

# Járványmenedzsment Romániában

- Definíció
- Történelem
- Előfordulás
- Fázisok
- Szervezeti struktúra Romániában
- SOP
- Szabályozás
- Határon átnyúló együttműködés

# Definíció

- Egy járvány (a görög **παν** *pan* + **δήμος** *demos*) olyan fertőzés, mely egy nagy területen (pl. kontinens), vagy akár világszerte terjed el.

# Körülmények

- A WHO szerint járvány keletkezik, ha 3 feltétel adott:
  - the **emergence** of a new disease to the population.
  - the agent **infects** humans, causing serious illness.
  - the agent **spreads** easily and sustainably among humans (infectious).

# The stages of a pandemic

- **Interpandemic period:**

- **Phase 1:**

- No new influenza virus subtypes have been detected in humans.

- **Phase 2:**

- No new influenza virus subtypes have been detected in humans, but an animal variant threatens human disease.

# The stages of a pandemic

- **Pandemic alert period**

- **Phase 3:**

- Human infection(s) with a new subtype but no human-to-human spread.

- **Phase 4:**

- Small cluster(s) with limited localized human-to-human transmission

- **Phase 5:**

- Larger cluster(s) but human-to-human spread still localized.

# The stages of a pandemic

- **Pandemic period:**

- **Phase 6:**

- increased and sustained transmission in general population.

# History

- **430 BC** Peloponnesian war, Greece;
- **541 AC** bubonic ciuma, Constantinople;
- **1347** “Black Death”; till 1700 problems in Europe;
- **1826** Cholera, India to Europe; 7 next pandemic situations;

# History

- **1918 – 1919** “Spanish Influenza”; between 20-40 million death people;
- **1956 – 1957** “Asian influenza”, 1 million death people;
- **1968 – 1969** “Hong Kong influenza”; 1-4 million death people;
- **SARS;**
- **HIV;**
- **H5N1;**



# How it's start

- Over 25% of population affected;
- Can be severe for everyone;
- Any person it's at risk;
- There are not available vaccines;

# Early Alert and Rapid Response in Transmissible Diseases System

( Order 883 / 2005 of Ministry of Health)

## ■ Objectives

- Early **identification** of transmissible diseases in order to prevent spread;
- **Monitor** the tendencies of transmissible diseases with rapid spread;
- **Evaluation** of applied control measures;
- Rational and efficient **use** of available resources;

# Early Alert and Rapid Response in Transmissible Diseases System

( Order 883 / 2005 of Ministry of Health)

- This legislative act **defines** :
  - alert **levels** for different infectious diseases;
  - **reports** situation model;
  - **responsibilities** ( physicians, institutions, etc.);

# National intervention plan for epidemic influenza

( Ord. 1094 / 2005 – Ministry of Health )

## ■ Objectives:

- **reduce** number of illness / deceased;
- **prevent** further spreading;
- Limit social consequences;
- reduce **economic losses** ( according to this plan flu pandemic is considered **calamity** by government);

# National intervention plan for epidemic influenza

( Ord. 1094 / 2005 – Ministry of Health )

- The basic plan structure:
  - **Measures & actions** needed to be taken in every stage of pandemic;
  - **Responsibilities**;
  - Situation **management**;
  - Pandemic **scenarios**;

# Plan structure

## ■ **General measures:**

- Organizational ( structure definition and composition);
- elaboration of intervention plans;

## ■ **Specific measures** (medical measures):

- surveillance;
- cases management;
- Clinic prophylaxis;
- Therapy (on the 4 phases of pandemic);

## ■ **Communication;**

## ■ **Logistics;**

# Avian flu in the world

## ■ 2003 – 2006:

- 218 cases on humans;
- 118 fatalities;

## ■ 2007:

- 74 cases;
- 48 fatalities;

## ■ Especially in Vietnam and Indonesia;

# Avian flu in Romania

## ■ 2005:

– first wave of avian flu;

■ Autumn of 2005;

■ Refunding of chicken owners **28** million euro;

■ 430.000 dead birds;



# Avian flu in Romania

## ■ 2006:

- Second wave:
  - 35 million euro compensations;
  - 22 million euro disinfection solutions;
  - 40 million decontamination by Transportation Minister;
- **183** settlements with avian flu (18 counties + Bucharest);
- Economic losses:
  - 70 million euro due to the decrease of request of chicken meat;
  - Decrease of chicken meat consumption with **80 – 85%**;
  - Over **60%** of production capacity affected;
  - Decreasing of Inflation;

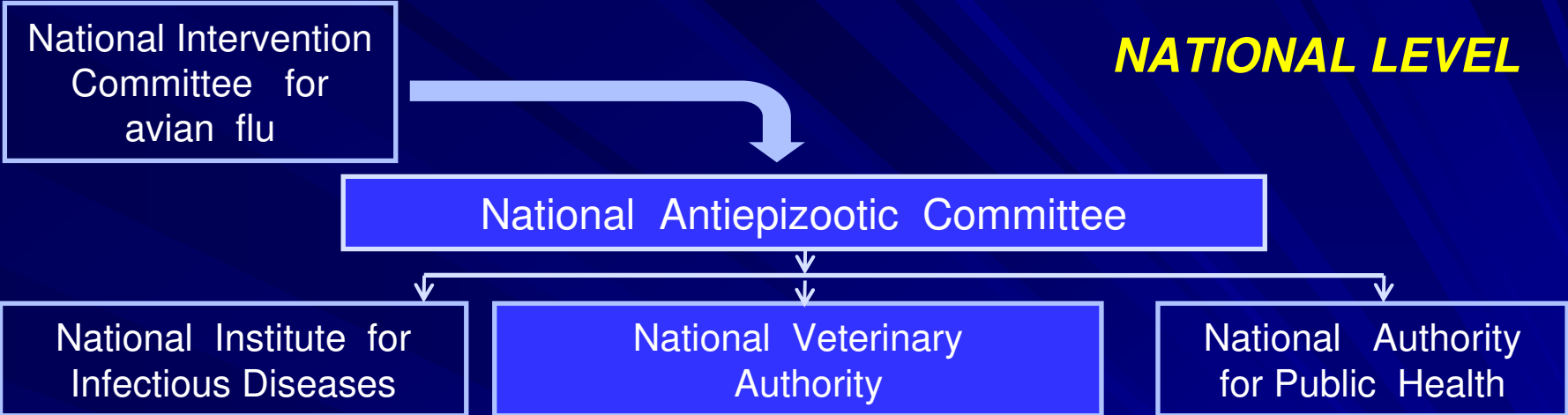
# Methodology of avian influenza control

Ord. 31 / 2006 of Ministry of Health

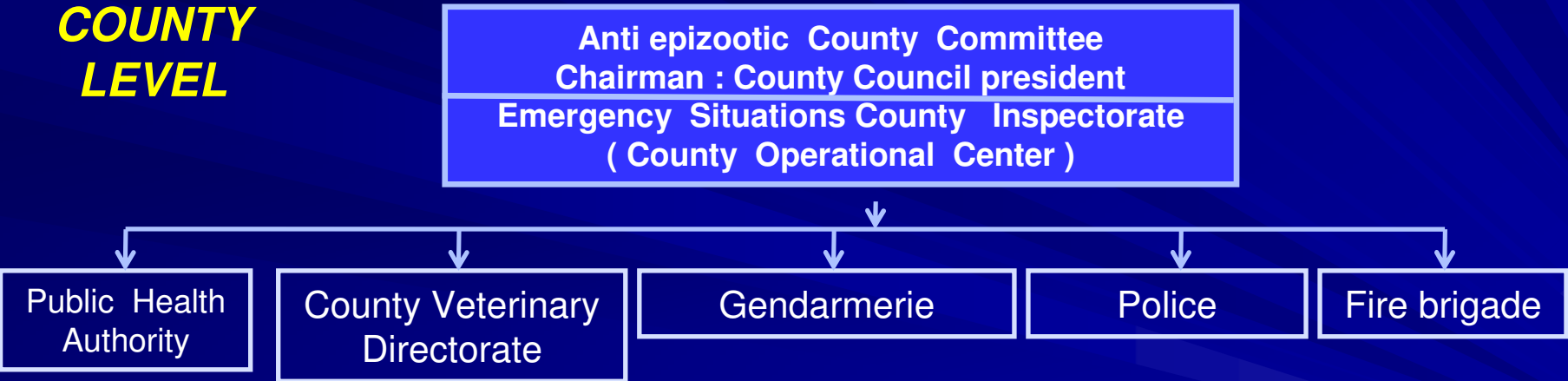
## ■ Describe:

- **symptomatology** (for birds and humans);
- situation **management**;
- **responsibilities** and duties;
- **safety** measures;
- **informational flow**;

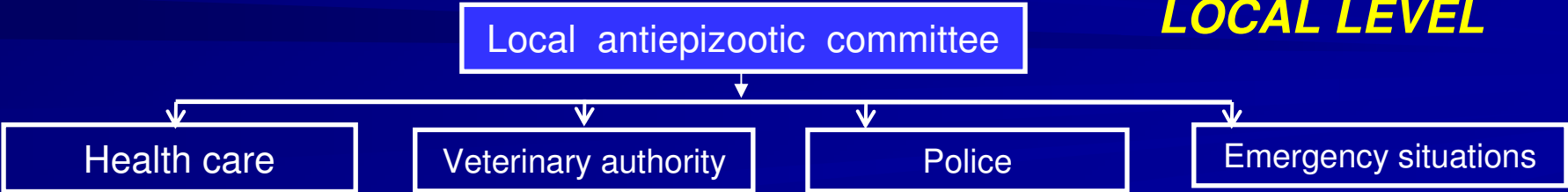
**NATIONAL LEVEL**



**COUNTY LEVEL**



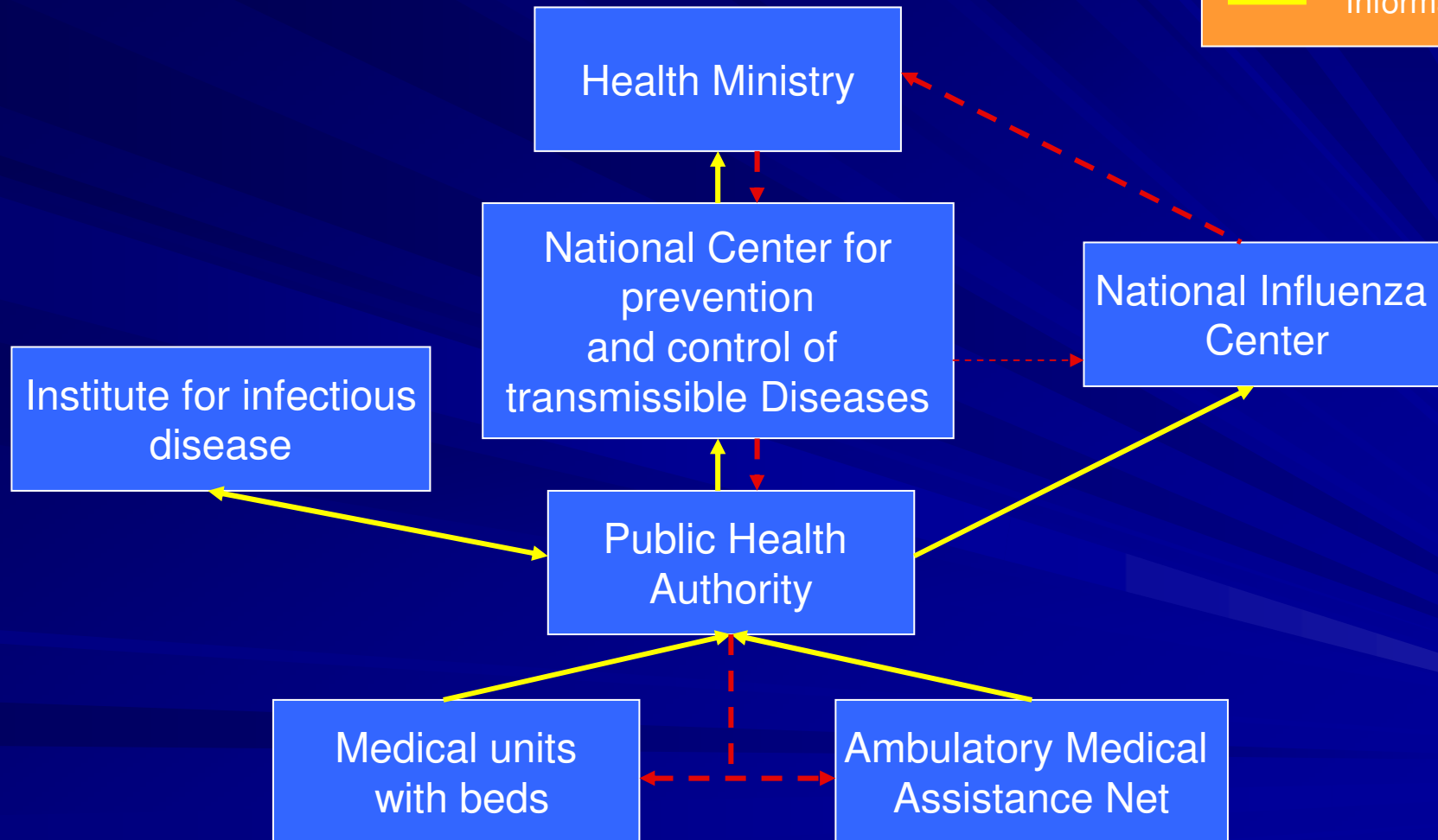
**LOCAL LEVEL**



# Information flow in pandemic situation

Legend

--- Command  
— Information



# What is an avian epidemic?



- Disease produced by virus H5N1;
- Affects birds (wild and domestic);
- Fast pace spread throughout birds;
- Migrating birds, especially aquatics, are considered natural reservoir for this disease;
- The disease can be transmitted from wild to domestic birds easily (secretions, dead bodies, water, food, shelters, transportation means, all can be contaminated);
- The close contact the bigger probability of infection;

# How it manifest?

## ■ Symptoms:

- Not eating;
- Position: wings down, comb swollen and dark-red colored;
- Black and blue spots on legs;
- Diarrhea;
- Secretions on beak;
- Head and neck swollen;
- Paralysis;
- Head tremors;
- Neck contortions;









# What has to be done?

- **Inform immediately** veterinary doctor as soon as you note ill or dead birds in your yard;
- **Don't touch** without unprotect hands dead bodies or ill birds;
- Keep the **birds closed** in shelters or confined areas; avoid as much as possible contacts with other birds;
- Don't let geese and ducks on lakes;
- **Survey children**; don't let them play with domestic birds!
- **Support efforts** of the responsible authorities and sanitary veterinarian personnel involved in the intervention activities;

**What the chicken farm owners have to do?**

**To respect the bio – security rules;**

**To support veterinarians efforts of  
controlling the disease;**

**To support state authorities in  
implementing administrative  
measures;**

# What the consumers have to do?

- **Buy** meat, eggs and other chicken products **only from authorized stores**;
- **It's not dangerous** the meat and eggs consumption **when** the products are well **thermic prepared**;
- **Wash** your **hands** with water and soap as many time you have contacts with chicken products;
- **Wash** your kitchen tools with detergent **after** using **chicken** products;

# Intervention actions & steps

- **Killing** and destruction of the **birds** population **from** the **affected** farm / households;
- First **disinfection**;
- Continuous clinical **survey**, throughout specific tests, over the birds populations in the vicinity of affected area;
- Farms owners and householders must stay close to intervention teams till the end of operations;
- **Control** the **entrance** and **exit** from the **affected** area; provide decontamination and control;

# Intervention actions

If the rapid test is positive delimitate the area and:

- **Kill all** the **birds**, products and subproducts coming from them;
- **Respect** the **bio security** and environment protection measures;
- Apply **disinfection** and **decontamination** measures in birds shelters, yards, streets, alley, etc.;
- Set up sanitarian – veterinarian **filters** for transportation means and personnel at the entrance and exit points from the affected area;
- Implement **traffic restriction** for personnel and transportation means till the end of the pandemic;

# Intervention actions

- Establish:
  - **Protection area** – minimum 3 Km;
  - **Surveillance area** - minimum 10 Km;
- **Destroy** all food, waste and other possible contaminated materials;
- **Determine** the producing or processing companies, warehouses and depots which had contact with farms from affected areas;
- Execute **second disinfection**;
- Execute **third disinfection**;
- Introduce **sentinel birds** in affected area;
- **Repopulation** of the area with bird is permitted after minimum 21 days from the end of intervention measures and after the birds health has been tested;
- Cancelling all restriction if the lab tests are negative;

# Other general measures

- Continuous clinical birds **health surveillance**;
- **Wild birds** populations surveillance;
- **Bio security** measures;

## Very important !!

- ❖ In Romania a lot of bird flu cases were detected but none case on humans;
- ❖ **This shows efficiency of control and prevention measures but also**

## **SUPPORT AND CONFORMITY OF ALL CITIZENS!**

- ❖ Bird flu is all around the world we aren't the only ones who fight against it !!
- ❖ Virus sources are in wildlife, it's possible to appear new cases;



**QUESTIONS**

**?**