An emerging consensus holds that achieving successful counter-movement outcomes requires combining overt repression (e.g. raids, arrests, and targeted assassination) with covert repression (e.g. monitoring, *agents provocateur*, and wiretapping). Research in this article disputes the presumed complementarity between overt and covert repressive tactics. When overt repression signals new information about the state’s covert intelligence collection program, challengers respond in ways that frustrate efforts to accumulate new intelligence. These propositions are investigated using original, weekly panel data on a Black Nationalist insurgent organization, the Republic of New Africa (RNA), and US Red Squad counter-movement activities directed against this group (between 1968 and 1971). Using archived materials generated by various policing agencies and their rivals in the RNA, the analyses provide new understanding of dynamics rarely observed or analyzed systematically. Findings reveal that the two methods of political repression can work at cross purposes. Overt repression motivates challenger adaption towards less readily observable tactics and organizational forms; covert repression subsequently fails to identify challengers’ actions or identities. These findings hold even while controlling for challenger mobilization and government investment in covert repression. In addition to advancing our understanding of what happens to behavioral challengers when governments repress, the results help to shed light on some of the factors that make defeating domestic challengers so difficult. Each ‘step forward’ taken by counter-movement forces potentially makes the next one more difficult.
Intelligence obtained through covert repressive actions (e.g. monitoring, *agents provocateur*, wiretapping, etc.) is crucial for political authorities confronting behavioral challenges like protest, terrorism, insurgency, and riots. With intelligence, governments are able to discern who is involved, where these individuals are living, what they are planning to do and/or where the challengers are vulnerable. Without such information, authorities are unable to target specific challengers with overt repressive actions (e.g. raids, arrests, targeted assassination, etc.). Essentially, state forces are left swinging in the dark.

But what determines the quantity and quality of government intelligence? Though intelligence is of primary importance to theories of domestic conflict, there have been few direct efforts to examine how governments generate intelligence or how challengers attempt to subvert such efforts. The principal obstacle has been evidence. There has simply been little data describing how authorities accumulate intelligence or how challengers attempt to counter covert repression. Instead, guided by arguments suggesting that information motivates action in political conflict, researchers have typically generated hypotheses derived from information-based mechanisms and tested them on more readily observed behaviors.

In this study, we directly examine how covert intelligence collection is affected by government and challenger strategies. To investigate these elusive relationships, we take advantage of unique archival sources encompassing the internal records of a black-nationalist organization, the Republic of New Africa (RNA), and US covert repressive agencies directed against the RNA between 1968 and 1971. The research design examines dynamics predicted by our micro-foundational theory as they operated
following a case of overt repressive activity. The analyses identify how an intensive raid, arrest, and interrogation of the RNA (known as the ‘New Bethel incident’) shaped subsequent behavioral challenges as well as how this act of overt repression influenced subsequent intelligence collection. We further show the diminishing success of covert repressive activities, including covert agents’ ability to monitor actions and identify members. Through the investigation, we provide more direct evidence on the generation of government intelligence than has previously been presented. We estimate the magnitude of these tactical changes as well as the scope of their effects on intelligence.

The results shed light on some of the factors that make defeating behavioral challenges so difficult. An emerging literature has begun to investigate the reasons for social movement death (e.g. Cronin, 2009; Pearlman, 2011; Davenport, 2015). In each of these studies, repression is seen as contributing to the demise of the movement. Government forces taking overt acts to repress challengers may deter members from continuing their participation. But these overt repressive actions can simultaneously inspire tactical adaptation among remaining challengers, limiting subsequent covert repressive capabilities. All of this drains intelligence and makes future acts of covert repression as well as overt targeting more difficult. Effectively each ‘step forward’ taken by counter-movement forces makes the next one more difficult.

In the remaining sections, we outline the basic model used to understand how repressive action and intelligence interact as well as the methods conventionally used to examine this relationship. In the second section, we present our theory of challenger adaptation and its effects on covert intelligence collection. The third section presents the research design and unique archival data used to examine our conjectures. The fourth
section presents the analysis. In the conclusion, we address the implications of our work for academic research and policy development.

**Understanding overt and covert repressive tactics**

Defeating political challengers requires that government forces generate the intelligence necessary to identify and monitor who is participating challenges as well as take overt actions to constrain, intimidate and/or eliminate those individuals. In other words, governments benefit from engaging in two distinct forms of repressive activity at once – covert intelligence collection and overt acts of coercion.¹

Describing the distinction between the two forms of repression, Davenport (2005: 124) notes that

(i) in the case of (overt repressive action), arrest, intimidation, and killing are the strategies of choice. These activities involve public and frequently violent forms of state power... and targets as well as potential targets are intended to know exactly what is being done to them and by whom... In the case of [covert repressive action], however, wiretapping, tails (following targets), and mail openings are the weapons of choice. These activities involve private as well as nonviolent forms of state power and targets are not supposed to know anything about what occurred.

Clearly, this study is not the first to distinguish between overt and covert repression. In addition to Davenport’s (2005) operational study of the distinction, other pioneering work looks at bureaucratic processes within the intelligence apparatus (e.g. Marx, 1974; Cunningham, 2004). But where efforts have been made to identify the relation between overt repression and covert intelligence, such work has focused either on aggregate geographic units (e.g. Davenport, 2005; Gohdes, 2015) or on anonymous

¹ While one might divide repressive tactics using alternate metrics, such as repressive targeting (noting the degree to which repression is discriminately or indiscriminately applied) or repressive agents (noting who carries out repressive activity), this study is concerned only with the distinction between the application overt or covert repressive tactics. Future work might identify how the covert/overt distinction interacts with the targeting of political repression or who carries out repressive actions.
tips from civilian informants (e.g. Lyall et al., 2015; Shaver & Shapiro, forthcoming), neglecting the direct accumulation of intelligence by government operatives targeting specific dissidents.² Such work has provided clarity to the often-opaque processes motivating political conflict, but without being able to test theories of intelligence collection more directly, interpretations of the existing evidence often requires adjudicating between competing, observationally equivalent mechanisms.

Despite a lack of systematic evidence, the prevailing consensus holds strongly to the idea that overt and covert repressive tactics are complementary. Good intelligence allows the police and military to target challengers with raids, arrests and assassination; raids, arrests, etc. provide state forces with information about who is involved as well as what can be done. Setting aside other motivations for repressive action (e.g. eliminating specific targets, preempting anticipated challenges, signaling to the wider public, etc.), acts of overt repression are generally thought to feed back into intelligence collection. The causal sequence believed to be functioning here is fairly straightforward. Captured and interrogated challengers may reveal the location of meeting sites, identify members, or detail their organizational structure, which then allows surveillance operatives to direct covert repression more efficiently and effectively. Even if the captured and interrogated challengers do not give up any information directly, identifying the friends, associates, and locales associated with them might provide useful information. Quoting the U.S. Military, ‘A cycle develops where operations produce intelligence that drives subsequent operations’ (US Army and Marine Corps., 2006: 25).

² Recent work explores the relationship between conflict and the buildup of state capacity over longer time horizons (e.g. Eck, 2018; Osorio et al., 2018).
Adopting this approach, governments win in their contests with challengers by taking advantage of this positive feedback loop and building the momentum necessary to contain or eliminate movement challengers. These insights can not only be found within the rich literature on counter-insurgency, which has been especially prominent in these discussions, but it can also be found within literatures concerning protest policing (Marx, 1974; 1979), riot control (Applegate, 1999), and counter-terrorism (Wilkinson, 2006). Across these contexts, it is argued that to defeat challengers, governments must put a premium on surveillance, use that intelligence to carry-out overt repression, and then feed the knowledge gained from those operations back into the application of covert intelligence collection. The expectation is that, ceteris paribus, following overt repression, subsequent covert repression should be more successful.

Reconsidering the relationship between overt and covert repression

While the connection between overt and covert repression appears to make intuitive sense, it is our contention that, rather than operate in a reinforcing manner, the diverse tactics that form the state’s repressive repertoire can actually undermine one another. Focusing on a simple set of tradeoffs faced by governments and challengers, we argue that overt repressive action limits subsequent intelligence collection because it inspires challengers to adapt and become more clandestine. The most significant problem is that challengers vary a great deal more than acknowledged in the framework outlined above. For example, if the dissident organization is relatively stable in terms of activities and somewhat open in terms of membership, then it can be penetrated more easily and intelligence can be acquired. If the organization is less consistent in terms of what it does
and it is relatively closed to new members, however, then it is harder to be infiltrated and intelligence will be less reliably acquired.

What influences stability or change in challenging organizations? Interestingly, the answer to this directly involves political authorities. Decades of scholarship into dissidents’ behavior, presents a dynamic view of responses to repressive action (e.g. Tilly, 1978; McAdam, 1983; Lichbach, 1987; Moore, 1998; Francisco, 2004; Pearlman, 2008; Cunningham & Beaulieu, 2010; Earl & Soule, 2010; Lawrence, 2010; Earl, 2011; Dugan & Chenoweth, 2012; Sullivan et al., 2012; Davenport, 2015; Finkel, 2015; Ritter & Conrad, 2016; Sullivan 2016a; 2016b). Movements do not maintain consistent strategies in the face of political repression. Rather, they adapt in order to best neutralize the effectiveness of such attacks and most effectively press their claims-making efforts. According to such studies, movements succeed by continually adapting their organization and tactics to produce new counter-strategies in the face of political repression.

It should be noted that not all research on social movements has supported the idea that tactical adaptation can outpace repressive action. Several studies have highlighted the fact that political repression radicalizes members of the movement, leading them to move away from particular (non-violent) contentious activities and towards other (violent) means of contention (e.g. White, 1993; della Porta, 1995). Other studies have focused on the development of ‘repertoires of contention’ among social movements (e.g. Tilly, 2010). While both theories acknowledge organizational adaptation in the face of political repression, the pace and direction of the predicted adaptation is thought to be limited and foreseeable.
By contrast, we argue that in the face of overt repressive action political challengers are often able to take precisely those actions that cannot be anticipated (cf., Oliver & Myers, 2002; Trebbi et al., 2017). They will select tactics that can be less easily monitored by repressive agents and adapt their organizational form to outpace the actions of the state. Conceiving of movements as strategic actors capable of responding to government actions has dramatic implications for how we might expect overt and covert repression to interact. Covert repression, by definition, includes repressive actions movement organizations are unaware of. And while rumors of surveillance or agents provocateur may circulate within movement organizations, sowing distrust and hindering collective action, states take great pains to ensure that their covert operatives are not identified. Overt repression, on the other hand, is extremely visible, and reveals to the movement organization not only that the government is targeting them for political repression, but also that their actions and behavior are being monitored. State agents must have obtained the information necessary to overtly target the organization either from an informant source or through direct surveillance.

Recognizing that they are being monitored and that such covert repression could increase the likelihood that they would experience some extremely costly sanctions in the near future, movements can be expected to adapt to overt repression in such a way as to frustrate subsequent efforts to monitor their behavior. To the extent that they are able (related to group size, openness of organizational structure, and the availability of alternative strategic policies), challengers adapt to avoid state surveillance in order to minimize their exposure and reduce the potential for further repression. This is done to frustrate intelligence collection efforts in order to limit their exposure to more violent acts
of overt repression. For example, traits that made the movement readily monitored will be abandoned, while more clandestine characteristics will be adopted. Among other strategies, challengers may change the location of their meetings, alter their leadership, reorganize organizational networks, or engage in acts of dissent that are less easily monitored by the state.

Recognizing that overt forms of repression can inspire tactical adaptation within a challenger, we can begin to theorize about how the resulting organizational and behavioral changes affect the success of subsequent covert efforts. Reflecting upon this, we contend that because overt behavior incites organizational and tactical adaptation on behalf of challengers, it undermines the utility of prior intelligence and makes gathering new intelligence more difficult. Previously acquired information on the membership (i.e. who they are), organizational structure (i.e. who is leading and following), or meeting sites (i.e. where they are located) becomes obsolete. In this context, covert surveillance will be less likely to accumulate new information by trailing identified individuals or monitoring known organizational meeting sites. As challengers attempt to avoid detection, selecting new safe houses or moving to new territories that are less easily monitored and engaging in more discreet acts of dissent, covert tactics that had worked previously may become ineffective. Frustrated in their attempts, authorities often rely on old information and accumulated demographics and statistics (e.g. race or population) to direct future covert actions (Davenport, 2005). All of this hinders intelligence gathering for it creates formidable obstacles that the government must overcome in its search for the who, what, when, where and why of behavioral challenges. Until state agents devise

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3 We leave future work to identify how the transition towards clandestine organizational forms and tactics shapes quantities of violence. Our focus here is on the implications of such adaptation for government intelligence.
new methods for monitoring these more discreet movement actions, they will face an informational shortfall.\(^4\)

Here, diverse repressive activities do not complement one another but, instead, they work at cross-purposes. Engaging in overt forms of repression diminishes the utility of covert repression. This leads to the following hypotheses:

- H1: *Engaging in overt political repression prompts challenger adaptation to avoid detection (e.g. changing meeting times/locales and adopting more covert tactics of resistance).*
- H2: *Engaging in overt political repression reduces the government’s ability to locate both challenges (i.e. the places where they go/act) and challengers (i.e. their names and home addresses).*

**Repression and dissent: The case of the Republic of New Africa**

To investigate the relationships identified above, we analyze unique data detailing the political mobilization of a group called the Republic of New Africa (RNA) as well as the political repression of the organization by various police organizations in the city of Detroit, the state of Michigan as well as the federal government. As detailed by Davenport (2015), the RNA explicitly challenged the US government between March 1968 (the founding of the organization) and May 1971. The primary goals of the RNA were to: 1) establish independence from the US government, 2) hold a plebiscite among African Americans to determine the ‘national status’ of the ‘New Afrikan’ population, 3) be allocated five states from the US government: Alabama, Georgia, Louisiana, Mississippi, and South Carolina, and 4) be granted reparations for the treatment of blacks.

\(^4\) Other influences are possible. For example, if the challenging organization is repressed (people are being detained, others flee, etc.) – the need of covert and overt political repression may decrease over time. Thus, while the state has less capacity to undertake the repression (in time 2) for the reasons noted, they also are in less need of it if the organization weakens with repression (in time 1). We would disagree. This assumes that new members do not come into play and/or that the relevant challenging institution does not move around (both of which are important issues). In these contexts, government information would need to be constantly updated.
Toward these ends, the RNA engaged in many legal forms of protest, including rallies, marches, demonstrations, petitions, political education courses, self-defense programs, food drives, lectures, conferences, and the publication of independent newsletters/newspapers, along with illegal and violent activities, including robberies, shootouts with police, plots to bomb state and federal buildings as well as a plane hijacking.

To counter this organization and its claims-making effort, numerous political authorities engaged in electronic and physical surveillance, opening mail, placing informants as well as double agents within the RNA, arresting members for various offenses, raiding their facilities, and even firing upon them. The efforts were organized under a Detroit based anti-radical unit or Red Squad. Historically, Red Squads were charged with monitoring the behavior of organizations deemed radical or violent as well as constraining and/or eliminating targeted organizations (Donner, 1990). In this case, related organizations included the Detroit Police Department (i.e. Special Investigations, Demonstration Detail, Detective Division, Homicide, Criminal Division, the Public Complaints Division, and Tactical Reconnaissance), the Michigan State Police (Special Investigation Bureau and Special Investigation Unit), and at the federal level the Internal Revenue Service, Department of State, and the Federal Bureau of Investigation.

Data and measurement

Information about the Republic of New Africa comes from two archival sources. The first involves materials generated and archived by the Detroit Red Squad. In pursuing these the RNA, the Red Squad compiled records from the diverse agencies identified
above. Most relevant to the research here, the collection contains informant and surveillance reports from the different government institutions. These records detail what intelligence had been acquired from the covert repression of the RNA over time. The Red Squad documents are complemented by a second set of documents created and collected by the RNA itself. These records are similarly rich and contain detailed information about what was happening within different meetings, protests and other movement actions, as well as who was participating at each meeting. The RNA documents supply information on the internal communication as well as dynamics of movement activities where the state was not present. Combined, the two sets of records provide a nearly complete picture of RNA and police activities.

Documents from the Red Squad and RNA were received through several means. First, access was obtained to a compilation of materials directly from the RNA. This contained not only internal records (e.g. diaries, newsletters, press releases, meeting notes, event announcements, coloring books and legal documents), but also numerous government documents as well (e.g. arrest and surveillance reports). Regarding the latter, one of the authors of this article was informed that an officer in Detroit Police Department had said that the documents were likely to disappear and, in this context, they passed these materials to the RNA who subsequently passed them to us. Another source of information was the Walter Reuther Library in Detroit, Michigan. This depository was set up by the city as different political leaders throughout United States cities tried to decide what should be done with the material compiled by the Red Squads. In Detroit, a decision was reached to allow individuals to request and see information pertaining to themselves and at a much later date to allow the larger archive to be seen by anyone.
interested in them. These records include arrest and surveillance reports. In addition, information is contained about police departmental structure and budgets as well as personnel allocations.

Upon receipt of all this material, everything was divided by side of the conflict (RNA or government), and then subdivided into specific named organizations (i.e. the surveillance or demonstration detail for the police and central government or regional chapter for the RNA). Approximately 50% of the archive are police documents, 20% are other government agencies (i.e. FBI, IRS, and CIA), and 30% are RNA documents (RNA, 2017). These materials were then placed into chronological order for subsequent event coding.

We are aware that no records come without some difficulties, but we believe that the information employed within this study are superior to other sources and the insights provided by the records provide unprecedented access (Balcells and Sullivan, 2018). Additionally, while there is significant overlap between the Red Squad and RNA records, these two sources each identified information that is not contained in the other. Diverse interviews with police from the period, the RNA and legal representatives for the RNA attest to the accuracy as well as importance of the records in detailing what transpired (Davenport, 2015). While not exhaustive, these efforts are suggestive of their validity and usefulness.

Independent variable

The analyses examine how an act of overt repression historically known as the *New Bethel incident* (*NBI*) affected movement and covert repressive behavior. On March 28,
1969, hundreds of members of the RNA converged on New Bethel Baptist Church in Detroit. At the meeting, the organization could discuss new proposals and evaluate initiatives. But, before the first day was through, everyone in attendance had been shot at, raided, arrested, and interrogated.

The action began when two police officers (Michael Czapski and Richard Worobec) reported to their dispatcher that they identified several African American males carrying rifles in the alley behind the New Bethel church. The officers exited their car and approached several RNA members on the street. It is not known who shot first, but after several minutes of gunfire Officer Czapski was killed and Officer Worobec was shot several times, calling for backup as he retreated to his car.

The response from government forces was both immediate and pronounced, leading many to speculate that the authorities were already waiting to repress the movement.⁵ Within minutes, officers from at least two different precincts were on the scene with several others on call. Responding to the show of force, RNA members outside the church moved inside. As in the alleyway, it is unknown who shot first. In the police version of the events, RNA members took position behind pews and fired on the officers as they approached. In the RNA version, members entering the church warned the rest of the attendees to hide out in the basement, and the officers fired on the RNA as they stormed in. Regardless of which version is believed, it is clear that approximately 50 officers discharged hundreds of rounds of ammunition into the facility, and within 20 minutes everyone was arrested. Individuals were brought to the police station, where they were interrogated over several days.

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⁵ This opinion and summary of events is taken from diverse media reports, academic monographs as well as personal interviews with former RNA members.
Dependent Variables

In line with our interests, the study examines two sets of dependent variables. The first set of variables captures organizational and tactical changes within the Republic of New Africa, while the second set captures the subsequent ability of government agents to successfully engage in covert repression.

Measuring challenger adaptation is done in several ways. As is conventional in the literature on repression and dissent, we begin by examining the effects of overt repression on the total number of RNA events undertaken within a given week (RNA events). The variable captures all forms of movement activity, including events such as marches, protests, meetings, leafleting, fundraising, voting for positions in the RNA, recruitment efforts, workshops and conferences, among others. This information is used to identify the general effect of the New Bethel incident on movement activity and to provide a baseline for the subsequent analyses.

From there, the investigations focus on four forms of tactical and organizational adaptation. Each is measured as a weekly event count of movement behavior. Two of these identify how the act of overt repression may have affected whether the RNA engaged in activities that were easily observable or less easily monitored through covert surveillance. Observable events capture all RNA activities that took place in a public location where the group could be observed in the act, including marches, protests, leafleting, rallies, speeches, riots and shootouts. Unobservable events capture all RNA activities that took place clandestinely, including meetings, training, recruitment,
education programs, criminal acts, sabotage and terrorism. The two remaining challenger variables capture additional forms of adaptation. *Events at new locations* identifies RNA actions taking place at locations that were never previously used for their activities. *Organizational changes* records modifications in the RNA’s organization’s structure. It is measured as a weekly count variable that sums changes including any time the RNA elected a new leader, initiated a new branch, or appointed a new officer.

Our second set of analyses examines overt repression’s effects on covert repressive action. Two dependent variables are analyzed for this. *Events identified* is the number of RNA events successfully identified through covert repressive behavior. The variable is a weekly event count measuring RNA actions that government agents surveilled (either through direct monitoring or through the presence of undercover agents). All forms of surveilled RNA activity are included. *Members identified* measures the number of participants at RNA events identified through covert means. For each surveilled event in the database government agents recorded the number of participants as well as the number of those they could successfully identify by name. Those identified by name are counted as *Members identified*. As agents accumulated new information on individual members, their ability to identify members updated continuously throughout the time-series, though it is important to acknowledge that such learning may have been limited to individual agents or specific agencies rather than spread throughout the Red Squad.

Combining the RNA documents with the Red Squad files, we identify both the events and participants successfully targeted by covert repressive action (which are taken

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6 A third category of events includes those that were not easily classified as discrete or indiscrete, such as the publishing of propaganda.
from the Red Squad files) and those events and participants that covert repression missed (which were taken from the RNA documents). To identify the success of covert behavior, the models variously estimate the number of RNA events and individuals identified in the Red Squad files, controlling for the entire number of events occurring and individuals participating that week. More information on the control variables is discussed within the analyses below.

Qualifications and scope conditions

Using data collected from previously confidential, archived materials generated by the Red Squad along with internal documents produced by the RNA itself, we identify how overt repression influences organizational and tactical adaptation by behavioral challengers and the subsequent ability of the state to gather intelligence through covert repression. Of course, there are tradeoffs in any research design. Ours privileges a direct examination of the causal mechanisms predicted by our theory. In this way, it is a logical continuation of research in the study of large-scale political violence away from macro-level studies of cross-national variation towards analyzing the micro-dynamics of contention (Tarrow, 2007). While the mechanisms of our theory are thought to be generally applicable to patterns of state-challenger interactions, future research will be necessary to probe the generalizability of our arguments.

Our analyses estimate how the effects of a large act of overt repression impacted both movement strategy and subsequent covert intelligence collection. This act, which involved a large raid and mass arrest, is significant because it was the first overt action specifically targeted at the RNA, and as a result provides a unique opportunity to observe
how challengers responds to new information about repressive action directed against the movement. But it is important to note here that we are not arguing that all repression is likely to affect challengers in the same way. Some forms of overt repression, such as disappearances or indiscriminate attacks, may be less easily interpreted by movement participants. As a result, we do not argue that all overt repression disrupts the cycle between intelligence and overt repression. Instead, we limit the theory to overt actions that provide new information to movement participants. 7 Among such forms of repression, we believe NBI presents a particularly hard test for our theory because the shooting, mass raid, and arrest were followed by the interrogation of more than one-hundred RNA members. Clearly, government agents believed this was an opportunity to acquire intelligence.

There are also particularities of the RNA case that are worth considering. This is a case of a Black Nationalist insurgency challenging a strong, democratic state 8 in a principally urban environment (after 1970 part of the group moved to rural Mississippi). The geography of the conflict is especially pertinent. Drawing primarily on research from rural conflicts, studies of intelligence and counter-insurgency have privileged one particular form of intelligence collection (i.e. civilian defection), while neglecting other means governments employ to collect intelligence (such as wiretapping, surveillance, and double agents). Challengers’ need for adaptation is likely greater in urban environments because the government’s repertoire of covert and overt repression is generally broader.

7 Similarly, it is worth noting that not all intelligence is equivalent from the perspective of the state. Intelligence studies, for instance, often distinguishes between ‘strategic’ intelligence, which tends to operate over a longer term, and includes information such as leadership identities, movement goals, or recruitment strategies and ‘operational’ intelligence, which tends to be more short term, and includes information on specific actions, addresses, or identities.

8 To black nationalists, however, the U.S. political system was believed to be more authoritarian as well as more repressive than most would characterize it.
(cf. Staniland, 2010; Christensen, forthcoming). The relative easy access to resources provided by urban centers also means that urban challengers may be less reliant on local populations, and as a result, are more agile and mobile.9

**Analysis**

*Identification strategy*

Our analyses examine changing patterns of organizational behavior and covert behavior using interrupted time-series (ITS) models. All dependent variables are measured weekly for one year prior to and one year after an act of overt repressive action (i.e. the *New Bethel incident*).10 Controlling for time trends present in the data (including both autoregressive and moving average [ARMA] components in each time-series), these models estimate how an act of overt political repression impacts subsequent challenger and government behavior (Enders, 2004).11 Results estimate the impacts of NBI by assessing changes in the outcome series independently from their ongoing, stochastic time-series processes.

The logic underlying ITS relates directly to our theoretical argumentation. Left to its own devices, an unrepressed social movement evolves under the momentum of its internal mobilization processes. Mobilization processes are temporally contingent, such that mobilization in any given period \( t \) is partially determined by mobilization during the

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9 This might vary by the degree to which the relevant locale is racially or ethnically segregated.
10 Examining one year prior to and one year following (to the day) yields a sample of 52 pre-treatment weeks and 51 post-treatment weeks.
11 The Box-Jenkins method was utilized to identify the auto-regressive and moving average components of time trends in each dependent variable. ARMA models were selected over alternative event count-time series models, such as the auto-regressive Poisson model [PAR(p)] or the Poisson exponentially weighted moving average (PEWMA) model for two reasons. The first is ease in the interpretation of the coefficients. The second is that a number of the variables display both auto-regressive and moving-average components, and neither the PAR(p) or the PEWMA models are able to adequately handle both components simultaneously (e.g., Brandt & Williams, 2001; Brandt et al., 2000).
preceding periods. The same can be said about covert repression, which (theoretically at least) follows a momentum of its own, which is directly tied to movement behavior.

With any ITS design, the modeler must specify the functional form of the proposed trends before, during, and after the treatment (i.e. overt repression). The most common assumption, and the one we employ, is that trends are linear (though including higher polynomials does not meaningfully alter our results). To mitigate the risk of endogeneity, the models estimate the effects of the NBI treatment as an interruption to the time-series beginning immediately after the New Bethel incident. In other words, the New Bethel incident acts a shock occurring on the 53rd week. Alongside the NBI shock, we include two other parameters accounting for the temporal dynamics in the aftermath of the raid, arrest, and interrogation. First, we include a Post-NBI dummy variable identifying post-NBI weeks. This variable resembles a temporally-variant intercept shift, mirroring standard approaches adopted in ITS models (McDowall 1980). It models any changes that occurred after NBI and remained consistent through the end of the period. Second, we include a Decay function, which is scored zero prior to NBI and then counts downward (from 53, declining programmatically by one) each week after NBI. Decay functions are also common in ITS, as they enable the models to estimate temporally dependent effects without assuming that effects either retreat immediately back to their baseline level or persist invariably (ibid.).

Results from ITS models can be interpreted by looking at the average treatment of the NBI shock affecting the rate of the behavior following treatment. Following the shock, government-challenger interactions stabilize to a new equilibrium (cf. Carey, 2006; Trebbi et al., 2017). The analyses below present this estimate of the average
treatment effect on the treated ($ATT$). In this case, the $ATT$ resembles the average marginal effect, with the exception that it is restricted to the weeks following NBI, and therefore is conditional on the Post-NBI dummy and Decay function. In other words, the $ATT$ is the estimated shock of NBI as compared to the counter-factual scenario in which the act of overt repression did not occur. The presumption is that NBI shifts the baseline from which subsequent temporal dynamics unfold.\footnote{We estimate standard errors for the $ATT$ using the delta method. We also employ the delta method when calculating standard errors in Figures SI 1-6.}

Results

Results from our analyses are presented in Figures 1-2. For ease of interpretation, the figures provide graphical depictions of the ATT, which in this case refers to the marginal effect of NBI conditional on the post-NBI dummy, decay function, additional controls, and forecasted time-series values. Figure 1 displays the estimated effects of an act of overt political repression (the New Bethel incident) on organizational and tactical adaptation of the Republic of New Africa, Figure 2 displays results from models estimating overt repression’s relation with subsequent covert repressive behavior.

Two things need to be noted. First, the internal time-series dynamics of organizational behavior and covert repression mean that the effects of a shock like NBI ripple forward through subsequent weeks (cf. Esarey & DeMeritt, 2013). We illustrate this in Online Appendix Figures SI 1-10, where we present dynamic forecasts of NBI’s effects (estimated using the three treatment variables) along with descriptive information on observed values of the dependent variables and counter-factual forecasts estimating scenarios in which NBI never took place. Second, because our $ATT$ estimates are derived
based on median predicted changes over stochastic time-series, in many cases the confidence intervals are quite broad. While all results remain statistically significant and confirm our anticipated effects, the broad confidence bounds generate challenges for substantive interpretation. For instance, in some scenarios the upper boundaries of the predicted substantive effects stretch well above observed values (in the case of positive treatment effects) or below zero (in the case of negative treatment effects). To illustrate, Figures 1 and 2 provide the pre-treatment weekly mean of each dependent variable along with the point estimates and standard errors of the ATT.

(Figure 1 about here)

Overt repression and challenger adaptation

The first model in Figure 1 estimates overt repression’s impact on the number of events engaged in by the RNA. The New Bethel incident is shown to have a positive effect on the number of activities committed by the RNA. This is in line with what some call a ‘Backlash’ effect (e.g. Francisco, 2004; Lawrence, 2017). In the aftermath of NBI, many former members left the movement. But they were replaced by new members, who joined anticipating subsequent repression. The effect not only shifted the membership in ways that made their participants less known to the state, but also made the organizational goals more radical (ibid.). At least in the short term, NBI appears to have made the organization stronger.

13 In other work, we show that the increase in RNA activity was driven by those who were repressed in the New Bethel incident and by new recruits (Sullivan & Davenport, 2017). Those who were in the movement but not arrested at New Bethel were subsequently less likely to participate in RNA activities.
Subsequent models in Figure 1 estimate overt repression’s effects on challengers’ efforts to avoid detections. One cannot identify changes in challenger’s events without first identifying that the RNA first engaged in some activity. The models estimating these adaptation variables reflect this facet by introducing a control for Total RNA events to ensure that the results are being driven by a change in that particular form of activity and not in a change in the total amount of RNA activity. Models b and c examine two types of movement activity—Observable events and Unobservable events. Results indicate that the number of indiscrete actions taken by the RNA dropped significantly following New Bethel. After the act of overt repression, RNA members engaged in fewer indiscrete acts of contention. At the same time, following the shooting, raid, arrests, and interrogations, the RNA significantly increased the number of discrete actions committed. Indeed, the number of discrete activities engaged in after New Bethel increased significantly after NBI. Clearly the RNA’s tactical repertoire changed, as members began to replace acts that used to be common with other forms of contention. Often, this meant changing from activities that were easily monitored to more secretive activity. For example, leafleting by the organization dropped 66% in the year following the shooting, raid, arrests and interrogations, while training and education programs increased by more than 240%.

The remaining models in Figure 1 examine two other forms of adaptation—Events at new locations and Organizational changes. By changing their meeting sites or altering their organizational forms, challengers hope to decrease the value of prior covert intelligence held and make gathering new intelligence more difficult. From the empirical results, we estimate that following overt repression the RNA became significantly more likely to engage in both forms of adaptation. After New Bethel, between 1 and 9 more
RNA events were held in new locations than estimated to have occurred had the raid, arrests and interrogations not taken place. After the observed acts of state repression, sites of previous actions, such as 2217 Puritan Street, where the organization met 23 times prior to the New Bethel incident, or 3227 West Euclid Street, where the organization met 13 times prior to New Bethel, were never used again. At the same time, the organization began meeting in new locations. For example, they moved their primary meeting location to 9823 Dexter Avenue (near Boston Boulevard), where they had never met prior to the raid, arrests, and interrogations. Estimates also indicate that the RNA shifted its organizational form much more frequently following the New Bethel incident than they would have done had the repressive event not taken place. As one example, the organization changed their cabinet ministers twice in the year following the raid and arrest, which they had never done during the year prior. By changing their meeting sites, leadership, and organizational structure, the Republic of New Africa adapted in an attempt to disrupt the government’s ability to monitor their behavior.

By looking at the discussions of RNA members as they reevaluated their organizational strategy in the aftermath of NBI validates, we use the archival materials to identify causal process observations underlying correlational findings and provide additional leverage for causal attribution (see Balcells & Sullivan 2018). The RNA was shaken up in the aftermath of NBI. They held an internal debriefing/interrogation, in which they interviewed the arrested members, one at a time, to see what kinds of intelligence the state may have accumulated during the shooting, raid, arrest, and interrogation (Davenport, 2015: 235). They also reflected on the potential that covert repression had been used prior to NBI. Members took clues both from what took place at
NBI and what was notably absent. The group’s leader, Imari Obadele (1970: 254) suggested that one reason the state did not engage in more extreme forms of violence at New Bethel was, ‘because present at the convention was a number of informers and agents whose identities were not all known to Detroit Police.’ In retrospect, of course, the Red Squad documents reveal that suspicions of covert agents and surveillance were justified.

Knowing that they were being surveilled, RNA discussions became intentionally vague, such as one on April 4, 1969 in which those present discussed how ‘top members’ had ‘gone underground’ (Davenport, 2015: 237). Other surveillance reports document RNA members retaliating against individuals who were presumed to be sharing information about their activities and encouraging others to ‘stay cool’ (ibid.: 239-240). All of this confirms that the organization saw NBI as confirmation that they were being monitored and that additional steps needed to be taken to limit future surveillance. Movement records indicate that this was a conscious choice – the members believed that their safety had been compromised with NBI, necessitating that something be done to restore it. ‘[I]ncreasingly reconfigured into a shifting maze of subcommittees,’ Davenport (2015: 242) writes, ‘the members of the RNA were largely isolated from one another.’ Of course, while the organizational compartmentalization was designed to limit surveillance, it also had negative effects on the movement, constraining its mobilization capacities (Obadele, 1970; Davenport. 2015).

(Figure 2 about here)
Overt repression and the success of covert repression

Displayed in Figure 2, our analyses estimate the relationship between overt political repression and subsequent covert activity. In the models, the New Bethel incident is significantly and negatively correlated with the number of RNA events identified by the state and the number of participants identified at these events. As above, the analyses control for relevant confounding factors. Models estimating the number of RNA events successfully monitored in a given week (Events surveilled) include a control to deal with the number of events engaged in by RNA members (RNA events). The control is included because increasing the number of RNA actions committed increases the latent probability of observing a greater number of RNA actions through covert repression. The results estimate that following NBI, government agents were able to identify 2-11 fewer RNA events than they would have in the absence of the raid, arrests and interrogations. Evidence clearly suggests that overt repression hampered the effectiveness of covert repression.

Similar patterns are present when we investigate the number of participants identified at RNA activities. For models estimating the number of RNA members successfully recognized (Members identified), three controls are included. The first (Total RNA members) is included to control for the total number of RNA members participating in movement events that week. The second is the RNA events control. Finally, models include a control for the number of RNA actions successfully monitored by state forces in a given week (Events surveilled). Results show the New Bethel incident significantly decreased the number of participants identified by the state. During the week following
the government action, authorities failed to identify approximately 32 participants they could have identified had NBI not taken place.\footnote{This decline is not due to diminished RNA membership. Sullivan & Davenport (2017) show that participation in the RNA increased after NBI. Here we include the number of participants as a control variable.}

One challenge that can be made to the above results is that overt repression not only influences the challengers’ behavior but also impacts surveillance behavior. For instance, having acted upon the available intelligence to round up a large number of RNA members, the government might want to reserve resources devoted to surveillance activities and redirect them towards other forms of political repression. In order to ensure that changes in intelligence are not being driven by a change in the amount of covert repression being applied, we also examined the NBI’s effect on surveillance. Two robustness checks are considered. First, we examine a new dependent variable—\emph{Surveillance hours}, which measures the total number of hours committed to covert repression by government forces in a given week. Second, the analyses re-estimate NBI’s influence on \emph{Events surveilled} and \emph{Members identified}, controlling for \emph{Surveillance hours}.

Contrary to the challenge laid out above, results from model $c$ in Figure 2 show that \emph{NBI} is positively related to the number of \emph{Surveillance hours}, our indicator of government investment in covert repression. Such evidence is interesting, as it indicates that in some manner the government forces may have been trying to overcome their intelligence losses. Like challengers, government forces are also adaptive actors capable of recognizing when the opposition has the upper hand. The escalation of surveillance following \emph{NBI} is consistent with the argument that the government recognized that they were losing surveillance capacity and redoubled efforts at covert repression in order to try
and counter the RNA. Models d and e in Figure 2 re-estimate the effects of NBI on Actions identified and Members identified controlling for the number of hours of surveillance occurring in a given week. Across specifications, the shooting, raid, arrests, and interrogations associated with NBI are still estimated to have a negative and statistically significant impact on both the number of events and the number of RNA participants identified.

Turning to causal process observations, it is clear that state agencies saw NBI as an opportunity to improve their intelligence collection abilities. Nearly all RNA members who were detained that day were interrogated, with some questioned on multiple occasions and others subjected to nitrate tests (examining if they had fired a weapon). Among other aspects, government agencies sought to identify ties individuals held to other black nationality movement organizations, ties between individuals, who held what position, and what goals, objectives, and plans had been developed for future actions (Davenport, 2015: 225). The individual interview transcripts were later re-evaluated by the Intelligence Bureau, which cross-validated the individual statements comparing them to one another, to earlier intelligence reports, and to reports from prior arrests (RNA, 2017). While this information proved useful for generating reports, including several detailing the personal information of RNA members, the surveillance records do not describe the kinds of self-reflection observed within the RNA. Thus, we cannot say to what extent the Red Squad was aware of their increasingly stifled attempts to surveil the RNA, or what (if any) actions were taken to counter the RNA’s newly secretive repertoire. But it is clear that the organizations took great care in gathering intelligence
from NBI in the hopes that this information would later prove useful for further surveillance. The results above indicate that these efforts proved futile.

Conclusion

How do governments defeat challenges to state authority? An emerging consensus contends that achieving a successful outcome requires combining covert intelligence gathering efforts with overt acts of repression directed at containing or eliminating behavioral challengers. The present study investigates this claim using original panel data on a black-nationalist organization, the Republic of New Africa, and US counter-movement activities directed against them. Results demonstrate that a principal obstacle in defeating challengers is that *overt and covert repression are not always complementary*. Overt repressive action prompted members of the RNA to adapt, which eroded the utility of existing intelligence and hampered the ability of surveillance to accumulate new intelligence.

As for the eventual decline of the movement, the RNA decided to pursue its ultimate objective regarding the establishment of an independent nation and a small contingent of members (including much of the leadership at the time) moved to Jackson, Mississippi. For all intents and purposes, this essentially ends the RNA in the historical sense as most of the activities undertaken in the Detroit chapter tends to serve as a support function for the Mississippi effort. A different but more definitive blow is dealt the organization when (on August 18, 1971) a joint police-FBI raid and subsequent trial led to the imprisonment of many members of this core group. This enveloped the RNA, compelling the organization to reduce actions to almost nothing (Davenport, 2015).
The mechanisms identified in our research have implications beyond the case studied here. For example, the United States is a strong state, and in the late 1960s it devoted considerable resources to eliminating the Republic of New Africa as a challenging movement. Weaker states battling rural or urban insurgencies can be expected to have even less success generating complementary outcomes. With fewer resources that can be devoted to coordinating overt and covert repressive activity, weak states may have greater difficulty responding to movement adaptation. In this situation of frustration, more heavy-handed and indiscriminate activity is expected.

Our work also has important implications for research into how repression shapes behavioral challenges because it suggests that the overt forms of repression that are most typically studied should be understood to be highly contingent on the actions of behavioral challengers and on the other forms of repression being applied against them. Theoretically, the present study introduced additional elements to the strategic calculus most commonly used to understand state-dissident interactions. The study shows how conceiving of social movements as strategically adapting to their changing environment can have a dramatic influence on the expectations of both movement action and repressive success.

Future work should explore the government’s decision to escalate to overt repression. This study uses a semi-random shock to examine overt repressive action which is an interesting way to approach the topic, but one that deviates from previous research. Typically, the government and behavioral challengers are believed to be simultaneously choosing strategies (cf. Ritter, 2014; Ritter & Conrad, 2016). In considering a more dynamic model, future research should also consider when
challengers or governments shift toward/away from different forms of contentious politics. Understanding the development of challenges to political order, as well as understanding when such conflicts endure, escalate or resolve themselves, means identifying the oscillation between public and clandestine claims making. While deviating from prior work, however, our research suggests that neither oscillation nor shock approaches should be accepted without additional exploration. Indeed, it may be the case that over the course of a contentious interaction actors move between strategies or stay with one.

Practically, the results provide some insight into the outcomes of repression and dissent. On the challenger’s side, our work suggests that challenger organizations seeking to avoid being repressed should respond to coercive behavior with adaptation. In the face of such government activity challengers should change tactics or organizational form. Combined, the changing membership composition and tactical repertoire work to undermine state intelligence, which in turn will make subsequent acts of overt repression more difficult. This is not to suggest that under these circumstances challengers will succeed. Rather, this is to say that adaptation increases the chances that the group might survive a little longer. On the government’s side, our work suggests that political authorities seeking vanquish challengers should anticipate adaptation to the tactics they employ. Staying with one approach after the situation within the challenger has changed is likely to be ineffective. Changing in accordance to the dissident group’s adaptation likely improves the government chances. Clearly the studies of the topic must allow for such dynamics in the future.
Figure 1:Interrupted time-series models of challenger behavior

<table>
<thead>
<tr>
<th></th>
<th>RNA events</th>
<th>Observable events</th>
<th>Unobservable events</th>
<th>Events at new locations</th>
<th>Organizational changes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
</tr>
</tbody>
</table>

| ATT | 26.890 | -78.692 | 64.325 | 4.791 | 56.354 |
| ATT SE | 8.183 | 20.584 | 17.766 | 2.326 | 10.986 |

Pretreatment Mean | 14.137 | 5.588 | 8.235 | 0.461 | 16.353 |

N | 103 | 103 | 103 | 103 | 103 |

Note: Column names indicate the outcome variable of the model. ATT = mean predicted weekly change in the DV after overt repression. Lines are 95% CIs. Standard errors (ATT SE) are calculated using the delta method. All models control for relevant autoregressive and moving-average parameters. Models b–e control for RNA events.
Figure 2: Interrupted time-series models of covert repression

<table>
<thead>
<tr>
<th>Events surveilled</th>
<th>Members identified</th>
<th>Surveillance hours</th>
<th>Events surveilled</th>
<th>Members identified</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
</tr>
</tbody>
</table>

| ATT   | -6.758 | -32.002 | 29.017 | -3.991 | -38.605 |
| ATT SE| 2.337  | 15.110  | 8.647  | 0.929  | 17.369  |
| N     | 103    | 103     | 103    | 103    | 103     |

Note: Column names indicate the outcome variable of the model. ATT = mean predicted weekly change in the DV after overt repression. Lines are 95% CIs. Standard errors (ATT SE) are calculated using the delta method. All models control for relevant autoregressive and moving-average parameters. Models b–e control for Events. Models c and e control for RNA members and Events surveilled. Models d–e control for Surveillance hours.
References


Shaver, Andrew, & Jacob Shapiro (forthcoming) The effect of civilian casualties on wartime informing: Evidence from the Iraq war.” *Journal of Conflict Resolution*


Online Appendix:

**Table SI-I: Interrupted Time-Series Models of Organizational Behavior**

<table>
<thead>
<tr>
<th></th>
<th>RNA events</th>
<th>Observable events</th>
<th>Unobservable events</th>
<th>Events at new locations</th>
<th>Organizational changes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1.797)</td>
<td>(1.472)</td>
<td>(3.557)</td>
<td>(1.472)</td>
<td>(1.041)</td>
</tr>
<tr>
<td>Total RNA actions</td>
<td>0.350***</td>
<td>0.600***</td>
<td>0.068*</td>
<td>0.831***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.022)</td>
<td>(0.037)</td>
<td>(0.033)</td>
<td>(0.013)</td>
<td></td>
</tr>
<tr>
<td>Post-NBI dummy</td>
<td>-5.763</td>
<td>-.781**</td>
<td>-0.280</td>
<td>0.901</td>
<td>0.668</td>
</tr>
<tr>
<td></td>
<td>(4.103)</td>
<td>(0.289)</td>
<td>(0.368)</td>
<td>(0.727)</td>
<td>(0.376)</td>
</tr>
<tr>
<td>Decay function</td>
<td>0.053</td>
<td>.0460***</td>
<td>-0.025*</td>
<td>0.029</td>
<td>-0.031**</td>
</tr>
<tr>
<td></td>
<td>(0.105)</td>
<td>(.008)</td>
<td>(.011)</td>
<td>(0.487)</td>
<td>(0.010)</td>
</tr>
<tr>
<td>N</td>
<td>103</td>
<td>103</td>
<td>103</td>
<td>103</td>
<td>103</td>
</tr>
</tbody>
</table>

Note: Table corresponds to Figure 1 in the main text. Column names indicate the outcome variable of the model. *p<0.05, **p<0.01, ***p<0.001 (Two-Tailed Test)
Table SI-II: Interrupted Time-Series Models of Covert Repression

<table>
<thead>
<tr>
<th></th>
<th>Events surveilled</th>
<th>Members identified</th>
<th>Surveillance hours</th>
<th>Events surveilled</th>
<th>Members identified</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a</td>
<td>b</td>
<td>c</td>
<td>d</td>
<td>e</td>
</tr>
<tr>
<td></td>
<td>(2.291)</td>
<td>(14.880)</td>
<td>(8.534)</td>
<td>(0.658)</td>
<td>(17.629)</td>
</tr>
<tr>
<td>Total RNA actions</td>
<td>0.237***</td>
<td>1.306***</td>
<td>0.042***</td>
<td>1.331***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.035)</td>
<td>(0.277)</td>
<td>(0.013)</td>
<td>(0.277)</td>
<td></td>
</tr>
<tr>
<td>Post-NBI dummy</td>
<td>-0.920</td>
<td>-28.106***</td>
<td>-17.103*</td>
<td>-0.085</td>
<td>-28.092***</td>
</tr>
<tr>
<td></td>
<td>(0.846)</td>
<td>(4.474)</td>
<td>(8.648)</td>
<td>(0.280)</td>
<td>(4.322)</td>
</tr>
<tr>
<td>Decay function</td>
<td>0.012</td>
<td>0.769***</td>
<td>0.253</td>
<td>-0.004</td>
<td>0.757***</td>
</tr>
<tr>
<td></td>
<td>(0.031)</td>
<td>(0.112)</td>
<td>(0.271)</td>
<td>(0.005)</td>
<td>(0.108)</td>
</tr>
<tr>
<td>RNA members present</td>
<td>0.011**</td>
<td>0.011**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.003)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actions identified</td>
<td>-1.276*</td>
<td></td>
<td>-3.405</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.625)</td>
<td></td>
<td>(2.070)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveillance hours</td>
<td></td>
<td>0.121***</td>
<td>0.298</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.004)</td>
<td>(0.259)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>103</td>
<td>103</td>
<td>103</td>
<td>103</td>
<td>103</td>
</tr>
</tbody>
</table>

Note: Table corresponds to Figure 2 in the main text. Column names indicate the outcome variable of the model. * p<0.05, ** p<0.01, ***p<0.001 (Two-Tailed Test)
Figure SI-1: Total RNA actions

Note: Figure corresponds to Table SI-I, Model a. Observed values represent events occurring after NBI. Predicted values are estimated based upon the effects of NBI occurring at week 53. Counter-factual values are estimated based on the presumption that NBI did not occur. Standard errors calculated using the delta method. 95% confidence intervals surround predicted and counterfactual values.
Figure SI-2: Indiscrete actions

Note: Figure corresponds to Table SI-I, Model b. Observed values represent events occurring after NBI. Predicted values are estimated based upon the effects of NBI occurring at week 53. Counter-factual values are estimated based on the presumption that NBI did not occur. Standard errors calculated using the delta method. 95% confidence intervals surround predicted and counterfactual values.
Figure SI-3: Discrete actions

Note: Figure corresponds to Table SI-I, Model c. Observed values represent events occurring after NBI. Predicted values are estimated based upon the effects of NBI occurring at week 53. Counter-factual values are estimated based on the presumption that NBI did not occur. Standard errors calculated using the delta method. 95% confidence intervals surround predicted and counterfactual values.
Figure SI-4: Actions at new locations

Note: Figure corresponds to Table SI-I, Model d. Observed values represent events occurring after NBI. Predicted values are estimated based upon the effects of NBI occurring at week 53. Counter-factual values are estimated based on the presumption that NBI did not occur. Standard errors calculated using the delta method. 95% confidence intervals surround predicted and counterfactual values.
Figure SI-5: Organizational changes

Note: Figure corresponds to Table SI-I, Model e. Observed values represent events occurring after NBI. Predicted values are estimated based upon the effects of NBI occurring at week 53. Counter-factual values are estimated based on the presumption that NBI did not occur. Standard errors calculated using the delta method. 95% confidence intervals surround predicted and counterfactual values.
Figure SI-6: Actions identified

Note: Figure corresponds to Table SI-II, Model a. Observed values represent events occurring after NBI. Predicted values are estimated based upon the effects of NBI occurring at week 53. Counter-factual values are estimated based on the presumption that NBI did not occur. Standard errors calculated using the delta method. 95% confidence intervals surround predicted and counterfactual values.
Figure SI-7: Members identified

Note: Figure corresponds to Table II, Model b. Observed values represent events occurring after NBI. Predicted values are estimated based upon the effects of NBI occurring at week 53. Counter-factual values are estimated based on the presumption that NBI did not occur. Standard errors calculated using the delta method. 95% confidence intervals surround predicted and counterfactual values.
Figure SI-8: Surveillance hours

Note: Figure corresponds to Table SI-II, Model c. Observed values represent events occurring after NBI. Predicted values are estimated based upon the effects of NBI occurring at week 53. Counter-factual values are estimated based on the presumption that NBI did not occur. Standard errors calculated using the delta method. 95% confidence intervals surround predicted and counterfactual values.
Figure SI-9: Actions identified (controlling for surveillance hours)

Note: Figure corresponds to Table SI-II, Model d. Observed values represent events occurring after NBI. Predicted values are estimated based upon the effects of NBI occurring at week 53. Counter-factual values are estimated based on the presumption that NBI did not occur. Standard errors calculated using the delta method. 95% confidence intervals surround predicted and counterfactual values.
Figure SI-10: Members identified (controlling for surveillance hours)

Note: Figure corresponds to Table SI-II, Model e. Observed values represent events occurring after NBI. Predicted values are estimated based upon the effects of NBI occurring at week 53. Counter-factual values are estimated based on the presumption that NBI did not occur. Standard errors calculated using the delta method. 95% confidence intervals surround predicted and counterfactual values.