

# Retail Food Establishments: Freezing for Parasite Destruction



**Public Health**  
Prevent. Promote. Protect.

## Five Key Risk Factors

*repeatedly identified in  
foodborne illness outbreaks:*

1. Improper Holding Temps
2. Inadequate Cooking
3. Contaminated Equipment
4. Food from Unsafe Sources
5. Poor Personal Hygiene

*Item 4 is addressed on this sheet.*

*Citations 3-402.11 & 3-402.12*

**3-402.11** – Parasite Destruction

**3-402.12** – Record Creation and Retention

## Public Health Reasons

Lightly cooked, raw, raw-marinated and cold-smoked fish may be desired by consumers.

In order to ensure destruction of parasites, fish may be frozen before service as an alternative to adequate cooking.

The FDA Office of Seafood Safety has found that certain species of seafood may contain hazardous parasites when not properly cooked or frozen.

## When is freezing required as a public health control?

When fish are served “ready-to-eat” without being fully cooked. Examples:

- » Ceviche
- » Sashimi
- » Sushi
- » Drunken Crabs
- » Cold-smoked fish
- » Undercooked grilled fish

## The products listed above are required to be frozen as per **3-402.11(A)**:

- » Frozen & stored at -4°F for 7 days, or
- » Frozen & stored at -31°F for 15 hours, or
- » Frozen solid at -31°F and stored at -4°F for 24 hours

## When is freezing not required as a public health control per **3-402.11(B)(1-5)**?

- » Molluscan shellfish
- » Aquacultured fish
- » Fish eggs
- » Tuna species: Atlantic, Bluefin, Yellowfin, and Bigeye
- » Scallop products consisting only of the shucked adductor muscle

## Recordkeeping:

- » For all species that require freezing for parasite destruction, the freezing temperature and time must be recorded. These freezing records must be maintained individually for each lot of fish as it is placed into and taken out of the freezer.
- » If the fish was frozen by an approved supplier, a written purchase agreement or a letter of certification from that supplier may be substituted for freezing records.
- » The freezing record or written purchase agreement must be maintained for at least 90 days after the last product of each lot is sold.

## Recommendations:

- » Freezing for parasite destruction should be performed using a dedicated freezer.
- » Temperatures should be continuously monitored by using a data logging device, with daily visual checks to ensure that the freezing temperature specifications are being met consistently.

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## Parasite Destruction for Raw or Undercooked Fish

If a food establishment (FE) serves raw or undercooked (less than 145°F) fish, the FE operator shall provide proof that the fish has been frozen for parasite destruction according to the Illinois Food Code Section 3-402.11(A). Some species of fish carry parasites which may be harmful to humans if eaten. Freezing is a method of killing the parasites before serving the fish to the consumer. CUPHD/CCPHD will review the records of parasite destruction during the inspection process.

Fish may be frozen for parasite destruction in the following manner:

- 1) Frozen and stored at a temperature of -4°F or below for a minimum of 168 hours (7 days) in a freezer;
- 2) Frozen at -31°F or below until solid and stored at -31°F or below for a minimum of 15 hours; or
- 3) Frozen at -31°F or below until solid and stored at -4°F or below for a minimum of 24 hours.

If the operator freezes the fish on-site very specific records must be kept. See 2-5 below.

If the FE purchases its fish from a supplier, a letter must be provided which states that the fish provided by the supplier is frozen for parasite destruction according to the Illinois Food Code requirements above. Below is the information which must be provided in the parasite destruction letter from the supplier:

- 1) Name and address of the establishment;
- 2) Name and address of the supplier;
- 3) All species of fish that are frozen for parasite destruction and provided to the establishment;
- 4) Exact temperature to which the fish specified in (3) above are frozen;
- 5) The length of time for which the fish specified in (3) above are frozen at the temperature specified in (4) above;
- 6) Contact name and phone number for person in charge of parasitic destruction operations at the supplier; and
- 7) Signature of contact person listed in (6) above.

There are some species of fish which are exempted from the parasite destruction requirement.

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