# IFC Food Safety Foundation Course



Interactive training for food processing companies in developing countries to upgrade food safety systems using a prioritized, incremental approach

#### Why this course?

Think of a Food Safety Management Systems as a house... A sturdy house of food safety needs a strong foundation and solid walls.

This is the entry-level course to the IFC's popular Food Safety Toolkit training program, which has already trained about 100 companies in Eastern Europe and Central Asia.

#### **The Course Provides**

- Measureable results in six months
- Step-by-step upgrade to build a strong base for HACCP
- Flexible methodology for various sectors
- Tips on low-cost measures that will help companies improve quickly (especially on Traceability, Pest Control and Hygiene)

**Target groups** 

Processing compa-

nies (meat, dairy,

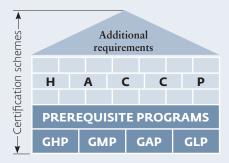
Catering and retail

other)

businesses

fruits, vegetables and

#### Food Safety Management System



**GHP** – Good Hygiene Practices

**GMP** – Good Manufacturing Practices

**GAP** – Good Agricultural Practices

**GLP** - Good Laboratory Practices

**HACCP** – Hazard Analysis Critical Control Points System

#### **Program Content**



- Introduction
- Session 1: Prerequisite Program—Prevention of Contamination
- Session 2: Prerequisite Program—Hygiene
- Session 3: Prerequisite Program—Infrastructure
- Session 4: Prerequisite Program—Interaction with Suppliers and Consumers
- Session 5: Basics of the Food Safety Management System
- Session 6: Assessment Process
- Site Visits (optional)

# Participating companies Cut Costs, Increase Sales

- IFC has advised 116 food businesses in the Balkans, Ukraine, Belarus, Georgia, Armenia, Tajikistan, Kyrgyzstan and Kazakhstan
- These companies have improved their food safety management systems and become better positioned to enter new markets, raised profitability, and increased customer trust and confidence
- The IFC clients in the region have boosted their sales by US\$ 205 million and raised US\$ 270 million of financing thanks to better food safety management

#### **Course Structure**

- The Best international practice customized to the local market
- Designed to address typical challenges and mistakes
- Sections build on the IFC Food Safety Trainings using an interactive methodology
- Exercises

Contact us:

• Three days training optionally includes a site visit

IFC Food Safety Advisory

Sarah Ockman, Program Lead,

sockman@ifc.org

www.linkedin.com/in/sarahockman/

Learn More: www.ifc.org/foodsafety

**International Finance Corporation** (IFC), a member of the World Bank Group, is the largest global development institution focused on the private sector in developing countries. IFC provides investment and advisory services to companies throughout the agribusiness value chain.



# IFC FOOD SAFETY

## FOUNDATION COURSE



Creating Markets, Creating Opportunities



# **SESSION 3**

# Hygiene





## **SESSION 3: CONTENT**



## Hygiene

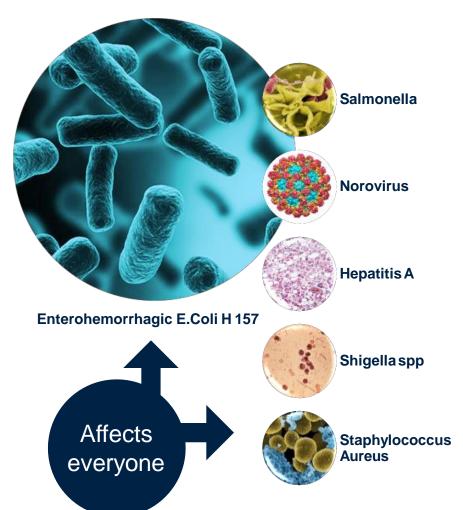
- Foodborne illnesses and Personnel Hygiene
- Hand Hygiene
- Sanitary Clothing
- Personnel Behavior
- Personnel Facilities

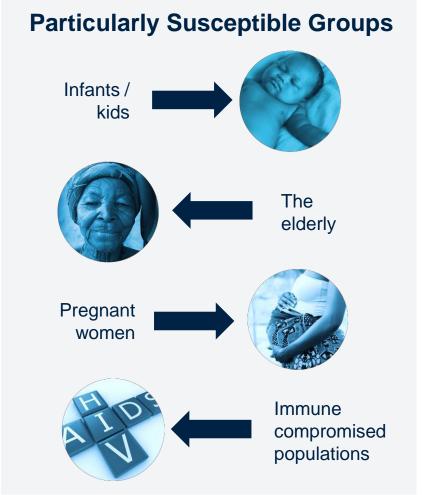






# FOODBORNE ILLNESS OUTBREAKS: MANY CAUSED BY INFECTED FOOD HANDLERS







## DEMO

# COMMON SYMPTOMS OF FOODBORNE ILLNESS



### Escherichia coli



# Salmonella enteriditis



Listeria monocytogenes

- Diarrhea
- Vomiting
- Mild fever

- Abdominal cramps
- Headache
- Fever
- Nausea
- Diarrhea

- Flu-like
- Meningitis
- Encephalitis
- Spontaneous abortion



### Campylobacter jejuni



### Staphylococcus Aureus



#### **Hepatitis A**

- Diarrhea
- Vomiting
- Headache
- Fever
- Muscle pain

- Diarrhea
- Vomiting
- Fever
- Feebleness
- Toxicosis

- Fatigue
- Nausea
- Vomiting
- Abdominal pain
- · Loss of appetite
- Mild fever





## **PERSONNEL HYGIENE**



Establish and document requirements on hygiene for staff, visitors and contractors



- Health status
- Illness and injury
- Personal cleanliness, including hands
- Personnel behavior
- Work clothes requirements





- Risk Analysis: Determine the appropriate personal hygiene requirements!
- Legal Requirements: Hygiene requirements complaints







# HEALTH STATUS, ILLNESS AND INJURIES



PRIOR TO
EMPLOYMENT
Medical
examination

AT INTERVALS
DURING
EMPLOYMENT
Medical check-ups as

Medical check-ups as established by food operator in accordance with legislative requirements

DAILY, PRIOR TO START OF WORK

Check and recording of data of personnel's health status in the Health Register

Name	Health status (available / unavailable purulent diseases on hands, pharynx, intestinal disorders in the family)	Sanitary clothing	Jewelry, personal effects in pockets (available / unavailable)	Permitted / not permitted to work	Responsible person
Jane Jones	None	Available, clean	Unavailable	Permitted	N.M.





## **HEALTH CONDITIONS**



## Notify management for these health conditions:

- Diarrhea
- Vomiting
- Abdominal pain
- Fever
- Jaundice

- Sore throat
- Infected skin lesions
- Dermal diseases
- Discharge from ear, eye or nose

## Management of injury or burn:

- Wear a special, brightly colored band (detected by metal detector if possible)
- Notify controller immediately if band is lost







## **ACTIVITY 3.1:**

## WHEN IS IT IMPORTANT FOR ME TO WASH MY HANDS?



Identify times and situations in which it is important to wash hands to keep food safe



- 4 5 minutes
- Group round robin



- As a class, 1 by 1 in turn, state a unique time/situation in which it is important to wash your hands to keep food safe.
- Do not repeat another person's answer.
- If you cannot think of another situation, say "pass" and deduct a sore on your Food Safety Quiz Scoresheet





## HAND HYGIENE



When is it important to wash your hands?

- Upon entering a food handling or processing area
- · Immediately after using the restroom
- After handling raw food or any contaminated material which could result in contamination of other food items
- After using a handkerchief/Kleenex
- · After eating, drinking, or smoking
- After handling equipment cleaning machines or equipment cleaning utensils
- After handling chemicals



Your fingernails should be:

- Trimmed, filed and maintained so the edges and surfaces are cleanable and not rough
- Unless wearing intact gloves in good repair, no fingernail polish or artificial fingernails are allowed







## HAND WASHING FACILITIES



### Sinks exclusively for hand washing

- Not used in food production process
- Not used for equipment washing

- Meeting required number
- In proper locations, including with toilets

### Sufficient quantities of warm water

### Liquid soap

- Unscented
- Standard soap uses detergent action to physically remove microorganisms from the skin.
- Soap formulations may be supplemented with chemical antiseptics to increase effectiveness

### Single use paper towels or hand air driers

### Towel disposal

### Posted instructions for hand washing

#### Sanitizer

#### Antiseptics based on:

- Alcohol (62-72%)
- Iodine and iodophors (special formulations)
- Chlorhexidine gluconate (washing uses)

- Chloroxylenol (skin formulations at 0.3-2.5%)
- Triclosan (often used in handwashing formulations)





# FOOD SAFETY QUIZ SHOW: MULTIPLE CHOICE

## Question

When working in a High Risk Zone, in what cases is it NOT a "must" to wash your hands?



When using disposable gloves



If hands are thoroughly disinfected after getting dirty



When leaving the High Risk production area for a break



If hands have not touched raw material during shift



## **ACTIVITY 3.2:**



# REASONS FOR REQUIRING CORRECT HAND WASHING



Define reasons why correct handwashing is necessary and get practical skill



## Timing

#### 4 - 6 minutes

- Group guessing (3-4 min)
- Answer checking (1-2 min)

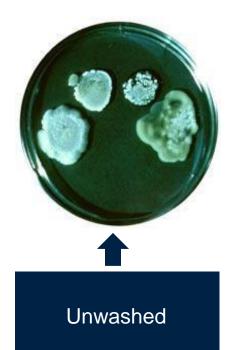


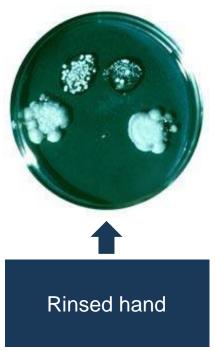
 2 volunteers, rest of class observe



## DEMO

# STUDY ON BACTERIA REMOVAL FROM HANDS











From: University of Georgia





# **SAMPLED SURFACES**

















## HAND WASHING FACILITIES





Moisten hands with water



Rub liquid soap until foaming



Thoroughly wash hands: Between fingers and under nails







Disinfect hands



Dry hands with paper towel



Rinse the remaining soap













## **SKIN PROTECTANTS**



## **Gloves**

- Must be used correctly to ensure hygiene and safety
- Do not replace proper handwashing—wash hands thoroughly before and after wearing gloves
- Do not replace caution—be just as aware of what you touch



# Lotions and creams

- Can help to provide a protective barrier for skin
- Can help to prevent skin shedding, which could include microorganism shedding
- Are most effective when used with handwashing with soap





## PROTECTIVE CLOTHING



## **Documented Policy**

- Should be laundered based on specifications available and in sufficient numbers
- Wear it on work only, nothing on top of it (overcoats etc.)
- Keep it separate from personal clothes
- Take them off in a specifically designated area, before going:
  - Outside
  - To the restroom
  - To the cafeteria/break room
  - To the first aid post
- Design suitable for the production process, No pins needles allowed on the clothing
- No personal effects in the pockets, including:
  - Cell phones
  - Mirrors and combs
  - Jewelry
  - Cigarettes, matches, and lighters









## **CLOTHING SPECIFICS**







# Hair, beard, and moustaches

 Fully covered with a cover specifically designed for that purpose

# Gloves contacting product

- Match the working load and tensile strength
- Check for allergic reaction
- Size gloves properly
- Proper hand-washing and glove-changing protocols
- Powdered or powder-free.

# Footwear in production areas

- Fully closed-toed
- Made of non-absorbent material(s)





# **ACTIVITY 3.3:**SANITARY CLOTHING PROCESS



Demonstrate the process for putting on sanitary clothing



#### 6 - 8 minutes

- In group (4-5 min)
- Checking and asking questions (2-3 min)



- Two volunteers are putting on the sanitary clothing
- Capture the process on the Handout
- Check your answers with trainers



## **DEMO**

# PROCEDURE FOR PUTTING ON SANITARY CLOTHES



Take off outdoor clothing



Put on protective head wear



Take off footwear used outdoors



Move your feet to clean zone (over step-over bench) and put on protective footwear





Enter the production zone



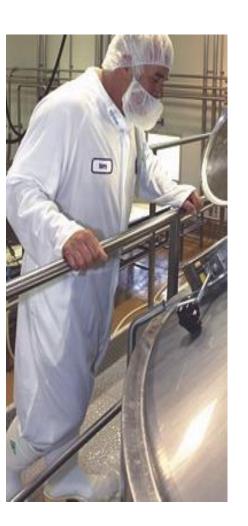
Wash and disinfect your hands



Put on protective sanitary clothes (and face mask, if necessary



Wash your hands





## **ACTIVITY 3.4:**

## DEMO

# WHAT PERSONAL BEHAVIORS COULD CONTAMINATE FOOD?



Identify behaviors / activities that could contaminate food



#### 4 - 5 minutes

Group round robin



- As a class, 1 by 1 in turn, state a unique personal behavior that could contaminate food.
- Do not repeat another person's answer.
- If you cannot think of another behavior, say "pass" and deduct a point on your Food Safety Quiz Scoresheet.





## PERSONNEL BEHAVIOR

Have a documented personnel behavior policy that includes:



No mobile phones

No sneezing or coughing on inputs or product

No spitting (expectoration)

No smoking, eating, chewing or use of personal items outside of specially designated areas









No/limited jewelry and control measures should be applied to minimize the hazards due to allowed jewelry

No nail polish, artificial nails and artificial eyelashes

No pens or pencils worn behind the ear

No garbage, dirty clothing or tools that could come in contact with product/s in personal lockers







# IMPORTANCE OF GOOD STAFF FACILITIES

Minimize risk of microbial, chemical and physical contamination

Ensure, when necessary, the segregation of staff in relation to product risk and activities

Promote required staff hygiene

Promote staff motivation









# PERSONNEL FACILITIES REQUIREMENTS





### Doors of sanitary and personnel facilities

· Are not to open directly into production, packaging or storage areas

### Changing rooms

- Designated
- · Located to minimize risk for work clothes to be contaminated in route to work areas



#### **Toilets**

- · Include required number of toilets in the sanitary construction
- · Include a sink for hand washing, hand dryer and hand sanitizer



### Break areas / canteens / lunchrooms

- · Designated places for storing food and catering
- · Located to minimize cross-contamination risks with production area
- Organized to ensure hygienic storage, cooking, and food distribution with defined storage conditions, temperate, and limitations

### Smoking areas

- Designated
- With appropriate cigarette waste disposal











# FOOD SAFETY QUIZ SHOW: TRUE OR FALSE

## **Statement**

Sanitary clothing of the personnel can be the source of microbiological food contamination







## **CONTRACTORS AND VISITORS**



### **Contractors and visitors MUST:**

- Be aware of access restrictions and procedures with regards to:
  - Sanitary clothes
  - Hand washing
  - Rules of conduct
  - Illness notification
- Have a procedure for informing the food operator about visitor's health
- Regular contractors should be trained to a similar level as employees
- Visitors and contractors in processing or storage areas should be monitored by a nominated person
- All visitors must have someone on site responsible for them









# ACTIVITY 3.5: SPOT AND CORRECT THE NON-CONFORMITY (HYGIENE)



## Objective

Apply knowledge of requirements to identify and address non-conformities



## Timing

#### 5 - 7 minutes

- 3-4 minutes in pairs
- 2-3 minutes answer checking and sharing



# Participant Instructions

- In In groups of 2-4, analyze the pictures in the Handout, identify the non-conformities and determine a way to correct them
- Be ready to share your answers with the class













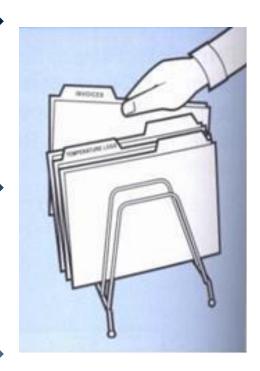
## **CONTRACTORS AND VISITORS**



Regular inspection of the site and facility is vitally important

Instances of incompliance should be recorded and corrective actions should be taken as soon as possible

Personnel engaged in hygiene monitoring should be trained adequately





## GFSI GLOBAL MARKETS: CHECKLIST REQUIREMENTS



B.B 1	Personal Hygiene The business shall ensure the implementation of appropriate hygiene practices for all its people and visitors. Such practices shall result in sanitary handling and delivery of safe and quality products to customers. The Codex Alimentarius Commission's recommendation on personal hygiene shall be followed.
B.B 1.1	Are personal hygiene requirements in place and applicable to all relevant people, contractors and visitors?
B.B 1.2	Are personal hygiene requirements compliant with legal requirements, if applicable?
B.B 1.3	Are communication procedures in place for people, contractors and visitors addressing actions to be taken in the case of an infectious disease?
B.B 1.4	Is a qualified person responsible to decide if individuals with a suspect illness may enter food areas and how these individuals are controlled?
B.B 1.5	Are people, contractors and visitors aware of and complying with the personal hygiene requirements?
B.B 1.6	Are people, contractors and visitors aware of and complying with the requirements for the wearing and changing of protective clothing in specified work areas?



# GFSI GLOBAL MARKETS: CHECKLIST REQUIREMENTS



B.B 7	Staff Facilities The business shall ensure that staff facilities be designed and operated so as to minimize food safety risks.	
B.B 7.1	Are suitable changing rooms provided for staff?	
B.B 7.2	Are toilets provided, operational, accessible and adequately segregated from processing and food handling areas?	
B.B 7.3	Are suitable and sufficient hand-washing facilities provided and accessible?	
B.B 7.4	Are separate lunch room facilities provided away from production, packaging and storage areas?	









