

## Surveillance, prevention and control of emerging and re-emerging diseases with special relevance to public health

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**Abstract** 

This is a research line aimed at investigating the factors associated with public health crises caused by the appearance of sporadic cases or outbreaks of emerging or re-emerging diseases, and the effectiveness of control measures.

In 2017, the FIS project PI16/02005 on factors associated with acute gastroenteritis outbreaks due to norovirus in closed and semi-closed institutions has been initiated. This project will end in December 2019. In 2016, the Scientific Conference " Prevention and Control of Meningococcal Disease: Public Health Challenges" was organized with the participation of Dr. Shamez Ladhani, Paediatric Infectious Disease Consultant of Public Health England Colindale.

In 2016, the Scientific Conference "Pertussis: an emerging disease?" was organized with the participation of Dr. Helen Campbell, of Public Health England expert on immunopreventable diseases.

In 2015, the Scientific Conference "Outbreaks of norovirus gastroenteritis: an emergent health issue" was organized with the participation of professor Marion Koopmans, international expert of Erasmus University Medical Center Rotterdam.

In 2015, we participated in the Scientific Conference "The Ebola virus disease. Lessons learned from the current epidemic" organized by the Advisory Council of Public Health. In 2015 and 2016 we have participated in the update of protocols for surveillance of the Ebola virus in Catalonia and the Advisory Scientific Committee of the disease.

In 2015 we participated in the "Guide for the

prevention and control of hepatitis C" published by the Department of Health and the Plan for Prevention and Control of Hepatitis C in Catalonia, available on the website <a href="http://canalsalut.gencat.cat/web/.content/home canalsalut/professionals/temes de salut/vigilancia epidemiologica/documents/arxius/guiahepatitisc.pdf">http://canalsalut.gencat.cat/web/.content/home canalsalut/professionals/temes de salut/vigilancia epidemiologica/documents/arxius/guiahepatitisc.pdf</a>.

In 2017, we are participating in the Scientific Advisory Committee for High-Risk Emerging Communicable Diseases created by the Public Health Agency of Catalonia in September 2017 and the update of the protocols for the surveillance of various emerging diseases such as Chikungunya, West Nile, Toscana, hemorrhagic fever Crimea Congo, Dengue and fever by Zika virus.

In 2013, the thesis "The viruses as a cause of outbreaks transmitted via fecal-oral in Catalonia" was read, that has generated several publications.



## Selected publications

- L. Basile, P. Ciruela, A. Requena-Méndez, M.J. Vidal, E. Dopico, A. Martín-Nalda, E. Sulleiro, J. Gascon, M. Jané, and the Working Group of Congenital Chagas disease in Catalonia. Epidemiology of congenital Chagas disease 6 years after implementation of a public health surveillance system, Catalonia, 2010 to 2015. Euro Surveillance 2019; 24: 1900011.
- I. Parrón, J. Álvarez, M. Jané, T. Cornejo Sánchez, E. Razquin, S. Guix, G. Camps, C. Pérez, À. Domínguez and the Working Group for the Study of Outbreaks of Acute Gastroenteritis in Catalonia. A foodborne norovirus outbreak in a nursing home and spread to staff and their household contacts. *Epidemiology and Infection* **2019**; 147: e225
- E. Borràs, L. Urbiztondo, G. Carmona, M. Jané, I. Barrabeig, M.R. Sala, J. Balañà, M. Company, I. Parrón, P. Godoy, C. Rius, N. Soldevila, C. Cabezas, À. Domínguez, the Working Group for the Study of Hepatitis B in Catalonia. Effectiveness and impact of the hepatitis B vaccination program in preadolescents in Catalonia 21 years after its introduction. *Vaccine* **2019**; 37:1137-1141.
- A. Sabrià, R.M. Pintó, A. Bosch, J. Quer, D. Garcia-Cehic, J. Gregori, A. Dominguez, M. Carol, M.R. Sala-Farré, S. Guix; Working Group for the Study of Outbreaks of Acute Gastroenteritis in Catalonia. Caracterization of intra- and interhost norovirus P2 genetic variability in linked individuals by amplicon sequencing. *PLoS One* **2018**; 13:e0201850.
- P.M de Salazar; M. Jane, M. Maresma, A. Plasencia. Evaluación del riesgo de transmisión autóctona del virus Zika y otras enfermedades virales emergentes transmitidas por mosquitos en Cataluña. *Gaceta Sanitaria* 2018; 32:101-105.

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