Risk Communication Plan:
Concentrated Animal Feeding Operations
and Rise of Antibiotic-Resistant Bacteria

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CHS 484
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Center for Science in the Public Interest’s Risk Communication Plan:
Concentrated Animal Feeding Operations and the Rise of Antibiotic-Resistant Bacteria

Introduction to Center for Science in the Public Interest

Center for Science in the Public Interest (CSPI) is a non-profit 501(c)(3) consumer advocacy and watchdog organization that advocates on behalf of the American public regarding issues involving food safety, nutrition, health, environment, and related problems. CSPI was established in 1971 by Michael Jacobson, PhD. CSPI seeks to educate the public, advocate to the United States government on issues of food safety and environmental justice issues, and counter the influence of large industry players on government policies and regulations that affect the health and safety of Americans and our food supply. As such, CSPI has established the rise and spread of antibiotic-resistant bacteria due to common industry practices as a priority education and advocacy issue.

Goal

The goals of this risk communication effort are to: 1.) Raise public awareness about the public health risks associated with practices of concentrated animal feeding operations (CAFOs), specifically regarding their use of antimicrobial medications in such a manner that promotes the development of antibiotic-resistant strains of bacteria, and mobilize grassroots efforts to change these practices; 2.) Encourage lawmakers to create and enact policies that prevent CAFO practices that promote the development of antibiotic-resistant strains of bacteria; and 3.) Appeal to CAFO operators to persuade them to stop these harmful practices and provide them with information on alternative methods of producing animal food products.

Situation Analysis

Industrialization of livestock production has led to fewer but increasingly larger animal production sites, referred to as concentrated animal feeding operations (CAFOs), for the raising of cattle, swine, and poultry. The Environmental Protection Agency (EPA) defines an Animal Feeding Operation (AFO) as a production where animals are raised in confinement and not in a pasture or in rangeland for a total of 45 or more days in a 12-month period. CAFOs are a subset of AFOs that meet at least one of the following criteria: 1.) House more than 1,000 animals; 2.) Have manmade ditches or pipes that carry manure or waste to surface water; or 3.) The animals come in contact with surface water that passes through the area in which they are confined. CAFOs produce over 40% of all the livestock and poultry raised in the U.S. Although CAFOs are more efficient and cost-effective for livestock production, there are numerous concerns about the health and environmental impacts of this practice on industry workers, adjacent crops, surrounding communities, and the population at large. One emerging issue is the development of antibiotic-resistant strains of bacteria due to the overuse and misuse of antimicrobial agents, or antibiotics, in CAFOs.

Due to the overcrowded, unsanitary, and confined quarters of CAFOs, animals are at an increased risk of contracting various bacterial infections. To combat the spread of disease, as well as to promote growth of the animals, low levels of antibiotics are added to the animal feed. Antibiotics are drugs that are used to treat infections caused by bacteria. Because antibiotics can fight infections that were once considered extremely fatal, they are touted as one of the greatest public health achievements of the 20th century. Unfortunately, the overuse and misuse of these
drugs are decreasing their effectiveness and allowing them to form a resistance.\textsuperscript{8} Although there is also concern among experts about antibiotic use among people, the vast majority of antibiotics prescribed in the U.S. are used in CAFOs as a means to prevent instead of treat disease. Of the approximately 28 million pounds of total antibiotics used in the U.S. per year, an estimated 25 million pounds are provided to animals.\textsuperscript{7} Studies have shown that this practice creates an increased risk for the rise of antibiotic-resistant strains of bacteria as low doses over a prolonged period of time is not enough to kill these organisms but provides them with opportunities to mutate and select for resistance.\textsuperscript{7} This is especially concerning as we currently have no other way of effectively treating the deadly infections that can be caused by these bacteria.\textsuperscript{7}

Antibiotic-resistant organisms that develop in CAFOs may infect human populations through water contamination from waste, animal food products made from the infected animals that consumers mishandle or do not cook properly, or the passage of bacteria from animals to farm workers and then into the larger community. One study found that poultry farm workers who worked in operations where chickens were given feed with tetracycline developed tetracycline-resistant intestinal flora within five months, despite not having been clinically treated with the drug themselves.\textsuperscript{7} Experts are concerned that we may be entering a “post antibiotic era”, where deaths due to infection once again become a very real threat for susceptible populations, such as children, the elderly, and the immuno-compromised.\textsuperscript{7}

While the Food and Drug Administration (FDA) established a policy in 2013 to phase out blanket use of antibiotics among animals being raised for food in order to increase size of the animals, little regulatory action has been taken to curb this practice.\textsuperscript{9} Furthermore, the policy only proscribed against antibiotic use to promote growth but still endorses the practice of using it as a preventative measure against infection, continuing to endanger the health of the U.S. population.\textsuperscript{10} The goal of this communication is therefore to increase public awareness about the occurrence and dangers of this practice, appeal to lawmakers to enact the necessary policies to protect the public health against antibiotic-resistance, and encourage CAFO operators to adopt more hygienic methods of raising animals that will not require use of antibiotics for preventative measures.

**Target Audience, Stakeholders, and Partners**

As this is a national campaign, the list of target audiences, stakeholders, and partners has the potential to be quite large. This section will therefore provide a list of the key individuals, groups, and organizations who are important for this communication effort, but this list is by no means meant to be exhaustive and should be updated as we receive more information. The target audience refers to the entities that are directly impacted by the use of antibiotics in animal production. Stakeholders are entities that have a personal investment in the use of antibiotic for food production and may either support our efforts to communicate about the risks of this practice or may counter them. Partners are entities that can be expected to assist in our efforts to disseminate this information and may play specific roles at different points of the communication timeline or in the efforts to reduce the use of antibiotics among animals raised for food.

**Target Audience**

- Citizens of the United States of America
- Local, state and federal lawmakers
- United States House of Representatives Committees on:
Agriculture
Ways and Means
Rules
Energy and Commerce

United States Senate Committees on:
- Agriculture, Nutrition, and Forestry
- Commerce, Science, and Transportation
- Health, Education, Labor and Pensions
- Rules and Administration

United States Department of Agriculture (USDA)
Food and Drug Administration (FDA)
CAFO Operators
CAFO Workers
Local and regional public health agencies
Local and national television, radio, print, and web-based media sources

Stakeholders
- The United States Department of Agriculture (USDA)
- The Food and Drug Administration (FDA)
- The Centers for Disease Control and Prevention (CDC)
- United States Department of Health and Human Services (DHHS)
- American Medical Association (AMA)
- American Veterinary Medical Association
- American Association of Meat Processors
- Pharmaceutical Researchers and Manufacturers of America (PhRMA)
- National Cattlemen’s Association
- National Dairy Council
- National Institutes of Health
- CAFO Operators
- Local and regional public health agencies

Partners
- California Food Policy Advocates
- Organic Trade Association
- World Trade Organization (WTO)
- World Health Organization (WHO)
- CDC
- Local and regional public health agencies

Objectives
The three goals of this risk communication effort are to 1.) Increase public awareness about CAFO practices and antibiotic-resistant, how individuals can protect themselves and their families, and foster grassroots efforts to change this practice; 2.) Bring about federal policy change regarding these practices; 3.) Encourage CAFO operators to adopt practices that do not promote the development of antibiotic-resistant strains of bacteria. The following objectives will be met in order to achieve the above goals:
1. Effectively communicate the public health risks posed by current CAFO antibiotic practices to all target audience segments through use of television, radio, print, and web-based media outlets.

2. Effectively communicate concrete, actionable steps that can be taken at the individual, community, organizational, and political levels to prevent and/or mitigate these risks.

3. Effectively communicate concrete, actionable steps that can be taken at the individual, community, organizational, and political levels to create systematic change.

4. Sponsor a legislative bill at the national level that would prohibit use of antibiotics among animals being raised for food products, except for therapeutic purposes. In addition the bill will prohibit practices that encourage bacterial infection and thus necessitate antibiotic treatment.

**Strategies**

In order to achieve the aforementioned goals and objectives, the following strategies will be employed:

1. Determine key messages that will effectively communicate the concepts of antibiotic-resistance, how CAFOs contribute to antibiotic-resistance, how to protect you and your family from antibiotic-resistant bacterial food-borne infections, and how we can prevent and/or mitigate antibiotic-resistance by changing CAFO practices.

2. Establish working relationships with a variety of credible media outlets that will disseminate our key messages, including television, radio, print, and Internet sources.

3. Establish partnerships with key individuals and organizations that have similar goals regarding eliminating CAFO practices that encourage antibiotic-resistance and protecting the public from antibiotic-resistance bacterial infections. Determine their roles and objectives in this communication effort.

4. Conduct research and monitoring to provide further support for the link between food-borne antibiotic-resistant pathogens and outbreaks in humans.

5. Establish relationships with CAFO operators and engage in collaborative problem solving to address these issues.

6. Engage in legislative advocacy efforts to develop relationships with key decision makers.

7. Conduct stakeholder analysis to determine levels of support and levels of influence on this issue. Create messaging to counter inaccurate or antagonistic information from stakeholders who do not support this cause.
**Tactics/Activities**

The following tactics and activities will be employed to achieve CSPI’s goals and objectives. The tactics and activities have been divided into a Pre-Communication Phase, Communication Phase, and Legislative Advocacy.

Pre-Communication Phase (June 2014 to August 2014)

I. Establish the Communication Leadership Team
   a. *Public Information Officer (PIO):* This individual is responsible for all communication efforts and will lead the rest of the communication team. Responsibilities include: determining what messaging needs to be developed for which audiences, approving all messaging, communicating with key stakeholders and partners, assigning tasks to other members of the Communication Team, and overseeing all efforts of the Communication Team.
   b. *Research Officer:* This individual is responsible for conducting research on antibiotic resistance, CAFO practices, legislative activity regarding this topic, and any developing outbreaks caused by antibiotic-resistant bacterium. They will also be responsible for reaching out to experts and researchers in the field to ensure that the team is communicating the most current and accurate scientific information.
   c. *Message Coordinator:* This individual will be responsible for identifying target audience segments, developing tailored key messages for each segment, and developing messaging for different media outlets for each segments as appropriate. They will also be responsible for updating messages on CSPI’s Facebook and Twitter accounts.
   d. *Media Liaison:* This individual is responsible for developing working relationships with members of the media (see Appendix A for list of priority media sources).
   e. *Industry Liaison:* This individual will be responsible for developing working relationships with key players in the animal food production industry, including CAFO operators, and coordinating all communications between CSPI and industry leaders.

II. Outreach to CAFO operators, industry leaders, and medical and scientific experts
   a. PIO will conduct outreach to determine potential supporters and opposition.
   b. Host conference to discuss problem and potential solutions identified by all parties

III. Develop Key Messages
   a. Research Officer will conduct research and write a report for the PIO and the Message Coordinator on the current state of antibiotic use in CAFOs, the development of antibiotic-resistant strains of bacteria, outbreaks linked to antibiotic-resistant strains of bacteria from CAFO food products, and how to prevent and mitigate these issues.
   b. Message Coordinator will develop messages for each identified audience segment to be disseminated through appropriate mediums.
   c. Member of research team will conduct focus groups with members of target audience to determine effectiveness and understanding of messages.
d. Message Coordinator will adjust messages as needed.

IV. Develop Communications from Key Messages
   a. CSPI will contract with advertising agency to develop and film/record television and radio advertisements using developed key messages.
   b. Message Coordinator will develop communications to be used on Facebook and Twitter accounts.

V. Establish plan to disseminate message
   a. Media Liaison will reach out to priority media sources to establish relationships with key contacts
   b. CSPI will contract with web designer to create dedicated space on the CSPI webpage to provide more information on this issue.
   c. Contact key partners who will also be disseminating information on this issue to ensure consistency in messages.
   d. Purchase paid advertising on television and radio outlets.
   e. Obtain free advertisement space dedicated for public service announcements (PSAs)
   f. Schedule interviews on talk radio and television shows
   g. Establish outlets for press releases and letters to the editor
   h. Prepare press releases and letters to the editor

VI. Organizational preparation
   a. Establish individuals to field incoming question from the press, the general public, and other key stakeholders
   b. Ensure all internal personnel are aware of the established messaging and are prepared to answer incoming questions or know whom to direct questions to
   c. Establish a hotline, web address, and email account in order for individuals to gather more information or contact CSPI regarding this topic

Communication Phase (August 2014 to August 2015)
I. Disseminate key messages
   a. Launch dedicated website pages
   b. Run advertisements on identified television and radio outlets
   c. Send prepared press releases and Letters to the Editor
   d. Update Twitter and Facebook account daily with original messages or links to other communications (i.e. links to online articles, YouTube videos, etc.).
   e. Continue to actively seek out additional opportunities to disseminate the message

II. Monitor response to messaging
   a. Field incoming questions and communications as established
   b. Actively look for responses from other stakeholders
   c. Prepare counter-messaging or responses to opposition messages
   d. Prepare acknowledgement statements or responses to support messages
Legislative Advocacy (June 2014 to August 2015)
*Key messages established by Communications Team will also be used in Legislative Advocacy communications. Although these two are listed separately, both teams will work closely together to ensure consistency in goals and messaging.

I. Establish legislative advocacy team
   a. **Advocacy Manager**: This individual is responsible for all advocacy-focused communications, including authoring letters to policy makers, meeting with representatives and their staff, attending house and senate legislative sessions, and testifying in front of congress on behalf of CSPI.
   b. **Legislative Advocates (2)**: These individuals will provide support to the Advocacy Manager by assisting with all communications with lawmakers, their staff, and federal regulatory agencies.
   c. **Policy Analyst**: This individual is responsible for conducting analyses on current and proposed policies that may provide support or prove to be a barrier for passing legislation that will change antibiotic practices at CAFOs. They will also draft the CSPI policy proposal.
   d. **Community Advocate**: This individual will be responsible for garnering community support and mobilizing grassroots efforts that support our policies.

II. Establish relationships with key decision-makers
   a. Vet list of Senators and Representatives who are influential in key committees.
   b. Vet list of legislators who may be willing to author a bill restricting use of antibiotics in CAFOs
   c. Establish list of key stakeholders in federal regulating agencies, such as the USDA, CDC, and FDA.
   d. Contact offices of the identified individuals to schedule meetings to discuss the issue and proposed policy.

III. Sponsor bill that limits antibiotic use in CAFOs.
   a. Advocacy Manager finds a federal legislator who is willing to author the bill
   b. Policy Analyst drafts proposal of bill text
   c. Advocacy Manager and Legislative Advocates monitor bill through legislative process by advocating for support from various lawmakers, testifying on behalf of the bill, attending Congressional hearings and meetings where bill is being debated.
   d. Community advocate stimulates grassroots effort to pass bill by organizing letter writing and phone call campaigns to representatives, organizing informational sessions, speaking at community rallies and events, disseminating messages through our media outlets, and meeting with groups and organizations who share similar goals (as established in the stakeholder analysis).
### Timeline

<table>
<thead>
<tr>
<th>Month</th>
<th>Activity</th>
<th>Assigned To</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2014</td>
<td>Establish Communication Team consisting of:</td>
<td>Director of Communications</td>
</tr>
<tr>
<td></td>
<td>a. PIO</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Research Officer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Message Coordinator</td>
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</tr>
<tr>
<td></td>
<td>d. Media Liaison</td>
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</tr>
<tr>
<td></td>
<td>e. Industry Liaison</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Finalize job descriptions for each position.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Conduct first team meeting to clearly establish goals and objectives.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Review timeline and deadlines for expected deliverables.</td>
<td></td>
</tr>
<tr>
<td>June 2014</td>
<td>Establish Legislative Advocacy Team consisting of:</td>
<td>Director of Advocacy</td>
</tr>
<tr>
<td></td>
<td>a. Advocacy Manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Legislative Advocates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Policy Analyst</td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Community Advocate</td>
<td></td>
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<tr>
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<tr>
<td></td>
<td>3. Review timeline and deadlines for expected deliverables.</td>
<td></td>
</tr>
<tr>
<td>June 2014</td>
<td>Establish relationships with key industry stakeholders.</td>
<td>PIO, Research Coordinator, Industry Liaison,</td>
</tr>
<tr>
<td></td>
<td>1. Identify key industry, medical and scientific leaders.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Contact key leaders and invite them to forum.</td>
<td></td>
</tr>
<tr>
<td>June 2014</td>
<td>Establish relationships with key political decision-makers.</td>
<td>Advocacy Manager, Legislative Advocates,</td>
</tr>
<tr>
<td></td>
<td>1. Identify influential and sympathetic lawmakers.</td>
<td>Community Advocate</td>
</tr>
<tr>
<td></td>
<td>2. Identify heads of influential regulatory agencies.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Contact key decision-makers and invite them to forum.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Schedule meetings with legislators and heads of</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Task Description</td>
<td>Responsible Officer</td>
</tr>
<tr>
<td>--------</td>
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<td>---------------------</td>
</tr>
</tbody>
</table>
| June 2014 | Preliminary research for key messages.  
1. Conduct research on issue of antibiotic resistance, CAFOs, public health effects, and potential preventative measures.  
2. Draft report on finding. | Research Officer |
| June 2014 | Develop messaging for each identified audience segment (public, lawmakers, industry). | Message Coordinator |
| June 2014 | Establish relationships with priority media sources  
1. Contact identified priority media outlets  
2. Identify editors and writers who cover beats on health, science nutrition, environment, and business/economy. Record their names and contact information  
3. Reach out to identified editors and writers to introduce CSPI’s newest campaign. Inform them we will be sending them more information as we obtain it. | Media Coordinator |
| July 2014 | Host forum for invited stakeholders in Washington D.C. | Director of Communications, Director of Advocacy, PIO, Advocacy Manager |
| July 2014 | Finalize messaging  
1. Conduct 3-4 focus groups with each audience segment  
2. Make changes to messaging based on focus group feedback  
3. Finalize messaging | Message Coordinator, PIO, Advocacy Manager, Community Advocate |
| July 2014 | Prepare for Traditional Media Message Dissemination  
1. Hire advertising agency to create scripts to television and radio advertisements  
2. Record/film advertisement  
3. Purchase paid advertising space on priority outlets  
4. Contact priority television and radio news/talk shows to | PIO, Message Coordinator, Media Liaison |
<table>
<thead>
<tr>
<th>Date</th>
<th>Task Description</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2014</td>
<td>Prepare for Nontraditional Media Message Dissemination</td>
<td>Message Coordinator, CSPI Web Manager</td>
</tr>
</tbody>
</table>
|               | 1. Create space on CSPI website for new page detailing information on this issue and linking to additional resources  
|               | 2. Create social media messaging for Twitter and Facebook accounts of CSPI and partnering organizations |                                        |
|               |                                                                                                        | Communications Director                |
| July 2014     | Prepare Organization for Communication Phase                                                          |                                        |
|               | 1. Establish hotline and e-mail address to provide the public                                           |                                        |
|               | 2. Send memo to organization informing them of key messages, managing personnel, and resources for interested individuals  
|               | 3. Instruct employees not to answer any questions about the project to anyone but to direct all questions to the PIO |                                        |
| August 2014 – August 2015 | Communication Phase                                                                                      | Communications Team                    |
|               | 1. Disseminate messages through all identified outlets                                                  |                                        |
|               | 2. Actively monitor media outlets for any responding messages from other stakeholders and respond as appropriate  
|               | 3. Be prepared to counter any conflicting or misinformation                                            |                                        |
| August 2014- December 2014 | Identify potential authors and co-authors for bill                                                      | Advocacy Manager, Legislative Advocates |
|               | 1. Multiple legislators will be identified as mid-term elections in November may change who is in office  
<p>|               | 2. Schedule meetings with potential authors’ staff and policy analysts                                  |                                        |
|               | 3. Secure an author                                                                                     |                                        |</p>
<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Description</th>
<th>Role</th>
</tr>
</thead>
</table>
| August 2014 – January 2015 | Draft proposed bill regulating CAFO use of antibiotics  
1. Research potential policy options  
2. Meet with legislative policy analysts, committee consultants, and staff to discuss policy solutions  
3. Meet with industry and scientific experts to discuss viable policy solutions  
4. Draft bill text | Policy Analyst               |
| February 2015 - indefinite | Introduce Bill and guide through legislative process  
1. Testify at committee and floor meetings  
2. Meet with legislative staff to secure votes at various key points of legislative process  
3. Monitor bill text to ensure the meaning stays true to our goals | Advocacy Manager, Legislative Advocates |
| January 2015 - indefinite | Create grassroots movement to generate public support for bill  
1. Organize letter writing and phone call to lawmakers campaign  
2. Collect signatures on a petition supporting our bill  
3. Schedule opportunities to speak at community rallies and events  
4. Disseminate messages through social media outlets  
5. Collaborate with partner organizations to inform public of bill and gain support | Community Advocate           |
Measurement

Several qualitative and quantitative techniques will be used to measure the effectiveness and success of our communication efforts and legislative campaign. We will seek to answer the questions listed below using the methodology indicated. CSPI recognizes that a long-term commitment is required to this issue in order to effect any real, permanent change in the CAFO practices that promote antibiotic resistance. This communication plan outlines the initial two years of our effort. We will conduct process evaluation throughout all communication phases as needed. In addition, we will utilize these outcome measurements to inform our ongoing efforts to address and eventually mitigate this serious threat to public health.

1. *Did our communications reach our target audiences?*
   We will use analytics to assess the amount of time and quality of media exposure. We will analyze how often our advertisements ran, on which channels, at what times, and who the likely audiences were. We will also measure the traffic to our website as well as any calls or e-mails we received regarding this topic. In addition, we will track the number of meetings we conducted with industry and political leaders, as well as track the quality of the meetings, and the general outcomes of the meetings.

2. *Did our communication efforts result in increased awareness and understanding of CAFOs’ role in the development of antibiotic-resistant bacteria?*
   On our website we will include a brief questionnaire testing individuals’ knowledge in this area. As the campaign continues we will analyze whether scores improve. The questionnaire will also be disseminated through our social media, as well as through our partner organizations’ websites and social media.

3. *Did our communication efforts result in increased awareness and understanding of the risk of antibiotic-resistant bacteria?*
   Please see #2 for measurement methods.

4. *Did our communication efforts result in increase knowledge and understanding protective measures one can take?*
   Please see #2 for measurement methods.

5. *Did our advocacy campaign result in increased activism among the community?*
   We will measure the number of letters sent and phone calls placed to legislators as part of our community advocacy efforts. We will also note the number of speaking opportunities we were invited to as well as communications we received from individuals asking to be involved. We will also track the number of signatures on the petition we will create supporting the bill.

6. *Did our communication efforts result in policy change?*
   We will assess how far along our bill made it in the legislative process. If the bill is not passed in 2015, we will assess the political climate and factors that led to the bill’s defeat. We will then utilize this information to adjust our tactics and continue our efforts.
7. *Did our communication efforts result in a change in industry practice?*

We will conduct focus groups with industry leaders to assess whether there have been voluntary changes in industry practices as a result of our campaign. In addition, based on policy changes, we will determine whether industry is following new policy guidelines or if further regulatory efforts by governing bodies are necessary.
Resources


Appendix A: Preliminary Message Maps for Target Audiences

<table>
<thead>
<tr>
<th>Audience: The general public</th>
<th>Concern: Current mainstream meat producing practices are causing life-threatening antibiotic-resistant strains of bacteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Message 1</strong></td>
<td><strong>Key Message 2</strong></td>
</tr>
<tr>
<td>What are antibiotic-resistant bacteria?</td>
<td>Humans can become exposed to these bacteria and become infected</td>
</tr>
<tr>
<td><strong>Supporting Fact 1-1</strong></td>
<td><strong>Supporting Fact 2-1</strong></td>
</tr>
<tr>
<td>These are bacteria that can cause infections that can be life threatening to children, the elderly, and those with weak immune systems.</td>
<td>Workers in animal operations can carry bacteria from the animals back to their families and communities.</td>
</tr>
<tr>
<td><strong>Supporting Fact 1-2</strong></td>
<td><strong>Supporting Fact 2-2</strong></td>
</tr>
<tr>
<td>Antibiotics are used to treat these infections. But because the bacteria are antibiotic resistant it means that these illnesses are harder to treat.</td>
<td>Waste from the animals that is carrying the bacteria can pollute water and soil that is used by humans, spreading infection.</td>
</tr>
<tr>
<td><strong>Supporting Fact 1-3</strong></td>
<td><strong>Supporting Fact 2-3</strong></td>
</tr>
<tr>
<td>Overuse of antibiotics in facilities that produce animals is causing many of these bacteria to become resistant so we no longer have a way to treat these infections.</td>
<td>Meat and eggs may contain the bacteria and people can get sick from eating these products if they are not cooked and prepared correctly.</td>
</tr>
<tr>
<td>Audience: Government Regulating Agency Officials</td>
<td>Concern: Laws regarding use of antibiotics among animals for non-therapeutic purposes are not stringent enough</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Key Message 1</strong></td>
<td><strong>Key Message 2</strong></td>
</tr>
<tr>
<td>Antibiotic-resistant strains of bacteria are a serious public health threat.</td>
<td>The majority of antibiotics in the U.S. are used for animals for non-therapeutic purposes.</td>
</tr>
<tr>
<td><strong>Supporting Fact 1-1</strong></td>
<td><strong>Supporting Fact 2-1</strong></td>
</tr>
<tr>
<td>Overuse of antibiotics is promoting resistance among bacteria that can cause life-threatening infections in vulnerable populations</td>
<td>Use of antibiotics in CAFOs accelerates the development of antibiotic-resistant strains of bacteria because CAFO conditions promote rapid mutation.</td>
</tr>
<tr>
<td><strong>Supporting Fact 1-2</strong></td>
<td><strong>Supporting Fact 2-2</strong></td>
</tr>
<tr>
<td>There are currently no alternative treatments for many of these infections.</td>
<td>Humans are exposed to these bacteria strains through contaminated water, soil, and animal food products.</td>
</tr>
<tr>
<td><strong>Supporting Fact 1-3</strong></td>
<td><strong>Supporting Fact 2-3</strong></td>
</tr>
<tr>
<td>Humans are also exposed to excess antibiotics that are excreted by the animals and then found in water and soil.</td>
<td></td>
</tr>
<tr>
<td>Audience: CAFO Operators and Industry Leaders</td>
<td>Concern: Current industry antibiotic practices are leading the development of antibiotic-resistant bacteria that can cause potentially fatal and untreatable infections in the population</td>
</tr>
<tr>
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<tr>
<td><strong>Key Message 1</strong></td>
<td><strong>Key Message 2</strong></td>
</tr>
<tr>
<td>Prolonged use of antibiotics for non-therapeutic purposes among animals raised for food is resulting in antibiotic-resistant strains of bacteria.</td>
<td>If people ingests animal products with antibiotic-resistant bacteria it can have severe negative effects on their health.</td>
</tr>
<tr>
<td><strong>Supporting Fact 1-1</strong></td>
<td><strong>Supporting Fact 2-1</strong></td>
</tr>
<tr>
<td>These naturally occurring bacteria can cause potentially fatal infections in humans.</td>
<td>People come in contact with the bacteria through water and soil contaminated by animal waste or by mishandling or undercooking meat that carries the bacteria.</td>
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<tr>
<td><strong>Supporting Fact 1-2</strong></td>
<td><strong>Supporting Fact 2-2</strong></td>
</tr>
<tr>
<td>Animals may become hosts for these bacteria and pass them along to humans, even if the animals do not look infected.</td>
<td>These antibiotic resistant strains of bacteria are not treatable with current drugs.</td>
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<tr>
<td><strong>Supporting Fact 1-3</strong></td>
<td><strong>Supporting Fact 2-3</strong></td>
</tr>
<tr>
<td>These strains are passed along to people but because they are now antibiotic resistant this means they cannot be treated by antibiotics in people</td>
<td>Infections caused by these bacteria can cause death in children, the elderly, and those with weak immune systems.</td>
</tr>
</tbody>
</table>
Antibiotics are medications used to treat infections that are caused by bacteria. Due to the overuse of antibiotics bacteria are developing a resistance to these drugs. This means that antibiotics are no longer effective for treating the infections caused by the bacteria. Experts warn that if this pattern continues, doctors will be unable to treat these infections and people could become seriously ill or die, especially as new antibiotics are limited. It is important that we take immediate action to prevent bacteria from becoming more resistant to antibiotics by not overusing or misusing these important medications. This will assure we have effective medications for treating these life-threatening infections.

- Large-scale industrial animal feeding operations that raise animals for food are often overcrowded and dirty. This is the ideal environment for bacteria to grow, which can cause infection in the animals.
- To prevent infections, farm operators feed animals low-doses of antibiotics over long periods of time.
- Antibiotics are also given to animals to increase their growth rates.
- These practices don't kill all the bacteria. Instead it allows bacteria that are strong enough to develop a resistance to the antibiotics.
- These bacteria then infect humans through the food supply and contaminated water. If these bacteria are resistant to antibiotics, doctors cannot effectively treat them. The infected person may then become extremely sick or even die.

What You Can Do

- Inform Yourself! Visit [http://www.cdc.gov/narms/animals.html](http://www.cdc.gov/narms/animals.html) to get more information about the risks of antibiotic use in animals.
- Write to Your Legislator. Demand stricter laws around the use of antibiotics in animals that are being raised for food.
CSPI to Launch Legislative Campaign Addressing Serious Public Health Consequences of Antibiotic-Resistant Bacteria From Animal Food Products

FOR IMMEDIATE RELEASE

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Overuse of Antibiotics in Industrial Farming Contributing to Rise in Antibiotic-Resistant Bacteria; CSPI Seeks Legislative Action

Washington, D.C., June 6, 2014 – On April 30, 2014 the World Health Organization (WHO) released a report that warns of the severe public health consequences of the increasing prevalence of antibiotic-resistant bacteria. Antibiotic-resistance, which occurs when bacteria change so that antibiotics are no longer effective in treating people with bacterial infections, puts people of all ages, nationalities, and genders at increased risk for severe illness and death. The issue is we currently do not have the antibiotics developed to treat these bacteria, causing serious untreatable illnesses and conditions such as outbreaks of MRSA. The WHO has called on everyone to take action to further prevent the development of antibiotic-resistant strains of infectious bacteria. As a public advocacy organization that is greatly concerned with the health of the American people, Center for Science in the Public Interest will be launching an informational and legislative campaign to bring about systematic changes that will help us fight this oncoming threat. Our campaign will provide much needed information on the dangers of antibiotic-resistant bacteria, the farm industries role in the issue, and seek to take legislative action that will prohibit irresponsible industry practices that contribute to this issue.

A key contributor to antibiotic-resistence in the U.S. is the industrial farm animal business. Of the approximately 28 million pounds of total antibiotics used in the U.S. per year, an estimated 25 million pounds of antibiotics are provided to animals. This results in the development of antibiotic-resistant strains of bacteria leading to an increased exposure to both untreatable bacterial infections and frequent low-doses of antibiotics disseminated into the general population.

To maximize production of cattle, swine, and poultry for food while minimizing costs, animal producers have increasingly moved away from small, family-owned farms to large factory productions for raising animals until they are ready for slaughter. Today, approximately 40% of all livestock and poultry in the U.S. are raised in Confined Animal Feeding Operations, or CAFOs. CAFOs are large-scale industrial animal operations in which animals are kept in confined and crowded areas with no access to grazing or pastureland. These establishments are overcrowded and unsanitary with little air ventilation. Animal waste accumulates on the ground until it is either washed or scraped away and placed in storage pits.

These unhygienic conditions are perfect for the growth and promotion of infection-causing bacteria. To combat the spread of bacterial infections among the animals, low-doses of antibiotics are added to animal feed. Unfortunately, this prolonged exposure to low-doses of
antibiotics is not enough to kill all the disease-causing bacteria. Instead, it allows an opportunity for the bacteria to develop a tolerance to the drugs. As bacteria reproduce they self-select for this tolerance, resulting in strains of bacteria that are fully resistant to our current antibiotics. These bacteria are present both in the animals and in the animal waste. The general population is then exposed to these bacteria through infected meat that is not properly handled or cooked, drinking water that has been contaminated by waste runoff from the CAFOs, contaminated produce that has been given manure from the waste produced by the CAFOs, or CAFO workers becoming carriers of the bacteria and bringing it back to their communities.

There are numerous ways individuals can protect themselves from infection. Individuals can purchase Certified Organic meat, which legally cannot come from an animal that has been treated with antibiotics. It is also important for individuals to practice the four steps of food safety in the home as prescribed by the Centers for Disease Control and Prevention (CDC): clean, separate, cook, chill (see http://www.foodsafety.gov/). If individuals would like to provide public support to our campaign or learn more information about the risks of antibiotic-resistant bacteria and how to protect themselves they can contact us at 1800-888-888 or visit our website at https://www.cspinet.org/.
Appendix D: Priority Media Outlets

This is an incomplete list of media outlets that will be prioritized to disseminate our messages. As other outlets are identified this list should be updated.

Television Stations
- PBS
- NBC
- FOX
- FOX News
- CNN
- ABC
- CBS
- Local news channels in the top 50 metro areas

Newspapers
- Washington Post
- The Wall Street Journal
- New York Times
- Los Angeles Times
- Chicago Tribune
- USA Today
- Daily News of New York
- New York Post
- Chicago Sun-Times
- The Denver Post
- Local newspapers in top 50 metro areas

Radio Stations
- National Public Radio