Public Health Recommendations to the CDC

Data: 30 samples from Centers for Disease Control and Prevention (CDC) surveillance and outbreak investigations

Species: All 30 samples were identified to be *Listeria monocytogenes*.

1. Antibiotic Resistance Awareness and Treatment Guidance

- **Recommendation**: Healthcare providers should be alerted about the inherent resistance of *L. monocytogenes* to fosfomycin and lincosamide antibiotics. This information should be disseminated through CDC's communication channels to ensure that ineffective antibiotics are not used in treating infections.
- Action: The combination of amoxicillin and gentamicin appears to be the best treatment option for Listeria infections, as the outbreak samples do not have macrolide resistant genes and are inherently resistant to Fosfomycin and lincosamides. This combination should be highlighted as the most effective treatment option currently known.

2. Genetic Analysis and Surveillance

- **Recommendation**: Utilize PulseNet to perform genetic comparisons of the core genome sequences of outbreak samples against the national database. This will help in identifying whether the outbreak strain has appeared in other regions or contexts.
- **Action**: Ensure that samples from all reported cases are promptly submitted for sequencing and comparison. This will aid in tracking the spread and evolution of the strain.

3. Epidemiological Investigation

- Recommendation: Conduct thorough epidemiological investigations including interviews
 with affected individuals regarding their food consumption prior to the onset of illness.
 This will help in identifying common sources of infection.
- Action: Coordinate with local health departments to standardize and expedite the interview process to quickly identify potential links to soybean sprouts or related products.

4. Food Safety and Inspection

• **Recommendation**: Review and analyze records from the State Department of Health Food and Drug Branch to check for any prior detections of *L. monocytogenes* in food processing facilities that handle soybean sprouts or related products.

• **Action**: Increase inspection and sampling frequencies at facilities processing soybean sprouts and related products to ensure compliance with food safety standards.

5. Product Recall and Public Notification

- **Recommendation**: If epidemiological and genetic evidence strongly suggests that soybean sprouts or products containing soybean sprouts (like tofu noodles) are the source of the outbreak, initiate a recall of the implicated products.
- Action: Provide clear guidance to consumers about the recall and safe handling of the affected products through media releases and public health alerts.

6. Public Education and Outreach

- **Recommendation**: Provide guidance to consumers, restaurants, and retailers on the proper handling and cooking of sprouts to reduce the risk of Listeria contamination.
- **Action**: Develop and distribute educational materials that highlight safe food practices, especially in relation to soybean sprouts and similar high-risk foods.

7. Long-Term Monitoring and Research

- **Recommendation**: Support ongoing research into the resistance patterns of *L. monocytogenes* and the effectiveness of various antibiotic treatments.
- **Action**: Maintain vigilant surveillance for *L. monocytogenes* in the food supply chain, especially in high-risk products like sprouts. Collaborate with state and local health departments to rapidly identify and respond to any future outbreaks.