

Guidance Document for a Model Wild-harvested Mushroom Program

Updated 5/5/2014

The provisions at 3-201.16(A) of the FDA model Food Code are clear that wild-harvested mushrooms may only be considered an approved source if the regulatory authority has approved them under its regulations. The Annex clarifies that a regulatory authority may establish its approval process by applying its own laws and policies and states that regulatory authorities have flexibility in establishing its approval process.

The Annex recommends a regulatory authority consider the following elements when developing wild-harvested mushroom regulations:

1. Resources & criteria to select wild mushroom species for service or sale;
2. Record-keeping and traceability to assure safety of wild-harvested mushrooms;
3. Written buyer specifications that include:
 - a. Identification by the scientific name and the common name of the mushroom species;
 - b. A statement that the mushroom was identified while in the fresh state;
 - c. The name and contact information of the person who identified the mushroom and the mushroom seller; and
 - d. A statement as to the qualifications and training of the identifier, specifically related to mushroom identification.

The Annex also recommends that the regulatory authority establish qualifications or training for mushroom identifiers.

This document, developed by the Conference for Food Protection Wild-harvested Mushroom Committee, updates guidance developed in 2012. This document assists regulatory authorities in developing language to establish approval criteria and includes wild-harvested mushroom identifier course learning objectives that regulatory authorities may consider when developing or approving certification or training courses.

Definition

For the purpose of this document, a Wild-harvested Mushroom means a fresh mushroom that has been picked in the wild and has not been processed (e.g., dried). A Wild-harvested Mushroom does not include mushrooms that have been packaged in an approved food processing plant or cultivated mushrooms.

Wild-harvested Mushroom Approval Language

In addition to parameters established by a regulatory authority through regulation, a regulatory authority should require the food establishment provide to the regulatory authority a one-time notification for approval prior to use or sales.

Wild-harvested Mushroom Selection Criteria and Resources

Regulatory authorities may specify criteria or form a committee to establish a list of approved of wild-harvested mushroom species that may be considered an approved source. Criteria may include mushrooms that are:

- already in commerce according to foragers, chefs and dealers in the jurisdiction;
- easily identified with field characteristics as determined by the jurisdiction;

- common, in a specific jurisdiction as determined by a committee;
- generally considered a low allergic reaction risk as determined by a committee; or
- approved for sale in other states.

If a regulatory authority chooses to form a committee to establish a list of approved wild-harvested mushroom species or serve as a resource to the regulatory authority, the committee may include:

- regulatory agencies from departments that oversee restaurants, markets and farmers' markets;
- local Poison Control Centers;
- local mycological organizations;
- restaurant associations;
- college or university personnel who are competent identifiers of wild mushrooms;
- commercial wild mushroom foragers;
- wild mushroom brokers;
- retailers and food markets; or
- chefs who serve fresh wild harvested mushrooms.

Record-Keeping and Traceability

To facilitate traceback and foodborne illness investigation, the regulatory authority should consider regulatory language that outlines appropriate record-keeping at the food establishment. The regulatory authority should develop elements record-keeping documents (e.g., a tag or label), taking into consideration factors unique to each local or regional jurisdiction, and should specify records retention.

If the regulatory authority requires that wild-harvested mushrooms be accompanied by a record, the wild harvested mushroom records should remain attached to the container in which the wild-harvested mushrooms are received and stored until the container is empty.

The records may include the following information:

- Approved identifier name;
- Address & phone number;
- Latin binomial name and locally used common name of the mushroom;
- Harvest date;
- Harvest location (e.g., town, county, township, etc.);
- Harvest weight; and
- Name of forager, if not harvested by an approved identifier.

Commingling of wild harvested mushroom lots is not recommended as it serves to confound traceback or foodborne illness investigations and could hinder efforts to remove implicated product from the food chain.

The records should be retained for at least 90 days from the date the container is emptied. This retention period accounts for potentially long asymptomatic latent periods (that can be up to 14 days from consumption), diagnosis and investigation timeframes that can be up to 3 weeks, and already existing records retention timeframes specified in the FDA model Food Code for other foods.

Written Buyer Specifications

In addition to records that should be kept with the wild-harvested mushrooms at receipt and during storage to facilitate traceback and foodborne illness investigation, the food establishment should keep

a written buyer specification, which should remain on file in the food establishment for at least 90 days from the date of sale or service. This written specification should include:

- Identification by the scientific name and the common name of the mushroom species;
- A statement that the mushroom was identified while in the fresh state;
- The name and contact information of the person who identified the mushroom and the mushroom seller; and
- A statement as to the qualifications and training of the identifier, specifically related to mushroom identification.

Consumer Notification

If the regulatory authority requires that a food establishment only receive wild-harvested mushrooms that have been identified by a person who is certified or has received training required by the regulatory authority and the food establishment maintains records and buyer specifications, then requiring a consumer advisory is not necessary.

However, if the regulatory authority does not require certification or training or the approval process does not include recommended elements outlined in this document, then the regulatory authority should specify that approval means that a food establishment that sells, uses or serves mushrooms picked in the wild shall ensure the mushrooms are conspicuously identified by a label, placard, or menu notation that states:

- The common and usual name of the mushroom; and
- The statement "Wild-harvested mushrooms: not an inspected product and is harvested from a non-inspected site."

Wild Harvested Mushroom Identifier Course Learning Objectives

A regulatory authority that chooses to require certification of mushroom identifiers or require that identifiers successfully complete training recognized or developed by the regulatory agency should specify the training meet learning objectives.

The regulatory authority should create measureable learning objectives, such as testing or hands-on identification (lab-practical) specific to the jurisdiction and the region. The objectives listed are overall course objectives. Instructors should develop module-specific objectives to meet the overall course objectives.

Critical learning objective elements include:

1. Illness information;
2. Identification;
3. Harvesting;
4. Best handling practices;
5. Regulatory requirements.

Illness Information (Symptoms, Cause and Prognosis)

- Identify foodborne illnesses associated with the consumption of wild harvested mushrooms and the mushrooms who cause those symptoms.

- Describe the symptoms and the consequences of consuming poisonous mushroom species specific to the region in which the mushrooms will be harvested.

Identification

- Describe the anatomy of a mushroom as it relates to identification.
- Demonstrate the use of keys in the identification of edible mushrooms and their poisonous look-a-likes.
- Demonstrate accurate identification of edible species of mushrooms from physical specimens.
- Demonstrate ability to differentiate between edible and their poisonous look-a-likes from physical specimens.

Harvesting

- Describe specific information in regards to the habitat and seasonality in which mushrooms can be harvested, including areas that are considered inappropriate for harvest (treated areas, contaminated sites, etc.)
- Describe proper collection and harvesting techniques.
- Demonstrate the seasonality and locality differences, if any, between edible mushrooms and their look-a-likes.

Best Handling Practices

- Recognize and describe the conditions and practices that could contribute to post harvest contamination.
- Describe storage and transportation methods that would prevent the contamination of mushrooms.
- Describe the relationship between personal hygiene and the potential for contamination that could contribute to foodborne illness.
- Be able to describe picking area/conditions where mushrooms should not be harvested due to soil or other conditions that may lead to foodborne illness (ex. Feedlots, mushrooms that appear to be contaminated by birds or other animal species).

Regulatory Requirements

Cite the regulatory requirements in the local jurisdiction for wild mushroom harvesting location and distribution.

Additional Recommendations

In addition to the training or certification required for wild-harvested mushroom identification, food worker training should be required if it is available. Although not a public health issue, a jurisdiction is encouraged to include the topic of harvest methods for species conservation in the training or certification program.