

USING THE HACCP CONCEPT IN ROUTINE FOOD INSPECTIONS

by Priscilla Luongo, B.S., R.S. and Deborah Katz, M.S.

The Division of Food and Drugs, as well as the U.S. Food and Drug Administration, have for some time been promoting an updated inspectional approach, known as *Hazard Analysis Critical Control Point (HACCP)*. The HACCP inspectional procedure places more emphasis on the food handling practices found to result in foodborne illness, and less emphasis on physical facilities, which generally have less public health significance. (See related articles in the July, 1987 *Reporter*.)

Many Massachusetts health agents have now been trained in HACCP methodology. Reports from the field are positive; HACCP has been particularly useful in foodborne illness investigations and institutional inspections. But many health agents report that they lack the time to use full-fledged HACCP procedures in their routine inspections. (See *HACCP: The Massachusetts Experience* in the Spring, 1989 *Reporter*.) As a result, we've formulated the HACCP *concept*; it can be integrated into routine inspections with a minimum of additional time required.

Traditionally, in a routine inspection, the health agent does the following:

1. Identifies self to person in charge.
2. Inspects the facility, noting violations.
3. Writes report.
4. Reviews the report with the manager in an exit interview.
5. Follows-up: may include reinspection and appropriate enforcement action as needed, filing reports.

In a routine inspection incorporating HACCP concepts, Step 1 is somewhat amplified. If possible, the health agent reviews the menu with the manager or arranges to also talk with the chef or kitchen supervisor — someone familiar with food preparation. During the menu review, the inspector has the opportunity to ask questions about sources, transport, preparation, storage and handling of food. A great deal of information can be uncovered in a surprisingly short time. The inspector has identified possible concerns to focus on during the actual inspection, and can efficiently identify violations and problem areas.

For example, let's follow a health agent beginning a cafeteria inspection. She identifies herself to the person in charge, who provides a menu. On the health agent's suggestion, the kitchen supervisor then joins them to discuss some of the food preparation procedures.

The agent, applying the HACCP concept, asks the manager and kitchen supervisor some of the following questions. As they talk, she notes potential problems and concerns.

Agent: Is your soup canned or homemade?

Manager: *All our soups are made fresh every other day.*

Agent: Where do you purchase your meat, poultry and other foods?

Manager: *Boston Meat Company, Nash Foods in Smithville, Fuller City Produce and Hazy Oak Dairy in East Oshkosh.*

Agent: What do you do with your leftover soups and casseroles?

Manager: *They're refrigerated and reheated the next day.*

Agent: What kind of containers do you use to store leftovers?

Manager: *Any one that's available, usually the 5 gallon buckets.*

Agent: And are the leftovers covered and put into the walk-in right away?

Manager: Oh yes!

Agent: How is the tuna noodle casserole prepared?

Manager: Well, that's a frozen product that we have to thaw and then bake off.

Agent: How do you thaw out your frozen foods?

Manager: In the walk-in.

Agent: To what temperature is the casserole cooked?

Manager: Well, we cook that for about an hour at 350°.

Agent: Do you use a food thermometer to measure temperatures of foods?

Manager: We have thermometers in all our refrigerators and freezers.

Agent: Do you do all your vegetable prepping for salads?

Manager: Yes.

Agent: Do you wash all your produce?

Manager: Oh yes!

Agent: How do you clean your cutting boards and knives and other equipment that is manually washed?

Manager: We use plenty of soap and hot water!

Agent: Do you use a sanitizer?

Manager: Yes, we have a sanitizer for the dishwashing machine.

Agent: Are your salad dressings homemade or commercial?

Manager: We buy them already made in the one gallon plastic containers.

Agent: How do you mix and plate the salads?

Manager: We mix the salad in a large plastic tub and plate it by hand. But everyone must use disposable gloves at all times. It's the rule around here!

Agent: Are your hamburgers preformed or do you shape them yourself?

Manager: They are preformed patties that go from the freezer to the grill.

The agent then asks about menu items not being prepared or served that day. She identifies some possible concerns with these items, although she will not be able to directly observe their preparation during the inspection.

Agent: I think I'm ready to walk through. Thank you!

The agent then begins Step 2 of the inspection. Keeping in mind the menu review and the HACCP concept, she concentrates on:

- inquiring about food supplies and food preparation procedures;
- taking temperatures;
- observing food handling and employee hygienic practices;
- evaluating potential for contamination and time/temperature abuse; and
- noting violations and establishing control procedures for monitoring critical control points.

After walking through the facility, observing and asking questions, the agent's list of violations includes:

- Tuna casserole in original container thawing on counter with internal temp. of 55°F.
- Tuna casserole on service line at 128°F.
- Chicken salad in salad bar unit at 65°F.
- Foodhandlers using disposable gloves noted handling foods and garbage barrels with same gloves.
- Raw chicken on cutting board directly next to vegetables being prepped for salad.
- Toxic cleaning compounds stored over food preparation sink.
- No stem-type food product thermometer available to test temperatures of phfs.

She also notes some concerns based on the menu review only. For example, although beef stew is not offered today, the kitchen supervisor indicated that it often appears on the menu; the dish is cooled in large containers in the walk-in, possibly leading to temperature abuse.

Based on the violations she observes directly and the concerns raised during the menu review, she identifies critical control points. In the exit interview, she reviews these with the manager, and together they develop working monitoring procedures.

The following control points were identified for assessment:

Critical Control Point Monitoring Procedures	
<i>Thawing</i>	<ul style="list-style-type: none"> • Thaw frozen PHF casseroles under refrigeration.
<i>Cooking</i>	<ul style="list-style-type: none"> • Equip foodhandlers with stem-type thermometers to test temperatures of PHFs. • Check temperatures of PHFs after cooking to ensure adequate cooking temperatures are achieved. (Tuna casserole 140°F minimum).
<i>Hot Holding</i>	<ul style="list-style-type: none"> • Periodically test temperatures of PHFs on service line to ensure product is maintained at 140°F minimum.
<i>Cooling</i>	<ul style="list-style-type: none"> • Pre-chill salad ingredients to 45°F before mixing. • Keep backup supply of mayonnaise refrigerated at all times for PHF salad preparation. • Rapidly cool leftover PHF to 45°F within 4 hours using shallow pans, icebaths, agitation etc. before transferring to larger storage containers.
<i>Cross-Contamination</i>	<ul style="list-style-type: none"> • Provide in-service training on proper use of disposable gloves to avoid cross-contamination of food
<i>Employee Practices</i>	<ul style="list-style-type: none"> • Monitor employees use of disposable gloves and take appropriate action if improper use is noted. • Use separate cutting boards for ready to eat foods (such as vegetables for salads) and raw PHFs.
<i>Food Handling Surfaces</i>	<ul style="list-style-type: none"> • Sanitize cutting boards, food contact surfaces and cooking utensils after each operation
<i>Toxics</i>	<ul style="list-style-type: none"> • Designate storage space for toxics away from food storage and preparation areas.