(i.e., medical technicians, pharmacists and administrators). Reasons of declining influenza vaccination included doubt of the need for the vaccine (27.8%), concern of vaccine safety (21.0%), bad experience following vaccination in the previous year (41.5%), insufficient time to attend immunisation clinic (9.6%) and fear of the needle (6.6%).

**Conclusion**

Number of confirmed influenza cases is mostly under-reported. HCPs are at increased risk for influenza infection and efforts should focus on Infection prevention strategies and increasing immunisation coverage among HCPs and patients.

**Introduction**

The increase in the global population entails large production of wastewaters (WW) around the world. WW treatment plants (WWTP) may represent a challenging and hazardous work environment, since various biological agents (viruses, bacteria, fungi, parasites), as well as endotoxins, can be transmitted to the ambient air in WW bioaerosols and cause various disorders. No occupational exposure limit values are currently available. Thus, the potential biohazard (BH) to WWTP workers (WWTPW) has become an increasingly relevant occupational health and safety (OHS) issue. Aims of our contribution are: to provide a state-of-the-art overview on the occupational BH to WWTPW and to elaborate good OHS practices, based on a field study.

**Methods**

Ten-year (2008–2017) scoping review of articles in the PubMed database, published in English, French, Italian or Spanish; full text review of the articles. Field study in a sample of 4 WWTP companies managing more than 200 plants overall, with a capacity varying from less than 1000 to more than 8 70 000 population equivalents and employing about 5 to 50 WWTPW. The study entails: collection of OHS documentation on risk assessment and management, health surveillance, education and training; microbiological environmental monitoring (culturable, countable, assayable biological contaminants); investigation on general and specific health data in a sample of WWTPW, by administering a questionnaire regarding socio-demographic aspects, life habits, occupational and clinical history, preventive and protective measures, and by collecting some functional data (e.g. respiratory function); exploring correlations between BH and OHS outcomes among WWTPW.

**Result**

Scoping review is ongoing as well as enrolment of WWTP and occupational data collection.

**Discussion**

Main expected results are: assessment of occupational BH in WWTP; development of good OHS practices, particularly on risk assessment, health surveillance, fitness for work, immunisation and preventive practices in WWTP; generation of benchmarks; contribution to the research on occupational limit values for BH.
Abstracts

1. REVIEW OF REVIEWS ON THE EFFECTIVENESS OF WORKPLACE WELLBEING PROGRAMMES

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Introduction According to the world health organisation, workplace health programmes are one of the best ways to prevent and control chronic disease, and also to support mental health. There are over 2 million people employed in Ireland and this literature review informed the development of a national healthy workplace framework for Ireland.

Method The search strategy involved a keyword search of peer-reviewed databases of relevant subject areas (pubmed, econlit, psycinfo) and study type (cochrane library) supplemented by hand searches and selected citation searches. Included studies were systematic reviews or meta-analyses of a workplace intervention in the areas of nutrition and/or physical activity, mental health, smoking cessation and alcohol interventions, or health promotion. Evidence on outcomes across reviews was synthesised as ‘strong’ if the conclusion of at least two meta-analyses, ‘moderate’ if the conclusion of the one meta-analysis found, and ‘some’ if no pooled estimates, but the conclusion of the systematic review(s) found.

Results A range of measures of effect are used; they fall into the three broad categories of health behaviours, health outcomes, and economic or organisational outcomes. Most of the evidence from meta-analysis is on health outcomes, followed by organisational outcomes, and finally, health behaviours. In terms of health behaviours, there is strong evidence of a favourable impact on physical activity and fitness, and smoking cessation, while some evidence of a favourable effect on fruit and vegetable intake and dietary behaviour. With regard to health outcomes, there is strong evidence for a favourable impact on weight and BMI, stress/distress, anxiety and depression, and mental well-being. Examining organisational outcomes shows there is strong evidence of a favourable effect on work ability and sickness absences, while there is moderate evidence for task completion, supervisor’s rating, job satisfaction, productivity, and work attendance.

Conclusion Overall, there is strong evidence of a favour effect of workplace programmes on health behaviours, health outcomes, and organisational outcomes.

This presentation is based on a report, Rapid Review of Evidence on Workplace Wellbeing Programmes: Effects, Costs and Benefits, Organisational Factors and Policy Mechanisms, by Robert Murphy, Emma O’Donoghue, Claire Doyle, and Carol Taaffe, Department of Health, Ireland. All authors contributed to the content on which this abstract is based, and all authors agree to this abstract being published.

2. DEVELOPMENT OF A POSTGRADUATE PROGRAMME IN WORKPLACE WELLBEING

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Introduction Public policy has focused recently on public sector workplaces, which account for 15% of the Irish workforce, in the form of a national workplace well-being bill. The aim of this policy initiative is to ensure that each public sector employer develops a ‘healthy workplace initiative’. In order to develop healthy workplace initiatives consistent with good health promotion practice, capacity building, in the form of workplace development is required. The Healthy Workplaces Framework, a key element of both the Department of Health Strategy 2016–2019 and the Healthy Ireland agenda, contains a commitment to develop a postgraduate programme in workplace well-being, in order to address workforce development, and the process by which this has taken place is the subject of this paper.

Methods The Discipline of Health Promotion in NUI Galway offer a suite of programmes (Certificates in Health Promotion) for the ‘wider workforce’; those interested in developing the skills to implement health promotion initiatives in their work setting or with particular populations. Certificates have been developed to date in Cardiovascular Health/Diabetes Prevention, Oral Health and Youth Health, comprising three modules delivered over one academic year:

1. Core Principles of Health Promotion,
2. the specialist knowledge appropriate to the topic or setting, and