## **Syllabus Module**

N°216	Occupational Health within Public Health
Coordinator	Emilie Counil, French Institute for Demographic Studies (Ined)
Dates	November 6 <sup>th</sup> to 10 <sup>th</sup> , 2023
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	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 occupation 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.
Prerequisites	M1 level in the same area + Advanced core EOHS M2
Course learning competency	Consolidate the competencies acquired in occupational health sciences in M1 and in particular:  - 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)	<ol> <li>Morning sessions:         <ol> <li>Introduction to module; Emilie Counil (Ined), 0h30</li> <li>The place of occupational health in our global health (Introductory lecture); Carel Hulshof (Amsterdam UMC), 3h</li> <li>Analysis and control of working conditions: policies, regulations, work organization, risks insurance; Carel Hulshof (Amsterdam UMC), 3h</li> <li>Tools and methods to analyze the different kinds of occupational risks at the company level; Roger Cooke (Cooke medical services limited and Birmingham University Institute of Occupational and Environmental Medicine), 3h</li> <li>Work-related psychosocial risks in Europe a mental health epidemic? Pierre Bérastégui (Health, Safety &amp; Working Conditions research unit, European Trade Union Institute - ETUI), 3h</li> <li>Surveillance and alert in occupational health: principles and examples of country-specific information systems; Emilie Counil (Ined), 3h</li> </ol> </li> <li>Afternoon sessions:         <ol> <li>Occupational health within global health: Illustrative examples; Carel Hulshof (Amsterdam UMC), 2h</li> <li>Presentation of assignment (Group work): Case studies in OH; Emilie Counil (Ined) &amp; Carel Hulshof (Amsterdam UMC), 1h</li> <li>Case studies in OH – Group work I; Emilie Counil (Ined) &amp; Carel Hulshof (Amsterdam UMC), 3h</li> </ol> </li> </ol>

4. Case studies in OH – Group work II; Roger Cooke (Cooke medical services limited) & Emilie Counil (Ined), 3h Case studies in OH – Group work III; Pierre Berastegui (ETUI) & Emilie Counil (Ined), 3h Case studies in OH - Group work IV - oral presentation; Emilie Counil (Ined) and other lecturers (remotely), 3h All readings and materials will be posted on REAL. Some videos from real-life practice in Resources occupational health will also be posted and commented during lectures. Group 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. For the afternoon sessions, students have to come to class prepared to discuss issues after reading Course requirement the course material posted on the REAL platform. Individual Assignment: Each student will be provided with a copy of the European Working Conditions Survey (EWCS) questionnaire that they will have to administer to a relative ahead of the module. 15min workshops will be held at the beginning of each afternoon session so that students can reflect on: - parts/items of the questionnaire that from their experience were more difficult to answer: - and on alternative measuring tools. Group work with summary report (3-4pages) and oral presentation (with ppt). 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 **Grading and** assessment 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. 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. 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 Course policy over material with students who have missed class. 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) 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) **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).  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.
Valuing diversity	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.
Course evaluation	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.

Morning Session 1	Presentation of module
Speakers	Emilie Counil, Ined (FR)
Session Outline	Presentation of course rationale, learning objectives, program, teaching material, grading and assessment.
Duration	0h30

Morning Session 2	The place of occupational health in our global health (Introductory lecture)
Speakers	Carel Hulshof, Amsterdam UMC (NL)
Session Outline	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.
Learning Objectives	Discuss 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).

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 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	Discuss 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 at the company level
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, including physical, chemical and biological agents (workplace and workforce monitoring), as well as some aspects of work organization related to mental health that 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 and workability (by altering exposures or by restricting access to exposed jobs) as well as discuss ethical issues related to culture-sensitive definitions of wellness, the different assessment tools (psychometry, screening tools, formal psychiatric assessment) and risk management strategies.
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.  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 5	Work-related psychosocial risks in Europe a mental health epidemic?
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Speakers	Pierre Bérastégui, Health, Safety & Working Conditions research unit, European Trade Union Institute – ETUI (BE)
Session Outline	This session will delve into work-related psychosocial risks (PSR) and their impact on occupational health and safety, with the aim of providing clarity to this multidimensional (and often poorly understood) concept. It will begin with a brief review of the conceptual origins of PSR and, from that starting point, describe the evolution of definitions, terminologies, theories and models over the past 50 years. It will then take stock of the situation in Europe with regard to prevalence, morbidity, mortality and costs of PSR, as well as the overall policy context. It will also apply the risk management framework to the psychosocial work environment (hazard-risk-harm typology) and discuss avenues for prevention (e.g. primary-secondary-tertiary, hierarchy of control).
Learning Objectives	Collate and summarize the numerous theories and models of work-related PSR. Identify long-lasting and emerging trends shaping the burden of PSR. Identify avenues for the prevention of PSR at source. Discuss policy options to curb the stress epidemic that is hitting the world of 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 others by adopting a population wide 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 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.  Discuss 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: Illustrative examples
Speakers	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 illustrative examples, showing the interrelations between workplace hazards and health risks in the broader community:  - One example 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);  - Another one 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 Counil & Carel Hulshof
Session Outline	Case study: small groups, 3 themes: 1-Acute exposure 2-Psychosocial exposure 3-Chronique exposure (Chronic disease or MSD) for each theme, 2 situations: high incomes country/LMC
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	Carel Hulshof, Emilie Counil & Roger Cooke
Session Outline	Case study: small groups, 3 themes: 1-Acute exposure 2-Psychosocial exposure 3-Chronique exposure (Chronic disease or MSD) for each theme, 2 situations: high incomes country/LMC
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	Roger Cooke & Emilie Counil
Session Outline	Case study: small groups, 3 themes: 1-Acute exposure 2-Psychosocial exposure 3-Chronique exposure (Chronic disease or MSD) for each theme, 2 situations: high incomes country/LMC
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	Pierre Bérastégui & Emilie Counil
Session Outline	Case study: small groups, 3 themes: 1-Acute exposure 2-Psychosocial exposure 3-Chronique exposure (Chronic disease or MSD) for each theme, 2 situations: high incomes country/LMC
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 - Oral presentation
Speakers	Guest lecturers (online) & Emilie Counil
Session Outline	Case study: small groups, 3 themes: 1-Acute exposure 2-Psychosocial exposure 3-Chronique exposure (Chronic disease or MSD) for each theme, 2 situations: high incomes country/LMC
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 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.