le cnam

Conservatoire national desarts et métiers

PUBLIC HEALTH

Mooc - Epidemiology

Monitoring diseases and carrying out population-based surveys to identify their causes (behaviours, environmental exposure, and genetic factors): such is the role of epidemiology, the principles and methods of which you will learn during this course.

Content

The course begins with a presentation of the key principles of descriptive epidemiology (monitoring of diseases, investigation of epidemics) and analytical epidemiology (identification of disease risk factors). Principal risk indicators, the formulation of a scientific hypothesis, the study schemes used in population-based surveys, taking sampling fluctuations into account, the statistical analysis of results and the interpretation of bias: all of these will be explained and illustrated by examples and case studies drawn from the real world.

The course will also address the main principles of causality and the levels of proof required today to be able to say that a given “exposure” is responsible for a disease.

At the end of this MOOC, the students will have the keys to interpret scientific articles dealing with these subjects, and will be prepared to pursue specialised teaching in epidemiology and public health.

Format

5 videos of 10-15 minutes every week for six weeks (except for the last week, where the last video will be replaced by a final exam, making 29 videos in total). Subtitled in English.

Who can sit this course?

This course is for anyone who wants to know more about epidemiology and its related job prospects.

It is particularly relevant for students and professionals who are interested in professions concerning population health, better known under the name of the public health profession.

This course can also serve as a supplement for professionals from other disciplines of public health (e.g. public health policy, health economics) who would like to better understand epidemiology’s role in the study of population health.

Prérequisites

There are no prerequisites, although knowledge of biostatistics would be useful for hypothesis tests. What about medical knowledge? Of course, the more you know, the better, but it is far from necessary. In Anglo-Saxon countries, the majority of public health specialists are not doctors.

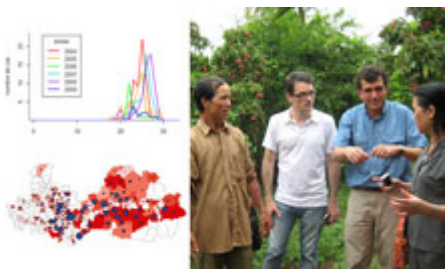
Note: two of the case studies are drawn from scientific articles in English. An understanding of written English will therefore be important for these two exercises.

The teacher

Arnaud Fontanet :

Professor of the Health and Development Chair at the Conservatoire National des Arts et Métiers (Cnam), and Director of the Epidemiology of Emerging Diseases Unit at the Institut Pasteur.

Former resident at Parisian hospitals, a doctor of medicine (Université Paris V) and of public health (Harvard University), Arnaud Fontanet is specialised in the epidemiology of infectious and tropical diseases., Arnaud Fontanet is also the Director of the Epidemiology of Emerging Diseases Unit at the Institut Pasteur. With Jean de Kervasdoué, he co-founded the Pasteur-Cnam School of Public Health.



April 8, 2019

May 19, 2019

More information and registration:

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http://www.cnam.eu/courses-on-line/mooc-epidemiology-1046176.kjsp?RH=1409303704446