

Syllabus Module

N°216	Occupational Health within Public Health
Coordinator	Emilie Council, French Institute for Demographic Studies (Ined)
Dates	November 28 th to December 02 nd , 2022
Credits/ECTS	3 ECTS
Duration	5 days of 6 hours = 30 hours of courses, and personal group work (estimation 8h)
Location	Room - EHESP 20 Avenue George Sand 93210 LA PLAINE ST DENIS
Description	<p>The purpose of this session is to further the presentation of the concepts, principles and methods related to occupational health and safety (OHS) and to occupational epidemiology. It will in particular emphasize the importance of integrating occupational health within public health. With workers representing half of the world's population, improving working conditions and limiting the exposure to occupational hazards and risks should be a priority for any public health authority. Despite effective interventions to assess and manage health risks at the workplace, major gaps exist between countries, sectors and types of contracts, with regards to the health status of workers and their exposure to occupational risks. The prevention of occupational hazards, the protection and the promotion of health at work, the management and the organization of occupational health services requires a strong and protective legal framework as well as the involvement of workers, employers, medical professionals and public health specialists as it will be exposed through a case-based approach to the students. Epidemiology is also a key discipline once it comes to occupational health as there is a need to quantify and follow-up the health status of workers against various occupational hazards and risks.</p>
Prerequisites	M1 level in the same area + Advanced core EOHS M2
Course learning competency	<p>Consolidate the competencies acquired in occupational health sciences in M1 and in particular:</p> <ul style="list-style-type: none"> - Understand the public health implications of workplace exposures and policies - Identify and describe the occupational determinants of health - Identify their connections with environmental protection and public health policy - Apply analysis skills and techniques to assess and understand an occupational health problem - Know and use surveillance of work-related risks in order to identify intervention/policy needs
Structure (details of sessions title/speaker/date /duration)	<p>Morning sessions:</p> <ol style="list-style-type: none"> 1. Introduction to module; Emilie Council (Ined), 1h 2. The place of occupational health in our global health (Introductory lecture); Carel Hulshof (Amsterdam UMC), 2h 3. Analysis and control of working conditions: policies, regulations, work organization, risks insurance; Carel Hulshof (Amsterdam UMC), 3h 4. Tools and methods to analyze the different kinds of occupational risks; Roger Cooke (Cooke medical services limited and Birmingham University Institute of Occupational and Environmental Medicine), 3h 5. Tools and methods to analyze occupational mental health; Roger Cooke (Cooke medical services limited and Birmingham University Institute of Occupational and Environmental Medicine), 3h 6. Detection/identification of risks: surveillance and alert in occupational health; Emilie Council (Ined) <p>Afternoon sessions:</p> <ol style="list-style-type: none"> 1. Occupational health within global health: Two illustrative examples; Emilie Council (Ined) & Carel Hulshof (Amsterdam UMC), 2h 2. Presentation of assignment (Group work): Case studies in OH; Emilie Council (Ined) & Carel Hulshof (Amsterdam UMC), 1h 3. Case studies in OH – Group work I; Emilie Council (Ined) & Carel Hulshof (Amsterdam UMC), 3h

	<ol style="list-style-type: none"> 4. Case studies in OH – Group work II; Emilie Council (Ined) & Roger Cooke (Cooke medical services limited), 3h 5. Case studies in OH – Group work III; Emilie Council (Ined) & Roger Cooke (Cooke medical services limited), 3h 6. Case studies in OH – Group work IV and oral presentation; Emilie Council (Ined), 3h
Resources	All readings and materials will be posted on REAL.
Course requirement	<p>Assignment: Group work (about 3 students) with oral presentation. A group assignment whereby students will prepare and expose an occupational health within public health case study. It will force them to draw from the different sessions in an integrative way. We will evaluate the capacity of students to be synthetic, take a step back, highlight major issues and point to plausible solutions with respect to a particular topic.</p> <p>For the afternoon sessions, students have to come to class prepared to discuss issues after reading the course material posted on the REAL platform.</p>
Grading and assessment	<p>Group work with summary report (2-3pages) and oral presentation. Note that students will complete a questionnaire that assesses their own and their teammates' contributions to group work. All team members will receive the same grade except if it is clear that a student has not participated effectively (attended and contributed to meetings; made timely, helpful contributions; been constructive, etc.). In that case, the student's grade will be lowered accordingly.</p> <p>Students will also have the opportunity to self-assess their progress throughout the module by completing the online quiz available at the end of each session and then again at the end of the module.</p>
Course policy	<p>Attendance & punctuality Regular and punctual class attendance is a prerequisite for receiving credit in a course. Students are expected to attend each class. Attendance will be taken at each class. The obligations of attendance and punctuality cover every aspect of the course: - lectures, conferences, group projects, assessments, examinations, as described in EHESP Academic Regulations http://mph.ehesp.fr EHESP Academic Regulation Article. 3). If students are not able to make it to class, they are required to send an email to the instructor and to the MPH program coordinating team explaining their absence prior to the scheduled class date. All supporting documents are provided to the end-of-year panel.</p> <p>Students who miss class are responsible for content. Any student who misses a class has the responsibility for obtaining copies of notes, handouts and assignments. If additional assistance is still necessary, an appointment should be scheduled with the instructor. Class time is not to be used to go over material with students who have missed class.</p> <p>Lateness: Students who are more than 10 minutes late may be denied access to a class. Repeated late arrivals may be counted as absences (See http://mph.ehesp.fr EHESP Academic Regulation Article. 3 Attendance & Punctuality)</p> <p>Maximum absences authorized & penalty otherwise Above 20% of absences will be designated a fail for a given class. The students will be entitled to be reassessed in any failed component(s). If they undertake a reassessment or they retake a module this means that they cannot normally obtain more than the minimum pass mark (i.e. 10 out of 20)</p> <p>Exceptional circumstances Absence from any examination or test, or late submission of assignments due to illness, psychological problems, or exceptional personal reasons must be justified; otherwise, students will be penalized, as above mentioned. Students must directly notify their professor or the MPH academic secretariat before the exam or before the assignment deadline. Before accepting the student's justification, the professor or the MPH academic secretariat has the right to request either a certificate from the attending physician or from a psychologist, or from any other relevant person (See http://mph.ehesp.fr EHESP Academic Regulation Article 4 Examinations).</p>

	<p>Courtesy: All cell phones/pages MUST be turned off during class time. Students are required to conduct themselves according to professional standards, eating during class time is not permitted during class time, such as course or group work.</p>
Valuing diversity	<p>Diversity enriches learning. It requires an atmosphere of inclusion and tolerance, which oftentimes challenges our own closely-held ideas, as well as our personal comfort zones. The results, however, create a sense of community and promote excellence in the learning environment. This class will follow principles of inclusion, respect, tolerance, and acceptance that support the values of diversity. Diversity includes consideration of: (1) life experiences, including type, variety, uniqueness, duration, personal values, political viewpoints, and intensity; and (2) factors related to “diversity of presence,” including, among others, age, economic circumstances, ethnic identification, family educational attainment, disability, gender, geographic origin, maturity, race, religion, sexual orientation and social position.</p>
Course evaluation	<p>EHESP requests that you complete a course evaluation at the end of the school year. Your responses will be anonymous, with feedback provided in the aggregate. Open-ended comments will be shared with instructors, but not identified with individual students. Your participation in course evaluation is an expectation, since providing constructive feedback is a professional obligation. Feedback is critical, moreover, to improving the quality of our courses, as well as for instructor assessment.</p>

Morning Session 1	Introduction to module
Speakers	Emilie Council, Ined (FR)
Session Outline	Presentation of course rationale, learning objectives, program, teaching material, grading and assessment.
Duration	1h

Morning Session 2	The place of occupational health in our global health (Introductory lecture)
Speakers	Carel Hulshof, Amsterdam UMC (NL)
Session Outline	<p>This introductory session will set the scene for a public health approach in occupational health, considering it as an area of work in public health to promote and maintain highest degree of physical, mental, and social well-being of workers in all occupations and beyond working life, after retirement. It will explain and exemplify the complex relations between work and health; introduce the paradigm shift from occupational health to workers’ health; untangle the determinants of workers’ health (working environment, work-related health practices, social factors, access to health services), and highlight the extent of underserved populations of workers in terms of OHS worldwide as well as potential avenues of improvement for LMICs.</p>
Learning Objectives	<p>Understand the public health implications of working conditions and workplace hazards. Identify and describe the occupational determinants of health. Identify the drivers of workers’ health in different contexts (in particular HIC vs. LMICs).</p>
Duration	2h
Training methods	<p>Lecture Active participation of the students Discussion of practical situations</p>

Reading	Will be posted on REAL prior to course
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Morning Session 3	Analysis and control of working conditions: policies, regulations, work organization, risks insurance,...
Speakers	Carel Hulshof, Amsterdam UMC (NL)
Session Outline	This session will follow-up on the previous one to present a general framework for preserving and promoting workers' health through the articulation of environmental, behavioral and clinical interventions. It will explain the hierarchy of controls in occupational hygiene (from elimination of hazards to personal protective equipments) as well as corresponding legislation, regulation, evidence-based guidelines and protocols. It will also highlight the importance of the knowledge base for those interventions, stressing the importance of building and sharing a knowledge infrastructure for OHS.
Learning Objectives	Understand the public health implications of workplace policies and interventions. Identify relevant knowledge base to improve workers' health.
Duration	3h
Training methods	Lecture Active participation of the students Discussion of practical situations
Reading	Will be posted on REAL prior to course

Morning Session 4	Tools and methods to analyze the different kinds of occupational risks
Speakers	Roger Cooke, Cooke medical services limited and Birmingham University Institute of Occupational and Environmental Medicine (UK)
Session Outline	This session will provide a detailed presentation of the tools and methods in use to analyse known occupational hazards (workplace and workforce monitoring) but also unknown/emerging risk factors (epidemiologic and experimental approaches). It will further address how available data can be used to protect worker's health (by altering exposures or by restricting access to exposed jobs) as well as to detect situations where local populations may also be impacted by workplace hazards through environmental exposures.
Learning Objectives	Identify known occupational risks and tools to detect emerging hazards. Identify their connections with environmental protection and public health policy/intervention. Identify analysis techniques to assess and understand an occupational health problem.
Duration	3h
Training methods	Lecture Active participation of the students Discussion of practical situations
Reading	Will be posted on REAL prior to course

Morning Session 5	Tools and methods to analyze occupational mental health
Speakers	Roger Cooke, Cooke medical services limited and Birmingham University Institute of Occupational and Environmental Medicine (UK)
Session Outline	This session will follow-up on the previous one to present the importance and specificities of mental health within occupational health, starting with a discussion of culture-sensitive definitions of wellness and introducing the different assessment tools (psychometry, screening tools, formal psychiatric assessment). Occupational mental health is linked to a specific group of working conditions and workplace hazards (typically psycho-social risk factors) that may induce de novo ill-health or trigger pre-existing conditions. It is also a dimension of workability and as such is subject to different

	strategies - and their ethical issues - ranging from the selection of workers whose mental health fits in the demands of the job, to the adaptation of the job to current worker's mental health.
Learning Objectives	Identify the specificities of mental health in terms of monitoring and workplace interventions. Reflect on ethical issues around the different strategies for managing mental health at work.
Duration	3h
Training methods	Lecture Active participation of the students Discussion of practical situations
Reading	Will be posted on REAL prior to course

Morning Session 6	Surveillance and alert in occupational health: principles and examples of country-specific information systems
Speakers	Emilie Counil, Ined (FR)
Session Outline	This session will add to session 4 by adopting a population wide perspective rather than a workplace specific perspective in the surveillance of occupational risks and detection of emerging risks. It will typically present different architectures for occupational health surveillance within public health, and show how different countries - like France and Sweden - developed national information systems relying to different extents on administrative and health consumption data that are routinely (or passively) collected, as well as on <i>ad hoc</i> (or active) surveillance systems based on repeated cross-sectional surveys or longitudinal follow-ups. When analyzing a public health problem, it is important to describe what is known or visible from the available knowledge and data as much as what cannot be captured by them and will remain invisible and unaddressed (no data, no problem). This has strong implications in terms of occupational health equity that will be discussed based on examples such as fatal work accidents and occupational cancers.
Learning Objectives	Identify the goals of occupational health surveillance in public health. Describe different types of surveillance systems. Understand their strengths and limitations, including blind spots generated for sub-groups of workers. Identify relevant data to assess and understand an occupational health problem.
Duration	3h
Training methods	Lecture Active participation of the students Discussion of practical situations
Reading	Will be posted on REAL prior to course

Afternoon Session 1	Occupational health within global health: Two illustrative examples
Speakers	Emilie Counil & Carel Hulshof
Session Outline	This session will add to Morning Session 2 ("The place of occupational health in our global health") by providing in-depth description of two illustrative examples, showing the interrelations between workplace hazards and health risks in the broader community: - Example 1 will describe a real-life situation where citizens expressed concerns about their general environment leading to look at risks for workers (typically residents in the vicinity of a chemical plant); - Example 2 will build on exposures and risks for workers that may contribute to exposures of their relatives (typically take-home asbestos exposures, and psychologically burdened relatives of workers affected by PTSD).

Learning Objectives	Identify connections between occupational hazards and environmental protection/intervention.
Duration	2h
Training methods	Lecture Active participation of the students Discussion of practical situations
Reading	Will be posted on REAL prior to course.

Afternoon Session 2	Presentation of assignment (Group work): Case studies in OH
Speakers	Emilie Council & Carel Hulshof
Session Outline	Presentation of case studies material and making of 3 groups, working each on 1 case study: 1-Acute exposure 2-Psychosocial exposure 3-Chronic exposure (Chronic disease or MSD) For each group, 2 situations: high incomes countries/LMCs
Learning Objectives	Apply analysis skills and techniques to assess and understand an occupational health problem.
Duration	1h
Training methods	Discussion with students.
Reading	Material will be made available on REAL.

Afternoon Session 3	Case studies in OH – Group work I
Speakers	Emilie Council & Carel Hulshof
Session Outline	Case study: group work (3 groups): 1-Acute exposure 2-Psychosocial exposure 3-Chronique exposure (Chronic disease or MSD) For each group, 2 situations: high incomes countries/LMCs
Learning Objectives	Apply analysis skills and techniques to assess and understand an occupational health problem.
Duration	3h
Training methods	Group work (analyzing assignment material, searching scientific databases, sharing information, discussing needs...) Following a roadmap Supervision by instructors
Reading	Material will be made available on REAL.

Afternoon Session 4	Case studies in OH – Group work II
Speakers	Emilie Council & Roger Cooke

Session Outline	Case study: 3 groups 1-Acute exposure 2-Psychosocial exposure 3-Chronique exposure (Chronic disease or MSD) For each group, 2 situations: high incomes countries/LMCs
Learning Objectives	Apply analysis skills and techniques to assess and understand an occupational health problem.
Duration	3h
Training methods	Group work (analyzing all available information, assessing the OH problem) Following a roadmap Supervision by instructors
Reading	Material will be made available on REAL.

Afternoon Session 5	Case studies in OH – Group work III
Speakers	Emilie Council & Roger Cooke
Session Outline	Case study: 3 groups 1-Acute exposure 2-Psychosocial exposure 3-Chronique exposure (Chronic disease or MSD) For each group, 2 situations: high incomes countries/LMCs
Learning Objectives	Apply analysis skills and techniques to assess and understand an occupational health problem.
Duration	3h
Training methods	Group work (analyzing all available information, assessing the OH problem, preparing short report and presentation) Following a roadmap Supervision by instructors
Reading	Material will be made available on REAL.

Afternoon Session 6	Case studies in OH – Group work IV and oral presentation
Speakers	Emilie Council
Session Outline	Case study: 3 groups 1-Acute exposure 2-Psychosocial exposure 3-Chronique exposure (Chronic disease or MSD) for each group, 2 situations: high incomes countries/LMCs
Learning Objectives	Apply analysis skills and techniques to assess and understand an occupational health problem. Present a summary of that problem and discuss main stakes.
Duration	3h split equally between: Finalization of report/presentation Group presentations
Training methods	Group work supervised by instructor Presentation of group work Collective discussion
Reading	Material will be made available on REAL.