



For more information about the Health is Academic initiatives from the Mississippi Office of Healthy Schools - with funding from The Bower Foundation, visit the website at:

www.healthyschoolsms.org


Mississippi Department of Education

Office of Healthy Schools

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601-359-1737




4 + 4 =

FOOD SAFE @ School

**Food Safety Assurance
Training for
Mississippi School Staff**

Health is Academic



This training module, developed by the Mississippi Office of Healthy Schools, provides key facts and resources about food safety as they pertain to Mississippi school districts. It is designed to help schools comply with the Nutrition Standards as required by the Healthy Students Act of 2007.

This information is intended for all school staff **outside of the Child Nutrition program** - administrators, classroom teachers, parents, and others involved with food events, such as classroom celebrations, student stores, and concession stands. As we will discuss in a few moments, Child Nutrition programs have their own specific requirements for food safety training.

This brief training module is not intended to replace comprehensive food safety trainings, such as **ServSafe®** or **TummySafe®** through the Extension Service of Mississippi State University. Detailed information about these programs and schedules for their sessions is available online at http://msucares.com/health/food_safety/servsafecal.htm



NUTRITION STANDARDS

Healthy Students Act of 2007

- **The Healthy Students Act, passed by the 2007 Mississippi Legislature, required the Department of Education to develop Nutrition Standards for healthy food preparation in schools.**
- **The standards require that schools update their School Wellness Policy to include a food safety assurance program for all food offered to students through sale or service.**
- **This training meets the requirements for training school staff on food safety principles.**



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The Mississippi Healthy Students Act, passed by the 2007 Mississippi Legislature, required the Department of Education to develop Nutrition Standards for healthy food preparation in schools.

The standards, passed as a policy of the Mississippi State Board of Education, require that schools update their School Wellness Policy to include a food safety assurance program for all food offered to students through sale or service.

This module meets the requirements for training school staff on basic food safety principles. It also provides additional food safety resources and materials for schools. All of this information, including these PowerPoint slides with a complete script, is available online at the Office of Healthy Schools web site: www.healthyschoolsms.org



WHY is food safety important in Mississippi schools?

- Foodborne illness distracts schools from education
- Teacher illness costs time and money
- Student illness affects attendance and achievement
- Serious foodborne can cause death and lead to lawsuits against schools
- Foodborne illness is preventable with easy-to-implement food safety practices



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Foodborne illnesses are serious sicknesses caused by consuming a food or beverage that contains harmful substances, such as bacteria or viruses. The harmful substances can be in a food or beverage even though it looks OK, smells OK, and even tastes OK.

It is estimated that 76 million foodborne illnesses occur every year in the US - and that 5000 Americans, including some children, die from a foodborne illness every year.

Foodborne illnesses are a serious educational issue for Mississippi schools. When teachers and other staff are sick, it costs time and money to find substitutes for them. When children are sick, they miss school and can fall behind in their academic work.

When adults or children consume contaminated food at school and become ill, it can also lead to legal action against the school district.

All of these issues are preventable because foodborne illness is preventable - with easy-to-implement food safety practices.



FOOD SAFE SCHOOLS **support student success**

- **Mississippi Child Nutrition programs and school cafeterias already have food safety training and meet strict standards**
- **School staff and students need to think food safety for classroom celebrations, student stores, and concession stands**
- **Basic food safety principles must be used anytime food is served at school**



Health is Academic

Like other health issues, safe food handling practices are academic issues. Food safety helps to support student success in Mississippi schools by preventing the foodborne illnesses that may cause child and teachers to miss opportunities for classroom education.

Mississippi Child Nutrition programs are responsible for food safety and HACCP plans for school kitchens and cafeterias. Both USDA and Mississippi State Board of Education policy require Child Nutrition programs to provide regular food safety training for all staff. They must also meet strict requirements to insure that all school meals are safe and healthful for children and staff.

However, food is consumed in many school situations outside of the cafeteria. School staff and students need to use basic food safety principles **wherever and whenever** foods and beverages are consumed. This includes classroom celebrations, students stores, concession stands, and other school events. This is the food safety assurance training required by the Nutrition Standards in Mississippi Healthy Students Act of 2007.



WHAT can Mississippi schools do to be food safe?



Take a minute to think about all the places that foods and beverages are consumed on your school campus or during school sponsored events, like field trips and athletic competitions.

Remember, child nutrition professionals are directly responsible only for the foods prepared in school kitchens and served during school meals.

All school staff must learn safe food handling practices to insure that Mississippi schools are as food safe as possible - for the health and academic success of all children.



WHAT can Mississippi schools do to be food safe?

- **Build awareness** of problems with foodborne illness
- **Educate** staff, students, and families on food safety basics
- **Promote change** to food safe habits throughout school




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All Mississippi schools can take simple, effective steps to become food safe for children and staff.

The first step is to **BUILD AWARENESS** of the problems associated with foodborne illness. Many people are unaware of the seriousness of foodborne illnesses and do not realize how easily food and beverages can be contaminated with harmful substances.

The second step is to **EDUCATE** staff, families, and students on the basics of safe food handling at school - and at home for any foods, especially for foods brought to school.


The third step is to **PROMOTE CHANGE** to food safe habits wherever foods and beverages are offered throughout the school campus - and during off-campus school sponsored events.



4 + 4 =

FOOD SAFE @ School

1. Clean	1. Hand washing
2. Separate	2. Hand sanitizing
3. Cook	3. Proper glove use
4. Chill	4. Clean and sanitize surfaces



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Here are the 8 keys strategies for food safe schools. In the next few minutes, we will discuss these strategies in more detail. As an overview:

- The four practices on the **left - CLEAN, SEPARATE, COOK and CHILL** - are the basic steps of the **Fight Bac®** program, a partnership of government and industry groups focused on food safety. In fact, these four practices form the basis of any effective food safety program, including the one used by the Child Nutrition program in your school kitchen and cafeteria.
- The four items are the **right are all important CLEAN practices** to be used wherever foods and beverages are consumed in school. When these four practices are used regularly in your school, they can be effective in preventing most food contamination that occurs **at school**.

In order for a school to be food safe, all 8 of these practices need to be part of ALL food and beverage preparation, storage, and service - at home and school.



This slide shows the four steps of **Fight Bac**[®] mentioned on the previously. These four steps are the best way to keep food safe from bacteria - and other causes of foodborne illnesses, such as viruses. Educational information - including posters, brochures, and coloring sheets for children - with the **Fight Bac**[®] messages are available at www.fightbac.org (one of the web sites on your resource list).

Let's take just a minute to review the four Fight Bac[®] messages:

CLEAN: Wash hands and surfaces often. When we get to the next 4 practices, we'll go into detail about cleaning hands and surfaces.

SEPARATE: Don't cross contaminate. Cross-contamination is how bacteria spreads. When storing and preparing food, always keep raw meat, poultry, and seafood away from ready-to-eat foods.

COOK: Cook to proper temperatures. Improper heating and preparation of food means bacteria can survive and multiply. Using a cooking thermometer is the best way to insure that foods are properly cooked.

CHILL: Refrigerate promptly. Bacteria spreads fastest at temperatures between 40 °F and 140 °F, so chilling food properly is one of the most effective ways to reduce the risk of foodborne illness. Leftovers and takeout foods should be refrigerated after 2 hours at room temperature.



Temperature Danger Zone

- Bacteria (and other germs) grow most rapidly between the temperatures of 40 degrees and 140 degrees.
- In terms of food contamination, this is commonly called the **DANGER ZONE**.
- The goal is keep prepared food out of this danger zone as much as possible - and to refrigerate foods after 2 hours.



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As just mentioned, bacteria and other organisms that cause foodborne illness grow most rapidly between 40 degrees and 140 degrees Fahrenheit. At these temperatures, bacteria can double in number in as little as 20 minutes.

This range of temperatures is often called the "Danger Zone."

That's why **Fight Bac®**, **USDA's Meat and Poultry Hotline**, and other food safety groups advise consumers to always refrigerate food after 2 hours at room temperature.

An important note for Mississippi in warmer months: If the temperature inside (or outside for picnic events) is above 90 degrees, food should not be left unrefrigerated for more than 1 hour.

The only foods that can safely be left at room temperature for longer times are **unopened, shelf-stable products** - those that you might see on grocery store shelves without refrigeration, such as crackers, nuts, and whole fresh fruit.

Resources for Families

7 Food Safety Steps for Successful Community Meals

USDA, Food Safety and Inspection Service April 2010

Whether preparing food for a family reunion or a community gathering, people who are great cooks at home don't necessarily know how to safely prepare and store large quantities of food for large groups. Food that is mishandled can cause foodborne illness. However, by following some simple steps, volunteer cooks can make the event safe and successful!

For more food safety information, call the toll-free USDA Meat and Poultry Hotline at 1-800-535-4555, TTY: 1-800-234-7373, www.fsis.usda.gov.

For a copy of *Cooking for Groups: A Volunteer's Guide to Food Safety*, write: FCSI, Box 90043, Fort Collins, CO 80520

- Plan Ahead** — Make sure the location meets your needs.
 - Be sure you have enough sinks, stoves, refrigerators, freezers, and work space.
 - Food use if there's a source of clean water.
 - If not, bring water for preparation and cleaning.
- Store & Prepare Food Safely**
 - Refrigerate or freeze perishable food within 2 hours of shopping or preparing.
 - Food preparation areas in the work space for raw and cooked food.
 - Never place cooked food back on the same plate or cutting boards that held raw food.
 - Wash hands, cutting boards, dishes, utensils, and work surfaces frequently with hot, soapy water.
- Cook Food to Safe Internal Temperatures** — It's the only way to kill if harmful bacteria are developed!
 - Use a food thermometer to check the internal temperature of meat, poultry, vegetables, and other food. Check temperature in several places to be sure food is safely cooked.
 - Never partially cook food for finishing later because this increases the risk of bacterial growth.
- Transport Food Safely** — Keep hot food HOT. Keep cold food COLD.
 - Keep cold food at or below 40°F. Place in cooler with a cold source such as ice or commercial freezing gel.
 - Keep hot food at or above 140°F. Wrap well and place in an insulated container.
- Need to Reheat?** — Food must be hot and steaming the serving. Just "warmed up" is not good enough.
 - Use the stove, oven, or microwave to reheat food to 165°F. Bring soups, stews, and gravies to a boil.
- Keep Food Out of the "Danger Zone" (40-140°F)**
 - Place cooked food in chafing dishes, pre-portioned meals, trays, warming trays, and/or slow cookers.
 - Keep cold food cold — at or below 40°F. Place food in containers on ice.
- When In Doubt, Throw It Out!**
 - Discard food left out at room temperature for more than 2 hours.
 - Place leftovers in shallow containers. Refrigerate or freeze immediately.

Fight BAC!

When preparing for your special event, remember you have the power to Fight BAC!™ and keep your food safe. www.fightbac.org

CLEAN Wash hands and kitchen items.

SEPARATE Don't cross-contaminate.

COOK Cook to proper temperatures.

CHILL Refrigerate promptly.

Foodborne Illness Can Cause More than Stomach Ache

Nebraska EXTENSION Lancaster County

441 Clay Street, North Platte, NE 68901 (402) 441-7190 | <http://lanastercounty4h.org>

MyPyramid Food Safety Guidelines

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Each year in the United States, 76 million people become sick from foodborne illness and 3,000 people die. Some possible signs and symptoms you have a foodborne illness include:

- Diarrhea (sometimes bloody)
- Stomach pain
- Nausea
- Vomiting
- Dehydration (thirst, dry mouth)
- Don't count on signs, smell and taste to tell if food is safe. A "taste test" can not prevent you from getting sick.
- As few as 10 bacteria could cause some foodborne illness if you take 10 to 100 to become sick from a single food.
- You may become sick later even if you feel OK after eating.
- Some people have a greater risk for foodborne illness. A food you eat may make others sick. People with a higher risk of foodborne illness include:
 - Infants
 - Older adults
 - Young children and older adults
 - People with weakened immune systems and individuals with certain chronic diseases
- Because your risk of getting a foodborne illness is higher, the USDA's MyPyramid Food Safety Guidelines give five "Key Recommendations" for food safety:

- 1. Clean**
 - CLEAN hands and food contact surfaces. Handwashing is the most effective way to keep the spread of illness.
 - Wash cutting boards, knives, utensils and counter tops after preparing each food and before going on to the next.
 - Avoid spreading bacterial contamination to other foods. Use paper towels.
- 2. Separate**
 - SEPARATE raw, cooked, and ready-to-eat foods while shopping, preparing or storing foods.
 - Use different cutting boards — use one cutting board for raw meat, poultry and seafood and a separate one for fresh produce.
 - NEVER serve foods on a plate that previously held raw meat, poultry or seafood unless the plate has first been washed in hot, soapy water.
- 3. Cook**
 - COOK meat to safe temperatures to kill microorganisms. For more information about using food thermometers, visit the Web site, www.AMDDirect.org.
 - The USDA's FoodKeeper app has been updated to a safe internal temperature to use a food thermometer! Find out if a thermometer is safe between halves.
 - There are many types of food thermometers:
 - Instant read digital
 - Dial instant read
 - Stick-in style
 - Cook probe with cord
 - Disposable temperature indicators (single-use)
 - Thermometer data collection

Use the USDA's *FoodKeeper* app to get more information about food safety.

If your school allows students and their families to bring home prepared food for consumption at celebrations and events on the school campus, they need information about safe food handling practices.

These two handouts - available on the Office of Healthy Schools (OHS) web site - provide easy-to-understand information for families based on the 4 **Fight Bac®** messages. Providing written information to families does not guarantee that food items will be prepared safely at home - but it is the first step in educating families. The only way to guarantee food safety is to limit the food items brought from home. Some schools have limited outside food to shelf-stable, commercially prepared items. A few Child Nutrition directors in Mississippi are also catering items from school kitchens for events and celebrations. Information about this option is available on the OHS website as well.

The handout on the left - **7 Food Safety Steps for Community Meals** - directly addresses events like potlucks and community suppers. On the second page, it lists proper internal cooking temperatures for a number of common foods and dishes. The handout on the right - **Foodborne Illness Can Cause More than Stomach Ache** - uses the **Fight Bac®** messages to discuss safe food preparation at home.



Simple Steps to Prevent Problems

CLEAN

1. Proper hand washing
2. Proper hand sanitizing
3. Proper glove use
4. Correct cleaning/sanitizing of tables and other surfaces

These four **CLEAN** practices are the most important ways that staff, students, and families can fight foodborne illnesses and other infections **at school**.

When these practices are carefully followed, they can help prevent the contamination of food and the spread of foodborne illnesses from one person to another. They will also go a long way to prevent the spread of other infections, such as coughs, colds, and flu. In one study of hand washing, children who properly washed their hands four times a day had 24 percent fewer sick days due to respiratory illness and 51 percent fewer sick days due to upset stomach.

Surprisingly, many adults and children do not know how to properly wash their hands or how to use hand sanitizers.

Let's take a closer look at the proper procedures - very simple, very effective strategies to prevent serious problems.



Proper hand washing

If you handle food, you must wash your hands often.

WHEN
should you wash your HANDS?

- When arriving at work
- After using the bathroom
- After smoking
- After sneezing
- After touching your hair, face, clothing
- After eating or drinking
- After taking off or before putting on a new pair of gloves
- Before handling food, especially ready-to-eat foods like salads and sandwiches
- After handling garbage
- After handling dirty equipment, dishes, or utensils
- After touching raw meats, poultry and fish
- Anytime you change tasks – go from one thing to another

HOW
should you wash your HANDS?

- Wet your hands with warm running water.
- Lather with soap and scrub between fingers, on the backs of your hands, and under nails. Wash for at least 20 seconds, or as long as it takes to sing 'Happy Birthday' to yourself twice.
- Dry hands. Use single-use paper towels or electric hand dryers.
- Use a paper towel when you turn off the tap.

GLOVES
should be changed:

- Anytime you would need to wash your hands (see left)
- When they are torn or soiled

Massachusetts Department of Public Health
www.mass.gov/handwashing

January 2003

Proper hand washing is a powerful tool in the prevention of illness. For example, experts estimate that:

- Over one-third of foodborne illnesses are caused by poor hygiene, such as improper hand washing.
- Approximately 50 percent of diarrheal illnesses could be prevented by proper hand washing techniques.

This handout - available as PDF on the OHS web site - shows the proper technique, using warm water, soap, rubbing for 20 seconds, and drying with a paper towel. Note the importance of using the towel to turn off the water - so as not to get more bacteria onto your clean hands.

It also provides a list of the times when hand washing is necessary. In schools, the most important times are before and after handling food, after touching garbage or trash bags, after using the bathroom, and after touching money (at a bake sale or concession stand).

A laminated copy of this handout can be posted near sinks - in school kitchens, classrooms, and bathrooms - to remind food servers of proper hand washing techniques.



Proper hand sanitizing

How do I clean my hands with alcohol-based hand sanitizer?

Use enough to cover all the surfaces of your hands.



Minnesota Department of Health
Food Safety Center
625 N Robert St, PO Box 64975, St. Paul, MN 55164
651-201-5414, TTY 651-201-5797
www.health.state.mn.us

Images adapted with permission from the
Washington State Department of Health.

When proper hand washing is not possible, hand sanitizers are an effective substitute - if they are properly used.

This handout demonstrates the proper way to sanitize hands. It is available as a PDF (which also included proper hand washing) on the OHS web site.

Proper hand sanitizing requires an **alcohol-based** hand sanitizer. Adults and children must use enough sanitizer to cover all surfaces of their hands - and then rub the sanitizer until hands are dry.

NOTE: Hand sanitizers are not an effective way to clean very dirty hands or those that are covered with grease or oil.

A laminated copy of this information can be posted anywhere hand sanitizers are available to remind food servers of proper hand sanitizing techniques.



Proper glove use



Disposable, single use gloves are important for safe food handling - and should be available for use at all school functions involving food service and sales. They are especially important when preparing and serving ready-to-eat-foods foods, such as sandwiches, fruit, or vegetable sticks.

However, gloves are not a substitute for proper hand washing. They are an additional way to help insure that food is safe for children, staff, and families to eat at school. Gloves are readily available for purchase in many locations, such as supermarkets and chain stores. If you are not able find a source for gloves, check with your Child Nutrition director.

As you can see on this poster - available on the OHS web site - proper use of gloves includes hand washing before and after glove use. It is also important to change gloves frequently - especially if they are torn and after sneezing, wiping nose, touching hair, or contact with money.

A laminated copy of this handout can be posted anywhere gloves are used to remind food servers of proper glove use techniques.



Clean/sanitize surfaces

- **Cleaning** = dish soap, warm water, and rub down with a paper towel to remove dirt from tables and other surfaces
- **Sanitizing** = important after cleaning to reduce the number of bacteria and viruses. Use **commercial sanitizer** or solution of **1 tablespoon of bleach in one gallon of water**.

In addition to proper cleaning of hands, careful cleaning of surfaces - like tables and desks - is also necessary for food safety at school.

Cleaning surfaces properly in a two-step process:

1. First, dirt and other substances must be removed from surfaces with dish soap, warm water, and clean paper towels.
2. Then, the surfaces must be sanitized to remove bacteria and other contaminants - either with a commercial sanitizer or a solution of 1 tablespoon of bleach in one gallon of water - again using clean paper towels.

If you need more information or assistance locating effective sanitizers, check with your Child Nutrition director or Health Department staff.



HOW can Mississippi schools approach food safety efficiently?

- **Use existing materials** – no need to reinvent the wheel
- **Use local experts** – Child Nutrition director, MSU Extension staff, and Health Department staff
- **Use School Health Council** – for expertise and promotion of food safety



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Food safety is serious concern for Mississippi schools - to prevent foodborne illnesses among students and staff, as well as to avoid the potential for damaging lawsuits.

Fortunately, for busy Mississippi schools, there are easy ways to approach food safety efficiently.

- **Schools can use existing food safety materials:** There is no need to develop new materials. As you have seen throughout these slides, there are great existing handouts and materials that schools can use to educate and promote food safety. Many of these materials are posted on the MDE Office of Healthy Schools web site - and several others are provided on the resource list.
- **Schools can use local experts:** If your school needs additional information or wants to offer more detailed training sessions, you can utilize local experts, such as your Child Nutrition director, MSU Extension staff, and Health Department staff.
- **Schools can use their Health Council:** Your School Health Council may be able to provide food safety expertise and help promote food safety initiatives throughout the school.



Everyone Has a Role in Food Safety



Everyone can have a role in ensuring that schools are food safe. If everyone pitches in, schools can successfully:

- **BUILD AWARENESS** of the problems associated with foodborne illness.
- **EDUCATE** staff, families, and students on the basics of safe food handling at school - and at home for any foods brought to school.
- **PROMOTE CHANGE** to food safe habit, such as proper hand washing wherever foods and beverages are offered throughout the school campus - and during off-campus, school sponsored events.

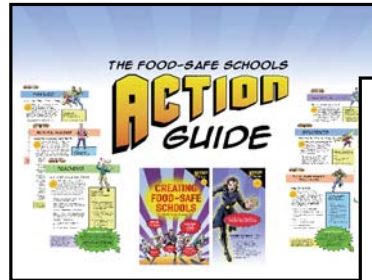
For example:

- **TEACHERS** can incorporate food safety concepts into classroom curricula, send information to families, and model proper behavior.
- **CHILD NUTRITION FOODSERVICE STAFF** can help develop guidelines and locate products (e.g., gloves, sanitizers, etc).
- **SCHOOL NURSES** can promote food safety strategies and provide staff education, as appropriate.
- **LOCAL HEALTH DEPARTMENTS** can assist with policies and procedures, as well as providing appropriate resources.



Resources for Schools

www.healthyschoolsms.org



SAMPLE LANGUAGE

To update your School Wellness Policy to include a food safety assurance program for all food offered to students through sale or service.



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The **FOOD-SAFE SCHOOLS ACTION GUIDE** - as well as the other web sites on the resource list - offer many ideas and materials for schools to use in food safety promotions. For example, this guide provides a step-by-step program for creating food safe schools - and would be ideal for a School Health Council to use for a comprehensive food safety promotion.

As required in the Nutrition Standards of the Healthy Students Act of 2007, all Mississippi schools shall update their School Wellness Policy to include a food safety assurance program. Sample language to update your policy is posted on the OHS web site - along with links to these slides and the materials described on them.

When you take the changes in your School Wellness Policy to your School Board for approval, you can also let them know what steps you are taking to prevent foodborne illness, so that children are fit, healthy, and ready to succeed.



4 + 4 =

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For more information and resources:

Mississippi Department of Education
Office of Healthy Schools
601-359-1737

www.healthyschoolsms.org

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Together we can all make a difference in food safety at school. The steps are simple and very effective in preventing foodborne illness.

Remember, the 4 + 4 steps are:

1. Clean, 2. Separate, 3. Cook, and 4. Chill - when preparing and serving foods at school and home.

The 4 CLEAN practices for schools to implement are:

1. Proper hand washing
2. Proper hand sanitizing
3. Proper use of gloves
4. Correct cleaning of surfaces, like desks and tables

For more information about creating food safe schools, contact the Mississippi Office of Healthy Schools online at:

www.healthyschoolsms.org

Or by phone at:

601-359-1737