

# Three epidemiological surveillance platforms: A unique approach towards “One Health” surveillance in France

Lucie COLLINEAU<sup>1,5</sup>, Hélène AMAR<sup>2,6</sup>, Didier CALAVAS<sup>3,5</sup>, Pauline DE JERPHANION<sup>3,7</sup>, Gaud DERVILLY<sup>1,7</sup>, Laura GONZALEZ TAPIA<sup>1,5</sup>, Renaud LAILLER<sup>3,6</sup>,  
Yves LAMBERT<sup>2,5</sup>, Melanie PICHEROT<sup>4</sup>, Samuel SOUBEYRAND<sup>1,7</sup>, Martin STRUGAREK<sup>2,7</sup>, Isabelle TAPIE<sup>2,5</sup>, Céline DUPUY<sup>3,5</sup>






<sup>1</sup> French National Institute for Agricultural Research, <sup>2</sup> French Ministry of Agriculture, <sup>3</sup> French Agency for Food, Environmental and Occupational Health and Safety, <sup>4</sup> French Ministry of Health, <sup>5</sup> Animal Health Epidemiological Surveillance Platform, <sup>6</sup> Food Chain Surveillance Platform, <sup>7</sup> Plant Health Epidemiological Surveillance Platform.

## CONTEXT

In the recent years, France has been developing a unique “One Health” approach for epidemiological surveillance based on a combination of three platforms, each focusing on a specific area: animal health, plant health or food chain surveillance.

## ORGANIZATION





The platforms have a common governance approach and involve private and public organisations responsible for monitoring health hazards:

-  The French Government
-  Scientific support organisations
-  Agricultural technical institutes
-  Representatives of farmers
-  Processing, distribution and catering sectors

Partnership between private and public organisations optimises activities and surveillance costs by pooling resources, skills and tools.

## OBJECTIVES

This organisation aims to:

-  **Develop** a collective culture common to all three areas about cross-cutting notions and concepts such as “One Health” and data quality.
-  **Identify** health issues that require the development of an integrated surveillance approach for all three domains.
-  **Establish** the cooperation needed in order to work together on transversal issues such as surveillance evaluation.
-  **Foster** technology transfers and share experience and skills.

## EXAMPLE:

### Salmonella surveillance

A first application of inter-platform collaboration will focus on Salmonella surveillance all along the food chain and particularly within the cattle, pig and poultry sectors. Joint activities will include, among others, an evaluation of the national Salmonella surveillance system performed by a mixed team of members from both animal health and food chain surveillance platforms.

The potential for synergies, including the development of health indicators and the use of whole genome sequencing for Salmonella characterization and epidemiological investigations will also be explored.

## CONCLUSION

Three platforms for epidemiological surveillance have now been set up in France. They are designed to help prevent and control health risks by ensuring effective epidemiological surveillance in animal, plant and human health domains, from primary production through to the consumer. An interplatform organisation was established to facilitate synergies and continuity in inter-platform collaboration.