



# Surveillance

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Jordan Food and Drug Administration

# Jordan Food and Drug Administration (JFDA)



Jordan Food and Drug Administration (JFDA), is the official body in Jordan responsible for the safety and quality of food in Jordan. The principal function of the JFDA is to take all reasonable steps to ensure that food imported, produced, distributed or marketed in Jordan meets the highest standards and to ensure that food complies with legal requirements and recognized codes of good practice.

# Jordan Food and Drug Administration (JFDA)



Jordan Food and Drug Administration (JFDA), seeks on yearly basis to implement a set of surveillance programs, including a national annual program and Four specialized programs, In order to monitor a range of potential risks in food.

# Surveillance, intervention and evaluation for integrated risk management

- **Links between surveillance and intervention for hazard mitigation**
- **The value of information**
- **Doing the right thing and doing it right**

# Surveillance/ Monitoring

## Monitoring:

Is the term describing a continuous effort to collect data to detect changes or trends in the occurrence in order to inform Risk Managers.(BFR)

It involves direct detection of microbial pathogens in food ingredients, products, or production environments. (Institute of Medicine,2006)

# Surveillance/ Monitoring

## Surveillance:

Is a special case of monitoring where data are used to assess a status in response to a pre-defined threshold.

For some hazards, the threshold may be zero. (BFR)

It involves the collection of human or animal foodborne disease data to identify problems in the food supply through analyses that detect clusters of cases and disease trends. (Institute of Medicine, 2006)

# Definition European Centre for Disease Control ECDC



## Surveillance:

The ongoing collection, validation, analysis and interpretation of health and disease data that are needed to inform key stakeholders in order to permit them to take action by planning and implementing more effective, evidence-based public health policies and strategies relevant to the prevention and control of disease or disease outbreaks.

The prompt dissemination of information to those who need to know is as essential as ensuring the quality, validity and comparability of the data.



# Surveillance for hazard prevention and control



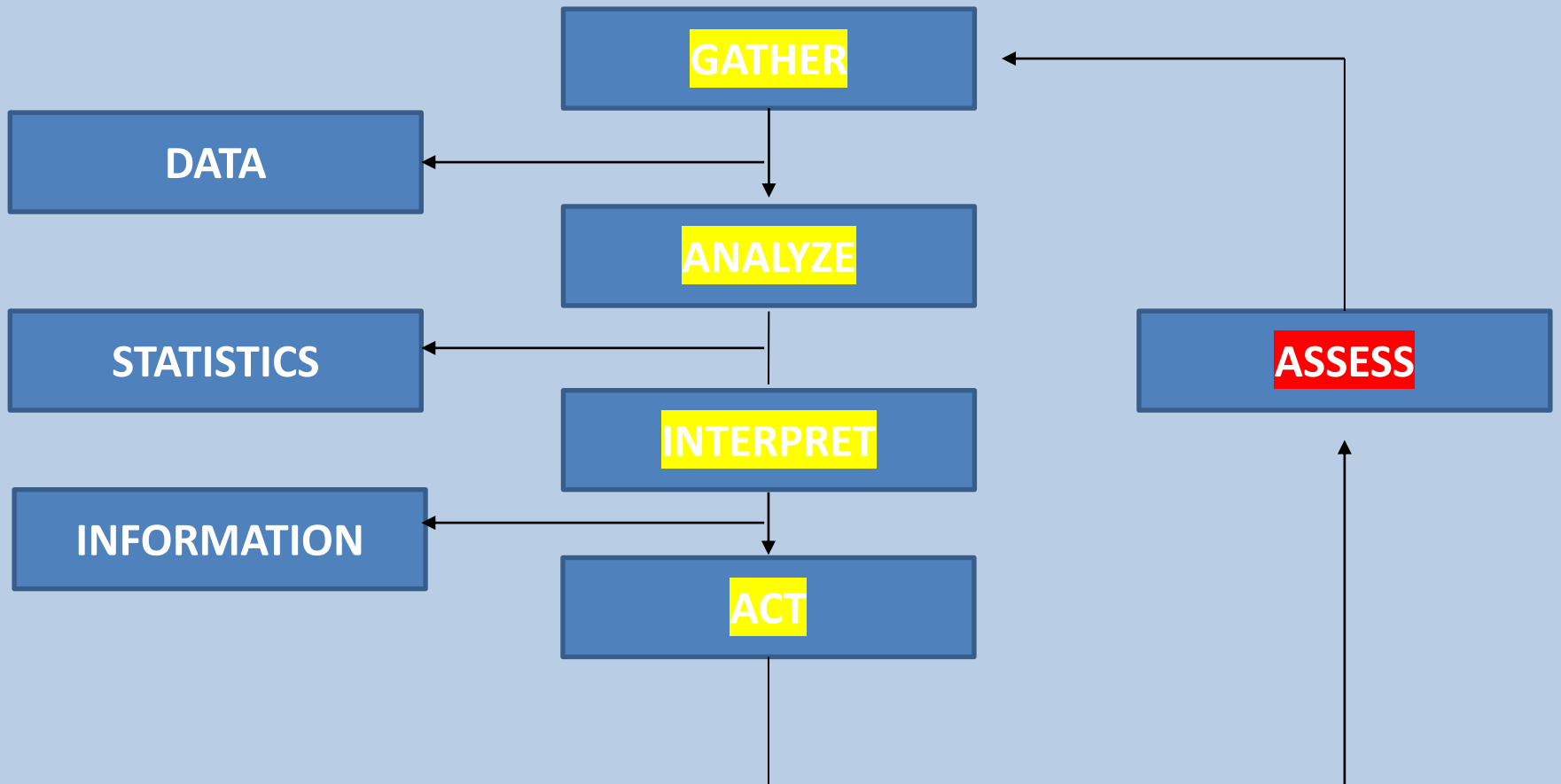
**Incidence**

**Trend**

**Check effectiveness  
of control**

**Time**  
**Freedom From  
Infection**

# Elements of monitoring and surveillance



# Monitoring/Surveillance levels

## Food safety



### National:

Demonstrate Freedom from hazard

Outbreak detection

Hazard control

Detect emerging hazards

Progress of hazard reduction programs

# Monitoring/Surveillance levels and objectives : Food safety



## Industry:

Assure freedom from hazard

Outbreak detection

Define herd/product status

Documentation of acceptable risk levels

# Monitoring/Surveillance levels and objectives : Food safety



## Producer:

Assure freedom from hazard

Outbreak detection

Define herd/product status

Documentation of acceptable risk levels

# Designing a surveillance systems



## Elements used in the design:

1. Objective(s)
2. Hazard selection
3. Case definition, diagnostic methods
4. Target population
  - Region, species, producers, animals, products
5. Timing, sampling intervals
6. Data management, analysis
7. Methods for data analysis
8. Feedback, dissemination of results

# Objectives



- To verify the effectiveness of food safety systems.
- To verify the safety of food in all parts of the country.
- To Determine the most recurring risks in food, and to analyze the results scientifically.

# Objectives



- To identify the level of conformity of selected groups of foods placed in the Jordanian market and consumed by the citizens.
- To Assist producers, importers and traders into avoiding cases of invalidity and/or non-conformity.
- To Create a database for the benefit of decision makers, authorities, industry, producers, academia and any other relevant agency.



# Objectives



- To assess the effectiveness of the measures taken by JFDA in controlling the safety of food in the Jordanian market .
- To Take corrective measures against producers responsible for the violation of the safety and quality of food.

# Objectives



- To Enhance the citizen's confidence in the performance of the regulatory body in ensuring the safety and quality of food offered for their consumption.
- To base our legislations, guidelines, technical regulations and decisions on scientific data.

# Sample collection instructions for the annual surveillance program :



## Collecting and transporting samples:

ISO 7218: "Microbiology of food and animal feeding stuffs – General rules for microbiological examinations".

## Sample collection instructions:

- The process of collecting and handling samples of food and raw materials by food inspectors during the implementation of the program is subject to the following instructions:

- The term sample wherever mentioned in the plan means:

food or raw material of the same batch, expiry date, commercial brand, , size, weight and packaging method.

- Time and date are designated for the collection of samples for each region .
- In the event that there are two days/week for one region , samples must be distributed equally among the two days.

## Sample collection instructions:



- Each region should commit to collect samples according to the plan for each quarter of the year.
- Commitment to the numbers of units and their weights contained in the sample size plan, provided that each unit is delivered separately and not as a single unit with a higher weight.
- Timing of delivery of the collected samples should be before twelve noon.

# Sample collection instructions:



- Inclusion of the largest possible number of brands and food establishments during the implementation of the plan.
- Expanding the area of sample collection .

## Sample collection instructions:



- Collecting samples of food, food products and raw materials is done only for those preserved in appropriate storage and packaging conditions.
- Collecting samples that carry a label, so that they can be checked to show their conformity with the specification of their technical regulation.



# Sample collection instructions:



Samples should be handled and transported according to the instructions in the correct manner that ensures no damages and according to the nature of the sample.

# Sample collection instructions:



- It is preferable to collect samples of raw nuts like pistachios from the warehouses or from plants and sweets shops.
- The symbol (⌘) means that samples must be transported to the laboratory refrigerated as soon as possible.

# Sample collection instructions:



- The symbol (xx) means that samples must be transported to the laboratory frozen as soon as possible.
- Samples that are refused to be received by the laboratory because they do not conform to the plan are not considered a calculated sample, and another sample must be collected in its place that conforms to the specifications contained in the plan.

# Sample collection instructions:



- The samples should be tightly sealed and labeled according to the instructions and regulations
- Instructions for receiving samples by the food laboratory is according to the quality procedure (No. AFQP-519)

## Methodology:



- Samples are collected by JFDA food inspectors in different governorates of Jordan and sent to the JFDA Food Laboratory according to an agreed schedule plan.
- Samples are received by Food Laboratory, according to a completely filled out sampling form.

## Methodology:



- Testing is done according to the Jordanian technical regulation of each food item in addition to other hazards the program is targeting.
- Physical, Microbiological and chemical testing includes natural toxins, food additives and contaminants are done at the testing labs.

# Methodology



- Analyzing and interpreting data.
- Dissemination of information to all those involved so that directed actions may be taken.

Allow evidence-based decision making  
To make “better” decisions

- National reporting.

# Methodology

## Food Directorate



Aims to remove contaminated products from the market





Decision options for moving forward:

- To Start a new control program
- Change a control program
- Stop a control program

Do nothing – Investigate further – Peace of mind

# To Start a new control program

Four special surveillance programs are conducted every year based on:

- The outcome and recommendation of the routine annual program.
- when there is concern about threats to our food supply (local, national, and global)
- Risk managers request.

# Specific surveillance programs

These programs are focused on specific foodstuffs and specific tests.

Examples:

1- Pesticide residue program in specific food items (packaged and cleaned vegetables, rice, red wine and canned food) .

# Specific surveillance programs

## 2- Veterinary drugs residue program

Chicken tissues were analyzed for residues of 32 veterinary drugs.

Residues of drugs may be left in tissues at concentrations that may be harmful to human health and eventually antimicrobial resistance will be developed.

Objectives were for the detection of incorrect use of veterinary drugs such as overdose, inappropriate use times, failure to implement best practices in poultry farming prior to slaughter .

# Specific surveillance programs



3- For detecting Microbiological and Chemical Hazard in 107 samples of Vacuum-packed Chilled Meat.

26 different brands from different origins were tested

# Specific surveillance programs



4 –Analytical program was conducted on foods and supplements available in Jordan intended to promote weight loss for the presence of pharmaceuticals weight loss drugs in response to a national food incident and several international reports showing detectable levels of scheduled pharmaceuticals in these products.

# Surveillance



Remains to be the most powerful detection tool for detecting problems in the food supply for years to come.

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Thank you