

West-Nile surveillance strategy

26 october 2005

- Objectives
- Methodology
- Common regional aspects
- What has to be done to achieve this in each country
- Publication strategy

Objectives

- **Confirm virus circulation (Barbados)**
 - Trace back the origin of positive horses
 - Vaccination ?
 - Importation ?
- **Identify virus circulation (Dominica)**
 - Horse : problem of
 - Bird survey
- **Identify a new virus circulation / intro (Guadeloupe)**

West-Nile Facts

- No (+/-) human cases
- No clinical case on horses
- No bird mortality
- Viral circulation
 - Birds
 - Horses
- No virus isolation
- Environmental risk factors

Possible objectives

- **Early detection of virus circulation**
- **Seroprevalence estimation**
 - Ponctual : What is the situation today ?
 - Regular : has the virus circulated this year ?
- **Detection of increased virulence**
 - Evolution of the virus
 - Increase of virus circulation
- **Isolating the virus**

Early detection of virus circulation

- **Network of sentinel birds**
 - Regular sampling
 - Sufficient number of samples (sensitivity)
 - Targeted on risk zones
- Heavy and expensive
- To be appreciated in relation to the human risk

Seroprevalence estimation

- **Transversal study**
 - Birds - horses
 - Harmonised regional protocol
 - Use the notion of risk zone
- **Regular study**
 - Birds of less than one year

Detection of increased virulence

- **Passive surveillance**
 - Horses
 - Birds
 - Humans

Virus isolation

- **Appropriated procedures for brain sampling on horses**
- **Reservoir birds ?**
- **Mosquitoes ?**

Regional strategy

- **Identification of risk zones in each country following the same criteria**
- **Harmonised transversal studies**
 - Regional database
 - Identify the common fields for the database
- **Regional research work on vector borne diseases (PhD)**