



Cost-effectiveness assessment of European influenza human pandemic alert and response strategies

NEWSLETTER 3

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Description of response strategies according to various scenarios of influenza human pandemic (WP5)

The objective of the core Workpackage 5 was to describe regional and national response strategies according to various scenarios of influenza human pandemic in Europe, according to existing preparedness plans.

Because of the complex and zoonotic nature of the disease, the aim of WP5 was to assess relevant responses and measures strategies, taking into account performance of interventions, costs, legal and ethical aspects and intersectoral aspects. The WP5 team reviewed the actions taken by member states during the 2009 pandemic and assessed the decision processes in EU countries.

The team selected 18 response strategies categorized in 7 groups:

- Individual disease transmission
- Societal interventions
- Immunization programs
- Antiviral distribution programs
- Reduction of secondary infections
- Interventions related to level of care
- Screening interventions

A set of standard criteria was defined including social disturbance, ethical impact, legal impact, feasibility level, direct and communication costs, work losses.

In addition 5 performance indicators have been defined, and expressed in success rates:

- Success rate 1:** reduction of mortality due to influenza $\geq 40\%$
- Success rate 2:** reduction of work loss days $\geq 30\%$
- Success rate 3:** reduction of morbidity due to influenza $\geq 30\%$
- Success rate 4:** reduction of the max weekly incidence rate
- Success rate 5:** delay epidemic peak ≥ 2 weeks

Finally 16 sequential strategies were defined composed by various combinations of the response strategies over the 3 quarters of a standard pandemic period.

An extensive pilot data collection was carried out in France, Italy, Poland and Romania.

WP5 is critical for the overall FLURESP project as it will not only focus on describing response strategies but also on proposing indicators and relevant criteria to assess most efficient sequential strategies in the frame of WP6 and WP7.

Scientific communications

FLURESP communications have been presented in the following events:

- XIV International Symposium of Respiratory Viral Infections (Macrae Foundation), Istanbul, 23-26th Mar 2012

- European Commission Press conference: Why is it important to be vaccinated, Luxembourg, 15-16 Oct 2012

FLURESP Working meeting Madrid, Oct 23-24th 2012



A large part of this working meeting was dedicated to validate the pilot data collected in France, Italy, Poland and Romania in the frame of WP6.

In addition, WP2 Dissemination and WP3 Evaluation Workpackages were discussed.

FLURESP Working meeting Paris, 14th Feb. 2013



Preliminary results from WP6 (multi-criteria analyses) were presented and discussed.:

- Some response strategies seem to have a negligible effect
- Other response strategies seem effective (immunization programs and antiviral distribution programs)
- Effect of response strategies appear similar from one country to another

FLURESP beneficiary institutions

- Université Claude Bernard Lyon 1, (main beneficiary) *France*
- Université Paris Descartes, *France*
- Instituto Vasco de Investigacion y Desarrollo Agrario, *Spain*
- Retroscreen Virology Ltd, *UK*
- Istituto Superiore di Sanita, *Italy*
- Open Rome, *France*
- Laurent Niddam Europai Közössegi Jogasz Iroda, *Hungary*
- National Institute of Public Health, *Poland*
- Institutul National de Sanatate Publica, *Romania*

Collaborating partners

- World Health Organisation, Headquarter
- European Centre for Disease Prevention and Control
- University of Crete, *Greece*
- Ministry for Health, Elderley and Community Care, *Malta*

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