Vol. 4, No. 3



Commonly Asked Questions & Answers ... 4

Small Plant NEWS

Editor: Keith Payne

Production: Joan Lindenberger, Sally Fernandez

Design: Gordon Wilson

Contact: Small Plant News, USDA/FSIS, Aerospace Building, 3rd Floor, Room 405, 14th and Independence Ave., SW, Washington, DC 20250. (800) 336-3747 E-mail: SmallPlantNews@fsis.usda.gov

The U.S. Department of Agriculture prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's Target Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Ave., SW, Washington, DC 20250-9410, or call (800) 795-3272 (voice) or (202) 720- 6382 (TDD). USDA is an equal opportunity provider and employer.

Controlling *Listeria* in Ready-to-Eat Products:

10 Helpful Measures You Can Implement in Your Plant

By Beth McKew

revious issues of Small Plant News (Vol. 3, No. 11 and 12) featured articles describing elements of effective control programs for Listeria monocytogenes (Lm), a bacterial pathogen that can contaminate post-lethality exposed ready-to-eat (RTE) meat and poultry products, and which has been the cause of several outbreaks of foodbourne illness. Effective control programs for Lm will include preventive measures to eliminate cross contamination between RTE and non-RTE products, the design and implementation of a sanitation program focusing on common bacterial harborage sites, and strict adherence to temperature controls.

Small Plant News has outlined 10 proactive measures you can take to control contamination from Lm in an RTE environment. The following steps are not listed in any particular order, but if you implement them collectively, you can further protect your customers and your business.

Separation of Raw and RTE Products

Ideally, RTE and raw areas should be separated by physical barriers (walls) with separate air handling,



employees, equipment, utensils, tools, etc. However, if this is not possible, then RTE and raw processing areas should be separated by time or space. For example, schedule RTE processing on a different day than raw processing. Or, if processing on different days is not possible, always schedule the production of RTE products first, followed by raw products.

Also consider using separate equipment for RTE and raw processing. Or, if separate equipment is not possible, use equipment for RTE processing first, followed by equipment for raw processing.

In establishments that produce FSIS and U.S. Food and Drug Administration (FDA)-regulated products, it may also be advisable to separate the products to maintain the

Continued on Page 2 ...

... Continued from Page 1

safety and integrity of FSIS-regulated products.

Personal Hygiene



Hands or gloves can readily transfer *Lm* from one surface, person, or food product to another. Washing hands and sanitizing gloves before resuming workplace duties after breaks will reduce the spread of bacteria. Employees should be trained and retrained on hygienic practices and proper hand

washing techniques on a regular basis. Monitoring your employees to observe if they are following personal hygiene practices in-plant is another important aspect of controlling *Lm*.

Traffic Patterns



If you assign different personnel for RTE and raw processing, restrict employee travel to and from non-RTE areas during RTE processing. Avoid passing raw product through RTE areas and RTE product through raw areas. All these measures will help prevent the contamination of RTE

product with *Lm*.

In addition to restricting access to RTE processing areas, using color-coded coats in RTE areas and non-RTE areas will further reduce the risk of bringing *Lm* into RTE processing areas. Mandatory footbaths, clean gloves, hairnets, and clean unused coats upon returning to the RTE processing area are additional preventive measures that will also minimize the spread of this pathogen.

Sanitation



Maintaining sanitation in the RTE processing environment is crucial to controlling *Lm*. *Lm* can form harborates in areas that are not thoroughly cleaned and spread to food contact surfaces and product. Keep records of sanitation procedures to be used for processing RTE products that are

covered by the *Listeria* rule as required in 9 *Code of Federal Regulations* (CFR) Part 416. Also, monitor the performance of sanitation procedures and maintain records of sanitation procedures performed in RTE processing areas, as well as throughout your plant. These actions may shed some light on any lapses in procedure or identify the need for employee

training or changes to sanitary procedures. Intensified sanitation should be performed in response to positive test results from *Listeria* testing programs. By increasing the frequency of sanitation, breaking down equipment for further cleaning, and heating or steam cleaning large pieces of equipment, establishments can better address possible harborage and cross contamination in the establishment.

Room Temperature



Temperatures in processing areas and packaging rooms should be maintained and regularly monitored and recorded, as stated in your Hazard Analysis and Critical Control Point (HACCP) plan, Sanitation Standard Operating Procedures (SSOP).

and/or prerequisite programs, to prevent *Lm* growth in the RTE processing environment. FSIS recommends maintaining the temperature below 50 °F in packaging areas for products that are to be refrigerated or frozen.

Water



Because a moist environment is conducive to the growth of *Lm*, cooling units, air handling equipment, standing or dripping water, and condensation all contribute to a very hospitable environment for the bacteria. If you stop the cause of standing or dripping water, clean cooling

units and air handling equipment at specific frequencies, and keep track of dates cleaned and cleaning due dates, these preventive steps can make a difference in stopping the spread of Lm.

During repairs, production of RTE products should be stopped. All equipment and processing areas should be cleaned and sanitized once operations resume after repairs are completed. Additionally, equipment and processing areas should be tested for *Lm* or *Listeria* species before resuming RTE production.

Equipment Maintenance



It isn't just leaky roofs and broken air-conditioning units that need prompt attention. Rusty, pitted, or peeling tools and equipment parts should be promptly replaced with new, smooth-surfaced ones. Irregular surfaces can be difficult to clean and make for perfect hiding spots, or harborage sites, for

Generic Food Defense Plan Now Offered in Four Other Languages

By Jane Johnson

n its continuing effort to reach as many small and very small plant owners/operators as possible, FSIS' Office of Outreach, Employee Education, and Training is pleased to announce that the generic food defense plan, Food Defense Plan: Security Measures for Food Defense, has been translated into Spanish, Korean, Vietnamese, and traditional Mandarin Chinese.

FSIS believes that it's essential for slaughter and processing plants under the Agency's jurisdiction to have a functional food defense plan in place to increase the preparedness and ability of small plant owners and operators to respond during an emergency. A functional food defense plan may reduce the risk of unsafe product and economic loss, reduce theft, reduce the need for additional regulation on food defense, and reduce company liability.

The Food Defense Plan: Security Measures for Food Defense is a valuable tool for you because it's simple, easy to understand, and can be modified to address the specific operation's needs better. The foreign language versions are posted alongside the English language version on FSIS' Web site at www.fsis.usda.gov/Food_Defense_&_Emergency Response/index.asp.

If you, or someone you know, need copies of this generic food defense plan and other food defense resources, call the Small Plant Help Desk at (877) 374-7435. You can also send your request to *InfoSource@fsis.usda.gov*.

Plan de protección alimentaria terdidas de seguritad para la protección alimentaria	Kế Hoạch Phong Vệ Thực Phâm Các Bán-Phụi là Nan Phong vi Thọc Phâm
Bades Streets and Control of the Con	Marine Sand House Sand Sand House
食品防卫计划 *5年27年8月	식품 방어 계획 사용 방어로 위한 보안 조치
9944 E. C.	region

Food Safety Resources

By Sally Fernandez

s you know, FSIS has regular podcasts on issues affecting small and very small plants. There's a wide variety of topics these podcasts cover including labeling, risk assessment, and humane handling.

For your convenience, FSIS' Office of Outreach, Employee Education, and Training has compiled all 70 podcasts from 2009 on one DVD. It's easy to order a free copy. Just fill out the order form from the Food Safety Resources brochure you received in the mail and fax it to (202) 690-6524. To order a copy, go to www.fsis. usda.gov/Science/HACCP_Resources_Brochure/index. asp or call the Small Plant Help Desk at (877) 374-7435. You also can view the podcasts online at www.fsis.usda.gov/news_&_events/Food_Safety_Inspection_Podcasts/index.asp.



Commonly Questions & Answers

If a federally inspected establishment conducts custom exempt slaughter and processing operations on the official premises, is it required to implement its SSOPs on the days that it conducts only custom exempt operations?

Yes. The regulations require that any time custom operations are conducted in an official establishment, all of the provisions of 9 CFR Part 416 (sanitation) must apply to those operations [9 CFR 303.1(a)(2) (i)]. Establishments operating under custom exemption also are required to document the implementation and monitoring of the SSOPs and any corrective actions required [9 CFR 416.16(a)]. These records must be maintained and be available to FSIS [9 CFR 416.16(c)].

... Continued from Page 2

Lm. Tools used for RTE equipment should be cleaned and sanitized before each use. Equipment maintenance records and a monitoring program are important so that damaged equipment can be repaired or replaced as soon as the need is identified.

Rodent control



Rats, mice, and insects are sources of *Listeria* and other microbial contamination. Effective rodent and insect control programs play a critical role in preventing *Lm* from entering your plant and from spreading throughout your facility, including into RTE processing areas.

Sanitizers



Sanitizers are only effective if mixed as described in the manufacturer's instructions. Procedures should be in place to ensure that sanitizer concentrations used on equipment, footbaths, and other food and non-food contact surfaces are adequately

maintained. Records should be kept to verify that the correct procedures were followed. It's also important that employees understand that *Lm* can form biofilms if residual food is left on the equipment. Food contact surfaces should be thoroughly cleaned and then sanitized so that biofilms are not given the chance to develop. Sanitizers should also

be rotated to ensure *Lm* does not develop resistance to particular sanitizers in use at the esblishment.

Listeria Testing Program



To ensure that testing is as comprehensive as possible, maintain a record of all food contact surfaces (as required in 9 CFR 430) and environmental surfaces in the processing area to be tested. Ensuring that all of the identified surfaces are actively sampled and have an

equal opportunity of being selected for sampling will help make the results more meaningful. Include the supporting documentation of the testing frequency in your Lm sanitation program, as well as supporting documentation to support which alternative you are using in your HACCP, SSOP, or other prerequisite program, to support your claim that Lm is not a hazard reasonably likely to occur in your product. Additionally, a key point to remember is that an Lm testing program is a verification of the effectiveness of your food safety program to control this pathogen, not a substitution for carrying out an effective control program.

By enacting a concerted approach with all 10 of these proactive measures, you can contribute immensely toward the effort in preventing foodborne illness from *Lm*. FSIS' Small Plant Help Desk also has numerous resources to help you prevent *Lm* contamination in your plant. Call (877) 374-7435 or send your inquiry to *InfoSource@fsis. usda.gov*.