

Focus Area 10 Worksheet:

Control of Source and Secondary Spread

Complete this worksheet if “Control of Source and Secondary Spread”¹ is a high priority Focus Area for efforts to improve foodborne disease outbreak response in your agency/jurisdiction. (NOTE: The term “agency/jurisdiction” refers to the entity for which your workgroup is making decisions. See your completed “Document D: Preliminaries” worksheet for a definition.)

List the individuals participating in the discussion of this Focus Area (and their affiliations).

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To help you understand what is included in this Focus Area, review the following goals and keys to success.

GOALS FOR CONTROL OF SOURCE AND SECONDARY SPREAD:

Agency/jurisdiction works with the facility or production site implicated in an outbreak to ensure that actions are taken to quickly stop exposure to contaminated food and prevent similar food safety problems in the future. Agency/jurisdiction also works with health-care providers, the public, and managers in settings where transmission of disease easily could occur (e.g., food establishments, health-care institutions, and child-care settings) to prevent secondary spread of disease from persons infected from the original source of the outbreak.

KEYS TO SUCCESS FOR CONTROL SOURCE AND SECONDARY SPREAD:

“Keys to success” are activities, relationships, and resources that are critical to achieving success in a Focus Area. Determining whether an agency/jurisdiction has a particular key to success in place is somewhat subjective. Metrics, such as measures of time (e.g., rapidly, timely, and quickly), have not been defined. Your workgroup should provide its own definitions for these terms, as is appropriate for your agency/jurisdiction, and use its best judgment in deciding whether a particular key to success is fully or partially in place.

Control measures

- Agency/jurisdiction works with the facility or production site, appropriate regulatory agency, and industry representatives in determining the desired control measures.
- Agency/jurisdiction has legal authority to require the desired control measures.
- Staff consider a variety of control measures to address the food safety problem (e.g., removing the vehicle from consumption, cleaning the environment, educating food workers, modifying food preparation, excluding ill staff).
- Staff work with the implicated facility to implement control measures as soon as sufficient information is available to do so.
- Agency/jurisdiction works with settings in which transmission easily can occur to prevent secondary spread.

Communication

- Outbreak response team members share information from the outbreak response with each other in a timely fashion.
- Staff effectively communicate necessary control measures to the facility manager, facility workers, and others involved in the implementation of control measures and provide education, as needed.
- Agency/jurisdiction has staff trained in communicating with the media and risk communication.

¹In the 2011 version of the CIFOR Toolkit (companion to the 2009 CIFOR *Guidelines*), this Focus Area was split into two Focus Areas (Focus Area 10: Control of Source and Focus Area 12: Control of Secondary Spread).

Control Measures

Focus Area 10: Control of Source and Secondary Spread

- Agency/jurisdiction has means to alert health-care providers about the outbreak and provide specific information about treatment and infection control.
- Agency/jurisdiction has ongoing communication with the public.
- Agency/jurisdiction has pre-existing relationships with the media to ensure rapid and accurate communication of information to the public.

Monitoring

- Staff monitor the implementation of control measures at the implicated facility and the effectiveness of those control measures.
- Staff monitor the population at risk to ensure that the outbreak has ended and the source has been eliminated.

Making changes

- Agency/jurisdiction conducts a debriefing among investigators following each outbreak response and refines outbreak response protocols based on lessons learned.
- Agency/jurisdiction has performance indicators related to control of the source at the implicated facility and routinely evaluates its performance in this Focus Area.

2. PRIORITIZE CIFOR RECOMMENDATIONS TO ADDRESS NEEDED IMPROVEMENTS.

Having identified activities and procedures in need of improvement, review the CIFOR recommendations related to this Focus Area (listed below). Rate the priority for implementing each recommendation based on its likely impact on foodborne outbreak response at your agency/jurisdiction and available resources. Use a scale of 1 to 5 to rate each recommendation (1=Low priority for implementation and 5=High priority for implementation). If a recommendation is already in place in your agency/jurisdiction, check the appropriate box. If a recommendation is not relevant to your agency/jurisdiction, select N/A. Refer to the blue underlined section number following each recommendation to view the recommendation as it appears in the CIFOR Guidelines.

	Already in place	Priority for Implementation or Improvement in Your Agency/Jurisdiction					
		LOW			HIGH		
Control of source							
Initiate control measures as soon as possible, concurrent with ongoing investigations. (6.1.1)	<input type="checkbox"/>	1	2	3	4	5	N/A
Solicit input from the entire outbreak response team (and possibly legal advisors, companies, trade associations, or other industry and academic experts) before implementing interventions that might have major legal or economic consequences (e.g., closure of an establishment or general food recall). (6.1.2)	<input type="checkbox"/>	1	2	3	4	5	N/A
Before a specific food is implicated, implement non-specific control measures based on good public health practice, suspicions about the likely pathogen, and the history of the establishment. (6.2.1.1) (6.2.1.2)	<input type="checkbox"/>	1	2	3	4	5	N/A
Adjust control measures as information on the causative agent and implicated food item becomes available. (6.2.1.2)	<input type="checkbox"/>	1	2	3	4	5	N/A
Embargo, hold, or stop the sale of food suspected to be the source of an outbreak. (6.2.2.1.1)	<input type="checkbox"/>	1	2	3	4	5	N/A
Issue a written hold or embargo order to establish a clear expectation and regulatory requirement for holding the food to prevent the owner from serving or destroying the food before the investigation is complete. (6.2.2.1.1)	<input type="checkbox"/>	1	2	3	4	5	N/A
Fully document the information that led to the decision (whether to remove or not remove food) and the process used to make the decision. (6.2.2.1.1)	<input type="checkbox"/>	1	2	3	4	5	N/A
Ensure that the facility and all equipment are thoroughly cleaned and sanitized, followed by microbial verification of the effectiveness of the cleaning and sanitizing processes. This is particularly important if <i>Salmonella</i> , <i>Listeria monocytogenes</i> , or norovirus are suspected. Consult industry guidance documents and the FDA's Food Code in Annex 4 for cleaning, sanitizing, and microbial verification protocols. (6.2.2.1.2)	<input type="checkbox"/>	1	2	3	4	5	N/A
Ensure that staff at the implicated facility are trained/retrained on proper cleaning and maintenance procedures for all equipment. (6.2.2.1.2)	<input type="checkbox"/>	1	2	3	4	5	N/A

Control Measures

Focus Area 10: Control of Source and Secondary Spread

	Already in place	Priority for Implementation or Improvement in Your Agency/Jurisdiction					
		LOW			HIGH		
Control of source (cont'd) Require that staff at the implicated facility be trained/retrained on general practices of safe food preparation including thorough hand washing, not working when ill, no bare-hand contact with ready-to-eat foods, proper use of gloves and utensils, proper holding temperatures, proper procedures for rapid cooling, and thorough cooking and reheating of foods. (6.2.2.1.3) (6.4.4)	<input type="checkbox"/>	1	2	3	4	5	N/A
If the pathogen is known, educate staff at the implicated facility about the disease (e.g., symptoms, mode of transmission, and prevention) and practices specific to control of that pathogen. (6.2.2.1.3) (6.4.4)	<input type="checkbox"/>	1	2	3	4	5	N/A
Customize training at the facility to support the desired behavioral changes among staff. (6.6.3)	<input type="checkbox"/>	1	2	3	4	5	N/A
Require the facility manager to document training of both current and newly hired staff. (6.2.2.1.3)	<input type="checkbox"/>	1	2	3	4	5	N/A
Work with the facility to modify food-production or food-preparation processes, if needed, to reduce risk, such as changing a recipe, changing a process, reorganizing preparation processes, changing storage temperatures, or modifying instructions to consumers. Base decisions on the scientific evidence of the effectiveness of the changes to control the pathogen linked to the outbreak. (6.2.2.1.4)	<input type="checkbox"/>	1	2	3	4	5	N/A
Work with the food establishment's person-in-charge (PIC) to implement active managerial controls and create a risk-control plan or consent agreement so the PIC knows exactly what steps need to be taken and has committed to control the situation and prevent additional outbreaks (6.2.2.1.4) (6.4.4)	<input type="checkbox"/>	1	2	3	4	5	N/A
Eliminate implicated foods from the menu until control measures are in place. (6.2.2.1.5)	<input type="checkbox"/>	1	2	3	4	5	N/A
Ensure that infected food workers are excluded from the workplace or restricted in accordance with the FDA Food Code or other regulatory requirements. Consult local ordinances and state statutes to understand the agency's legal authorities. If the outbreak response team believes a public health threat exists, the team should strongly recommend exclusion of infected food workers regardless of the legal authorities. (6.2.2.1.6) (6.4.3)	<input type="checkbox"/>	1	2	3	4	5	N/A
If the facility owner is unable or unwilling to take immediate corrective action to eliminate food-safety hazards, consider closing the facility, following local regulations. (6.2.2.1.7)	<input type="checkbox"/>	1	2	3	4	5	N/A
If the facility owner will not act voluntarily to close the facility, employ other control measures, such as cease-and-desist orders, permit action, and hearing in front of a judge. (6.2.2.1.7)	<input type="checkbox"/>	1	2	3	4	5	N/A

Control Measures

Focus Area 10: Control of Source and Secondary Spread

	Already in place	Priority for Implementation or Improvement in Your Agency/Jurisdiction					
		LOW			HIGH		
<u>Control of source</u> (cont'd) If the implicated facility provides food for an institution in which residents have no alternative food sources, work with institution staff to identify options for bringing in food or leave the facility open but eliminate high-risk items from the menu. (6.2.2.1.7)	<input type="checkbox"/>	1	2	3	4	5	N/A
Establish a clear plan with criteria that need to be met, including actions that must be taken or results that must be achieved, for the facility to reopen. (6.2.2.1.7) (3.7.2)	<input type="checkbox"/>	1	2	3	4	5	N/A
Remove restrictions at the facility when risk factors have been eliminated and testing indicates that the problem has been eliminated. (6.2.2.1.7) (6.6.2)	<input type="checkbox"/>	1	2	3	4	5	N/A

Additional ideas:

Communication with the implicated facility

Understand the agency's legal framework so you know how to interact with personnel from the facility implicated in the outbreak. (6.5.4)	<input type="checkbox"/>	1	2	3	4	5	N/A
Determine when and how to share outbreak information with the owner and/or manager of the implicated facility. Make contact as soon as possible and share as much information as possible. (6.5.4) (3.5.2.1)	<input type="checkbox"/>	1	2	3	4	5	N/A
Notify owners and/or managers of the implicated facility that they must share any new reports of illness or other new information that could affect the investigation or food recall efforts. (6.5.1)	<input type="checkbox"/>	1	2	3	4	5	N/A
Maintain communication with owners and/or managers of the implicated facility throughout and after the investigation, and tell them if additional information becomes available. Communicate possible outbreak control measures to the facility manager and workers and provide education as needed. (6.6.3)	<input type="checkbox"/>	1	2	3	4	5	N/A
Guide agency staff on how to respond to and communicate with angry food-service workers and managers. (3.6.2.5)	<input type="checkbox"/>	1	2	3	4	5	N/A

Additional ideas:

Control of secondary spread

Exclude or restrict ill (or recently ill) individuals working in settings where disease transmission can occur (e.g., food-preparation, health-care, child-care) from the workplace in accordance with the FDA Food Code or other regulatory requirements. Consult local ordinances and state statutes to understand the agency's legal authorities. If the outbreak response team believes a public health threat exists, the team should strongly recommend exclusion of ill or recently ill food workers regardless of their legal authority. (6.2.2.1.6) (6.4.3) (6.6.2)	<input type="checkbox"/>	1	2	3	4	5	N/A
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Control Measures

Focus Area 10: Control of Source and Secondary Spread

	Already in place	Priority for Implementation or Improvement in Your Agency/Jurisdiction					
		LOW			HIGH		
<p>Control of secondary spread (cont'd)</p> <p>Recommend the use of infection control precautions with hospitalized and institutionalized persons with infectious diarrhea (particularly easily transmissible infections such as <i>Salmonella</i>, <i>Shigella</i>, and norovirus) including isolation of patients; barrier nursing precautions; strict control of contaminated clothing, surfaces, and bedding; and strict observation of personal hygiene measures. (6.4.4)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>During a norovirus outbreak, recommend the use of chlorine solutions or other approved effective sanitizers or methods rather than standard cleaning chemicals. (6.4.4)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>Set up processes with area hospitals, physicians, local health departments, specialty clinics, or other health-care providers to provide prophylaxis before an outbreak occurs. Consider the number of people likely exposed and the anticipated response to the prophylaxis offer when planning, including community medical staff, vaccine/product supply, crowd control management, and health department phone staffing. (6.4.5)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>Test plans for large-scale prophylaxis before an outbreak occurs. (6.4.5)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>Develop processes to identify and communicate with persons who may need prophylaxis including groups at higher risk for severe illness and poor outcomes from foodborne diseases. (6.4.5)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A

Additional ideas:

Communication with health care providers

<p>Notify health-care providers about the outbreak and encourage them to report cases of the illness under investigation and collect appropriate patient specimens. (6.4.1)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>Provide health-care providers with information about the disease associated with the outbreak including specific treatments and follow-up of cases, infection control guidance for patients, and infection control precautions for hospitalized and institutionalized patients. (6.2.1.1) (6.4.1)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A

Additional ideas:

Communication with the public

<p>If the outbreak involves only one facility, determine whether public notification is necessary. Factors that support public notification include:</p> <ul style="list-style-type: none"> • Medical treatment is needed by persons exposed to the etiologic agent; • Public reporting of suspected illness is important to the investigation; and • The risk of exposure still exists. (6.2.2.1.8) 	<input type="checkbox"/>	1	2	3	4	5	N/A
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Control Measures

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	Already in place	Priority for Implementation or Improvement in Your Agency/Jurisdiction					
		LOW			HIGH		
<p><u>Communication with the public (cont'd)</u> If the outbreak involves a distributed product, notify the public. Provide information about how to handle the suspected product (e.g., discard, special preparation instructions, or return to place of purchase). (6.2.2.2.2)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>Identify an agency lead on interactions with the public, ideally someone trained in communication. (3.6.2.5)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>When developing messages for the public, seek assistance from the agency's public information officer or the public information officer at another agency, if the agency does not have this resource. (6.2.2.1.8)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>Establish procedures for coordinating communication with the public between agencies involved in an investigation to provide consistent messaging and accurate information flow. (3.6.2.5) (6.2.1) (6.2.2.2.2)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>Prepare messages for the public following good risk communication practices and agency communication protocols. Provide only objective information. Do not give preliminary, unconfirmed information. Provide clear actions the public should take to protect itself from infection. (6.2.1.1) (6.2.2.1.8) (6.2.2.2.2)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>Decide in advance how to communicate the naming of implicated establishments based on local legal guidelines and whether risk of transmission is ongoing.</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>Use standard formats for reporting complex procedural, technical, or risk information to the public and actions the public should take during an outbreak (e.g., how to decrease the risk for illness, how to handle the suspected product, actions to take if illness occurs). (6.5.3)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>Test messages with representatives of the target population, if possible. (6.5.3)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>When communicating with the public about an outbreak, take advantage of a teachable moment to reinforce basic food-safety and public health messages (e.g., thorough hand washing, proper food preparation, and advice on personal hygiene) and how to contact appropriate authorities to report suspected foodborne illness. (6.2.1.1) (6.4.2)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>Use established channels of communication with the public. Means of notification depend on the public health risk and the target population and include press releases, radio, television, fax, telephone, e-mail, Web posting, social media, or letters. (6.2.2.2.2) (3.6.2.5) (6.5.3)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A
<p>Attempt to reach all members of the population at risk, including non-English-speaking and low-literacy populations. (6.2.2.2.2)</p>	<input type="checkbox"/>	1	2	3	4	5	N/A

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	Already in place	Priority for Implementation or Improvement in Your Agency/Jurisdiction					
		LOW			HIGH		
Communication with the public (cont'd)							
Consider whether special communications are needed for groups at higher risk than others for severe illness and poor outcomes from foodborne diseases (e.g., infants, pregnant women, and immune-compromised persons). (6.5.3)	<input type="checkbox"/>	1	2	3	4	5	N/A
If the outbreak is large or the etiologic agent is highly virulent, consider setting up an emergency hotline so the public can call with questions. Persons answering the phones should be trained to give consistent responses. (6.2.2.2.2)	<input type="checkbox"/>	1	2	3	4	5	N/A
Guide agency staff on how to respond to and communicate with angry members of the public. (3.6.2.5)	<input type="checkbox"/>	1	2	3	4	5	N/A
Additional ideas:							

Communications with the media

Obtain media training for primary agency spokespersons. (3.6.2.7)	<input type="checkbox"/>	1	2	3	4	5	N/A
For each outbreak, identify an agency lead on media interactions, ideally someone trained as a public information officer. (3.6.2.7)	<input type="checkbox"/>	1	2	3	4	5	N/A
Establish procedures for coordinating communication with the media to provide consistent messaging and accurate information flow. (3.6.2.7)	<input type="checkbox"/>	1	2	3	4	5	N/A
Establish channels for communication with the media (e.g., website, telephone number) including primary contact persons for major local media outlets. Know routine deadlines and time frames for reporting news through major local media outlets (e.g., the deadline for having news from a press release appear in the evening newspaper). (3.6.2.7)	<input type="checkbox"/>	1	2	3	4	5	N/A
Additional ideas:							

Monitoring

Follow established agency/jurisdiction protocols for monitoring the implicated facility or food source. (3.7.2)	<input type="checkbox"/>	1	2	3	4	5	N/A
Monitor implicated foods or facilities to make sure no further contamination is occurring, that modified processes have been implemented and are effective, and that long-term behavioral changes have occurred. (6.2.2.1.4) (6.6.3)	<input type="checkbox"/>	1	2	3	4	5	N/A
Increase the number of routine inspections at the implicated facility to ensure that they comply with all required procedures. (6.6.3)	<input type="checkbox"/>	1	2	3	4	5	N/A

	Already in place	Priority for Implementation or Improvement in Your Agency/Jurisdiction					
		LOW			HIGH		
		1	2	3	4	5	N/A
Monitoring (cont'd) Conduct post-outbreak monitoring of the population at risk for signs and symptoms of the illness under investigation to ensure that the outbreak has ended and the source has been eliminated. (6.6.3)	<input type="checkbox"/>						
Consider conducting active surveillance, working with health-care providers to increase their vigilance for cases and collecting stool samples from the population at risk, to ensure that the outbreak has ended and the source has been eliminated. (6.6.3)	<input type="checkbox"/>						

Additional ideas:

Making changes

Arrange a debriefing (after-action meeting) following each outbreak investigation with all investigators to assess the effectiveness of outbreak control measures and difficulties implementing them, identify measures to prevent future outbreaks at the implicated facility and other facilities, and identify long-term and structural control measures and plan their implementation. (6.6.3) (3.2.3.4) (5.2.8)	<input type="checkbox"/>						
Prepare summary reports for all outbreaks consistent with the size and complexity of the response. Use the reports as a continuous quality improvement opportunity. (6.8) (5.2.9)	<input type="checkbox"/>						
Identify issues that need follow-up research (e.g., the need for new measures to control certain pathogens in certain foods). (6.9.1)	<input type="checkbox"/>						
Identify the need for broad education of the public, the food-service and food-processing industries, or health-care providers to prevent similar outbreaks in the future. (6.9.3)	<input type="checkbox"/>						
Identify the need for new public health or regulatory policy at the local, state, or federal level. (6.9.4)	<input type="checkbox"/>						
Consult with other public health, environmental health, and food regulatory agencies on the need for new policy before presenting to the appropriate jurisdictional authority. (6.9.4)	<input type="checkbox"/>						

Additional ideas:

Control Measures

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