ServSafe Examination Development Frequently Asked Questions (FAQ)

How is the ServSafe examination developed?

The ServSafe examination development follows three basic steps. First, a **J**ob Task **A**nalysis (JTA) is completed. The JTA outlines the essential knowledge, skills and abilities required by an entry-level practitioner in order to serve food safely and protect the public from foodborne illness. Next, items are written, reviewed and pilot tested. Finally, standard setting is performed, and the passing score is determined. All of these steps require input from industry professionals, or **S**ubject **M**atter **E**xperts (SMEs).

Initial Steps in Exam Development



What guidelines are used in developing the exam?

The development of the ServSafe examination is based on guidelines put in place by the American Educational Research Association, the American Psychological Association, and the National Council for Measurement in Education (Standards for Educational and Psychological Testing). Borrowing from these standards, the Conference for Food Protection (CFP) has put in place specific standards for developing food safety examinations. The development of the ServSafe examination follows these guidelines as well.

What is a JTA?

A Job Task Analysis (JTA) is an outline of the knowledge, skills and abilities required of an entry-level practitioner in order to perform his or her job safely and correctly. The JTA tells examination and content developers what should be included on the examination, as well as what should be in the training materials.

Who participates in the JTA?

A representative group of industry experts is recruited to participate in the development of the JTA. This group is made up of individuals representing all segments of the industry. They have various levels of experience and represent all regions of the country. This ensures that the content of the examinations and learning materials are not biased toward one specific segment or group of people. It also ensures that the knowledge outlined by the JTA is only essential knowledge (the "need to know" information, as opposed to the "nice to know" information).

How often is the JTA performed?

JTAs are typically performed every 3–5 years, depending on the field. For instance, the fields of computer technology and medicine change rapidly, so JTAs for those fields need to be revisited frequently. The ServSafe JTA is revisited every two years to coincide with updates to the *Food Code*. This provides examination and content developers with up-to-date information when developing examinations and books.

How are exam questions selected for the examination?

The final stage of the JTA is the development of the Table of Specifications, or Exam Blueprint. The Blueprint outlines the percentage of questions required on each examination from each major content area of the JTA. This ensures that every examinee is presented with the same number of questions from the same content areas, regardless of when the exam is taken. The ServSafe score report provides this information to examinees and instructors.

Number of Items (By Content Area) on the ServSafe Examination

FOODS	36
Ensure Food Protection	10
Purchase and Receive Food Safely	4
Store Food and Supplies Safely	8
Process, Prepare, Serve, and Display Food Safely	6
Prepare, Serve, Display and Transport Food Safely Off-Site	8
CLEAN AND SANITIZE EQUIPMENT AND UTENSILS	9
FACILITIES	6
MONITORING FOOD PERSONNEL	12
TEMPERATURE MEASURING DEVICES	2
ALLERGENS	3
HIGH-RISK POPULATIONS	2
LEGAL AND REGULATORY ISSUES	4
FACILITY LAYOUT AND DESIGN	1
TRAINING EMPLOYEES	5
TOTAL	80

How are examination questions written?

Items (also known as test questions) are written by industry professionals. Items are written to address the content outlined in the JTA, and must be directly referenced to widely accepted documents, such as the current *Food Code* (FDA), *Common Food Allergies* (Food Allergy and Anaphylaxis Network), *Egg Handling and Care Guide* (American Egg Board), *The Bad Bug Book* (FDA) and *Food Establishment Plan Review Guideline* (Northeast region, Plan Review Development Committee for the *Conference for Food Protection*).

Newly written items then undergo multiple reviews. Once they are in final form, they are eligible for pilot testing on an examination.

Who writes the items?

Item writers must meet specific criteria and must complete an application process. The final item-writing committee is selected based on credentials and areas of expertise. Committee members are asked to serve a 1-year term as an item writer, which involves two, 2-day item-writing sessions. Here, they are trained and supervised in writing quality items. Because it consists of individuals with various perspectives and levels of experience, the team of assembled writers can draw upon current, real-world scenarios that are pertinent to their establishments.

How do you know if the items are any good?

Newly written items are subjected to multiple reviews before being eligible for pilot testing. After an item-writing session, exam developers perform a preliminary review of the newly written items for adherence to format and item-writing guidelines. For example, items that are negatively worded will be rejected ("All of the following *except....*"). Next, items undergo a Structural and Sensitivity Review, during which they are checked for any type of bias. Fictitious worker names—as well as the actual, brand names of equipment and food—are made generic so that they will be applicable to all industry segments. For example, "A pizza parlor" is changed to "a foodservice operation," and "A chef preparing vegetables for tonight's Spicy Chicken Supreme" is changed to "a cook preparing vegetables."

After the Structural and Sensitivity Review, items are professionally edited for grammar, clarity and readability. ServSafe items are written to a sixth-grade reading level.

Once this step is completed, the newly written items are ready to be reviewed by a separate group of SMEs for content and relevance to industry practices. During this step, the Item Review Committee eliminates or revises any item that has more than one possible correct answer among the choices. Most importantly, the SMEs evaluate each item's content validity by determining whether the question actually addresses the task statement from the JTA to which it was written. This step ensures that the examination focuses on knowledge that is important and relevant to food safety.

During this review, some items are improved, and others are simply deleted. Once this review is completed, the remaining new items are eligible for pilot testing. Ten pilot items are randomly distributed throughout each examination, and their performance is analyzed. After statistical analyses indicate the item has performed well, then it becomes an operational item (worth 1 point). If the item's performance is poor, it is deleted or revised and then subjected to the above review process again.

Who determines if the items are any good?

SMEs for the Item Review Committee are recruited from around the country. They represent various industry segments and positions. These individuals are required to go through a rigorous application process. Once approved, they are required to serve a 1-year term.

Other individuals involved in reviewing items include the exam development staff, a professional editor and the examinees during the pilot testing phase.

What is a pilot item?

A pilot item is an exam item that is not worth any points. A newly written item that has survived multiple reviews is eligible for placement on an exam as a pilot item. Pilot items are randomly placed on an examination. Answering a pilot question incorrectly does not affect the examinee's test score. Pilot items are simply used to gather statistical information on the item's performance. If the pilot item performs well, it becomes an operational item (worth 1 point) and can be selected for placement on future exams. If the pilot item does not perform well, it is either deleted or resubmitted to the item-review process. Pilot items help build up the item bank (or pool of questions) from which a test is developed. Consistently using the same items over and over on an exam causes overexposure; therefore, it is important to constantly add new items as a security measure. Pilot items allow for this.

Are the last 10 items on the exam the pilot items?

No, the pilot items are randomly distributed so that the examinee cannot identify them.

Why are there 90 items on the test?

The examinee's score is based on the 80 operational items (items that are worth 1 point). The additional 10 items are pilot items and not worth any points.

How is the passing score determined?

Once the JTA has been completed, the Exam Blueprint determined, and items written, the first form of an exam is developed, and then the standard-setting meeting is held. Items for this base exam are selected to meet the content requirements of the Blueprint. The exam form is evaluated by another, independent group of SMEs. At this meeting, the items are examined individually, and the likelihood of an entry-level practitioner answering the question correctly is determined. Once all the items have been evaluated, the overall passing score is statistically determined.

How often are new items written?

New items are written annually.

How often are items reviewed?

New items are reviewed every six months. The performance of items on current exams is monitored. If the item analysis determines that an item is performing poorly, then it is flagged for review and presented to the Item Review Committee.

How can I become an item writer?

For information on becoming an item writer, please contact Doug Bernius at 1-800-765-2122, extension 330, or by email at dbernius@restaurant.org.

How can I become part of the review committee?

For information on becoming a member of the Item Review Committee, please contact Doug Bernius at 1-800-765-2122, extension 330, or by email at dbernius@restaurant.org.

How can I get more information?

For more information on exam development, please contact Amy Roedl at 1-800-765-2122, extension 747, or by email at <u>aroedl@restaurant.org</u>.