in accordance with a division of labour, it involves complex, intersecting chains of responsibility.

The concept of a so-called 'web of prevention' is based on the notion of collective action and collective responsibility (here understood as joint responsibility) and was initially introduced in the domain of biosecurity. The concept was originally mentioned in an initiative of the International Committee of the Red Cross on biotechnology and security in 2002 (Rappert & McLeish 2012, p. 4; Selgelid & Rappert 2013, p. 277). Yet, similar concepts, such as the web of deterrence, date back to debates of non-proliferation and biosecurity during the Cold War (Rappert & McLeish 2012, pp. 3–4).

In the context of biosecurity, the concept of the web of prevention describes an 'integrative and comprehensive approach' (Whitby et al. 2015, Ch. 7) to prevent the malicious use of biotechnology as weapons. The web involves a variety of stakeholders, such as national security institutions, international organizations as well as research institutions. These groups of stakeholders are jointly responsible for implementing a set of integrated measures, such as export controls, disease detection and prevention, effective threat intelligence,

international and national prohibitions, oversight of research and biosecurity education (Bezuidenhout 2012, p. 20; Selgelid & Rappert 2013, p. 277; Whitby et al. 2015, Fig. 7.2). In promoting a multifaceted web of measures to prevent the malicious use of novel innovations in biotechnology, the concept of the web of prevention quickly gained significant relevance in the academic debate on dual-use research and development. In this debate, the roles and responsibilities of research institutions and individual scientists within the web of prevention are stressed. As, for example, Miller (2018b) has argued, the notion of the web of prevention can be seen as an application of the concept of ioint actions and collective moral responsibility and, in particular, of the concept of a layered structure of joint actions. All stakeholder groups within the web of prevention in question are jointly responsible for the collective end of preventing the production and use of biological weapons. Yet, the members of each stakeholder group perform a joint action(s) that is constitutive of the web, and each member of each group performs an individual action (and has a corresponding individual responsibility) in order to fulfil the collective end of the constitutive joint action in which they directly participate (Miller & Feltes 2018b, pp. 65–71).

However, the concept of a web of prevention has not been used exclusively in this specific context. Security researchers outside of the dual-use debate have referred to this concept and stressed the importance of an extensive set of stakeholders taking a multifaceted web of countermeasures against terrorist threats. For example, James Revill (2016) proposes a 'web of IED prevention' to combat the threat of terrorist attacks with improvised explosive devices (p.93). By parity of reasoning, Feltes has deployed the concept of the web of prevention to analyse and improve the measures against the terrorist use of ricin, phosphine and americium (see Chapter 14 in this volume). Here, we advocate the deployment of the concept in relation to an entire CT strategy and, therefore, not restricted to terrorists' use of toxins.

This web of prevention against terrorist attacks requires the participation of at least the following institutions and constitutive institutional processes: government; security agencies, for example, the police, military and intelligence agencies; other state agencies, for example, finance departments; banks and other businesses; media, including social media companies; and citizenry. Each of these institutions has a collective end, or ends, and constitutive role structures to perform the necessary tasks to realize these ends; for example, governments develop an effective overall CT strategy, legislatures frame appropriate CT laws, intelligence agencies collect and analyse information, military forces engage in armed conflict against terrorist groups (if appropriate, as in the case of the Islamic State), police pursue criminal investigations, finance officers track money flows, journalists inform the public, and social media companies take down material inciting attacks.

In addition, countermeasures need to be designed and implemented for the purpose of responding to attacks if and when they occur, that is, on the assumption that prevention has failed. As Feltes (2020) has argued in relation to terrorist attacks using toxins, there are at least three groups of countermeasures: (1) measures to deny terrorists access to these substances, (2) measures to prevent the distribution of expertise that can be used to manufacture weapons with these substances, and (3) measures that are aimed at resilience and recovery in the aftermath of an attack with these substances.

In relation to the development of an effective overall CT strategy, it is important to address the issue of the motives underlying the establishment of a specific terrorist group and its support base; for example, the felt grievances of the Palestinian people over territory and statehood has led to the establishment of, and support for, Hamas. If there are legitimate grievances, then a key element of an overall CT strategy should presumably be to address these grievances.

The development of an effective CT strategy may require not only designing and implementing countermeasures and the like for existing institutions and institutional actors, but also the redesign of institutions and institutional roles, for example, the establishment of an agency to coordinate the CT strategy across various agencies that now have to cooperate more closely. Moreover, some of these institutional changes are likely to include new laws to restrict terrorist operations - for example, in relation to terrorist propaganda - and the granting of new legal powers to be attached to institutional actors – for example, new powers of detention for police. Accordingly, important questions may arise in relation to the moral, as opposed to pragmatic, justification for these new laws and legal powers because some of these additional laws and legal powers may compromise or curtail fundamental moral rights that are constitutive of liberal democracies. If so, elements of a liberal democracy's CT strategy may risk undermining the very society that it has been put in place to protect. In short, the collective moral responsibility to protect the members of the liberal democratic society from terrorist attacks needs to be discharged by institutional arrangements, including laws, that also respect individual moral rights.

#### NOTES

- 1. This is the collective end theory of joint action developed by Seumas Miller (1992, pp. 275–97, 2001, Ch. 2). For a related account, see Bratman (2014).
- 2. This view is developed and defended in Miller (2006, pp. 176–93).
- 3. This assumes that the intention is under their control and the intention causes the action in the right way. We cannot pursue the conceptual details of free and responsible action here, but see Paul et al. (1999) and Fischer (1986) for discussions of these issues.

- 4. Again, this assumes that the intention is under their control and the intention causes the action in the right way. See note 3.
- 5. See also Ludwig (2017).
- 6. See, for instance, Gross (2015).

## REFERENCES

Bezuidenhout, Louise (2012), 'Research Infrastructures, Policies and the "Web of Prevention": The Ethical Implications of Inadequate Research Environments', *Medicine, Conflict and Survival*, 28(1), 19–30.

Bratman, Michael (2014), Shared Agency, New York: Oxford University Press.

Feltes, Jonas (2020), *CBRN Threats, Counter-Terrorism and Collective Responsibility* (Unpublished PhD thesis), Delft University of Technology, the Netherlands.

Fischer, John M. (1986), Moral Responsibility, Ithaca: Cornell University Press.

Gross, Michael (2015), *The Ethics of Insurgency*, Cambridge: Cambridge University Press.

Ludwig, Kirk (2017), From Plural to Institutional Agency, New York: Oxford University Press.

Miller, Seumas (1992), 'Joint Action', Philosophical Papers, 21(3), 275-97.

Miller, Seumas (2001), *Social Action: A Teleological Account*, New York: Cambridge University Press.

Miller, Seumas (2006), 'Collective Moral Responsibility: An Individualist Account', in Peter A. French and Howard K. Wettstein (eds.), *Shared Intentions and Collective Responsibility*, vol. XXX in Midwest Studies in Philosophy, Boston: Wiley-Blackwell.

Miller, Seumas (2010), *The Moral Foundations of Social Institutions: A Philosophical Study*, New York: Cambridge University Press.

Miller, Seumas (2014), 'Police Detectives, Criminal Investigations and Collective Moral Responsibility', *Criminal Justice Ethics*, 33(1), 21–39.

Miller, Seumas (2018a), 'Joint Epistemic Action: Some Applications', *Journal of Applied Philosophy*, 35(2), 300–318.

Miller, Seumas (2018b), Dual Use Science and Technology, Ethics and Weapons of Mass Destruction, Cham: Springer.

Paul, Ellen F., Fred D. Miller, and Jeffrey Paul (eds.) (1999), Responsibility, Cambridge: Cambridge University Press.

Rappert, Brian, and Caitriona McLeish (2012), A Web of Prevention: Biological Weapons, Life Sciences and the Governance of Research, New York: Routledge.

Revill, James (2016), *Improvised Explosive Devices: The Paradigmatic Weapon of New Wars*, Cham: Springer.

Selgelid, Michael J., and Brian Rappert (eds.) (2013), On the Dual Uses of Science and Ethics: Principles, Practices, and Prospects, Canberra: ANU E Press.

Spencer, Richard (2014), 'Isil Carried Out Massacres and Mass Sexual Enslavement of Yazidis, UN Confirms', *The Telegraph*, 14 October 2014, accessed 18 May 2019 at https://www.telegraph.co.uk/news/worldnews/islamic-state/11160906/Isil-carried -out-massacres-and-mass-sexual-enslavement-of-Yazidis-UN-confirms.html.

Whitby, Simon M., Tatyana Novossiolova, Gerald Walther, and Malcolm R. Dando (2015), *Preventing Biological Threats: What You Can Do. A Guide to Biological Security Issues and How to Address Them*, University of Bradford, Bradford Disarmament Research Centre.