

CONCORSO PUBBLICO, PER ESAMI, A N. 1 POSTO DI CATEGORIA D, POSIZIONE ECONOMICA D1, AREA TECNICA, TECNICO-SCIENTIFICA ED ELABORAZIONE DATI, PER LE ESIGENZE DEL DIPARTIMENTO DI SANITÀ PUBBLICA DELL'UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II (COD. RIF. 2227), INDETTO CON DECRETO DEL DIRETTORE GENERALE N. 1006 DEL 19.10.2022)

QUESITI ESTRATTI ALLA PROVA ORALE DEL 24.01.2023

ELENCO N.10

Fattori di rischio ambientali e genomici in ambiente lavorativo

Avviare Microsoft Word, creare un nuovo documento, aggiungere una tabella 3x1, scrivere nella cella centrale il testo “Dipartimento di Sanità Pubblica” utilizzando dimensione del carattere 8, tipo carattere Times New Roman e allineando il testo al centro. Impostare il corsivo, infine, salvare il file sul desktop con nome “Documento”.

The physiological mechanisms of extreme heat on human health have been well documented. Many experimental studies (e.g. climatic chambers, trials, workplace simulation studies) have proved that working in hot environments can increase the risk of injury. While those studies are at an individual level, there is lack of heat-injury evidence at a population level, where mostly ecological and observational studies have been conducted. After assessing the evidence from both individual and population level studies, we can confirm the heat-injury association. Given the different characteristics of the data sources and of the heat exposure indicators used in the analysed studies it is not easy to further synthesize the results. However, the present findings confirm the relationship between high workplace heat levels and health effects in workers, even in younger age groups.

ELENCO N.7

Strumenti metodologici di valutazione ambientale o genomica

Inserisci un'immagine in un documento di word

The increased risk of infectious diseases for workers on account of climate change has not been thoroughly assessed. Outdoor workers are considered at increased risk for schistosomiasis (10) and

malaria (102) in China, dengue in Japan and Taiwan, leishmaniasis in Colombia (10) and West Nile Virus in Canada (103). The unusually warm winter of 2006-2007 supported vole population growth and contributed to the resurgence of leptospirosis in Germany among seasonal strawberry harvesters from Romania, Slovakia, and Poland (22). Electricity and pipeline utility workers are thought to be at increased risk of infection with Lyme Disease in the United States (9). Also in the Czech Republic the increasing trend of mean air temperatures found during the last three decades, most pronounced in the spring and summer months, was put in correlation with the highest activity of *Ixodes ricinus* ticks...

ELENCO N.8

Promozione della salute e controllo dei rischi ambientali e genomici

Avviare Microsoft Excel, creare una nuova cartella di lavoro, inserire nelle celle da B1 a B5 i seguenti numeri "5,4,8,2,3" ed ordinare i numeri dal più piccolo al più grande con l'apposita funzione.

The studies showed, in general, a positive correlation between higher air temperatures and current or future expansion of the habitat of vectors. Alimi et al. reported that altitude, annual precipitation and temperature are influential in both current and future models (4). Rift Valley fever outbreaks occurred after months of abnormal rainfall in Eastern and Southern Africa. Chikungunya outbreaks occurred in conditions of anomalous heat and drought in Eastern Africa. In Southeast Asia, such outbreaks were positively correlated with higher temperatures and rainfall (6). Another infectious disease that is resurging on account of unusually warm weather or more frequent weather events (typhoon, droughts) is fascioliasis, a foodborne trematode infection caused by *Fasciola hepatica* and *Fasciola gigantica*. According to a simulation based on a climate driven model, the season suitable for the development of *Fasciola hepatica* in the environment will possibly be extended by up to four months in northern Europe;

ELENCO N.1

Rischi Associati a determinanti ambientali, climatici e genomici

Indica su file Excel la formula per la Media.

The risks of heat exposure on human health are well known. The Italian physician Bernardino Ramazzini was probably the first, already in the 17th century, to report in his book “De Morbis Artificum Diatriba” on the ailments suffered by workers excessively exposed to heat stress. Bakers, he wrote: “...are afflicted by serious illnesses; in summer in particular, when they put the bread in the ovens and take it out, you can see them dripping with sweat.... I have observed that, in crowded cities, these workers fall ill more often than other workers”; as for soap-makers: “the ailments that afflict these workers are caused by the toil they endure day and night and the excessive heat from the fire that is constantly burning in the workshop. Indeed, it is so hot that they often have to go out for a moment to take a breath of fresh air....”

ELENCO N.11

Strumenti per la valutazione dei rischi ambientali e genomici in ambiente di lavoro

Creare sul Desktop una nuova cartella, rinominarla con il seguente testo “Documenti”, copiarla e incollarla all’interno di un’altra cartella, infine spostarla nel Cestino di Windows.

With regard to heat-related illness and injury, the data sources most used to conduct large, robust studies are workers compensations claims, emergency department data or hospital discharge records. Studies based on these data sources often employ heat indices such as the daily maximum temperature to assess the impact on workers’ health. These are generally ecological studies, where the exposure is measured at the group, not at the individual level. On the contrary, the WBGT is the most frequently measured index employed by ad hoc studies. Studies conducted to assess the association between heat exposure and acute injuries either considered the impact of heat-waves, or of increased temperatures the day of the injury, and/or the climate conditions in the previous days, taking into account the lag effect. The effects of high temperatures are generally assessed, whereas that of heat-waves currently appear to be the most neglected.

ELENCO N.4

Rischi sanitari associati direttamente e indirettamente a determinanti ambientali, climatici e genomici

Apri il programma Excel e esegui la somma tra due valori (100 e 266)

The present study has been conducted as part of HEAT-SHIELD, a project funded by the European Union under the Horizon 2020 Framework Programme for Research and Innovation, dedicated to address the negative impact of increased workplace heat stress on the health and productivity of five strategic European industries: manufacturing, construction, transportation, tourism and agriculture. We performed a systematic review with the aim to summarize the epidemiological evidence of the effects of climate change, with a special focus on high temperatures and heat waves, on workers' health and productivity, in order to better inform health policies in the EU and beyond. The workforce in Italy is particularly at risk given the country's geographic and meteorological conditions; however, no specific study has been carried out so far.

ELENCO N.12

Prevenzione e promozione della salute per ridurre l'incidenza delle malattie

Sul programma Word inserisci una tabella 3x1 e colorala le righe

The EU strategy on adaptation to climate change supports action aimed at making Europe more climate-resilient by promoting greater coordination and information-sharing (28). Meteorological early warning systems, timely public and medical advice, and ensuring that health care and social systems are ready to act are among the action recommended by the Health Action Plan, a product of EuroHEAT project on improving public health responses to heat-waves and extreme weather events, co-funded by the European Commission (66). Almost all countries have their own heat stress management guidelines in place. Currently, heat prevention policies mainly focus on the impact of extreme heat on occupational health. However, heat appears to be a silent killer. As a matter of fact, evidence has shown that the heat-injury relationship is a reversed U-shaped curve...

ELENCO N.3

Strumenti di prevenzione ambientale e genomici per la tutela della salute pubblica

Visualizzare la cronologia in un browser

With climate change, mean annual air temperatures are getting hotter in most parts of the world. Since thermometer-based observations began, the year 2015 and the period 2006-2015 were the warmest year and decade on record respectively. The global average surface temperature has risen at an average rate of 0.07°C per decade since 1901 (3). During the same period extreme weather events, such as heat waves, droughts, floods, cyclones and wildfires, have become more and more common, according to the findings from the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), and impacts from recent climate-related extremes revealed, with very high confidence, “significant vulnerability and exposure of some ecosystems and many human systems to current climate variability” (91).

ELENCO N.2

Fattori di rischio ambientali o genomici che influenzano lo stato di salute

Inserire una riga fra due righe esistenti in un foglio di lavoro di Microsoft Excel

Workers involved in moderate- or high-intensity activities in hot locations during the hot season are prone to heat-related health problems, as physical work activities create intra-body heat production, which adds to the environmental heat stress. A growing body of scientific evidence indicates that the exposure to excessively high heat levels is already resulting in excess morbidity and mortality in the general population, particularly among the elderly. Although workers in hot locations are also a vulnerable group for heat exposure and climate change, the impact of climate change on workers' health has not been extensively investigated. Guidelines and heat management systems to counteract increasing heat exposure in the occupational settings are still far from appropriately being implemented in at-risk regions.

ELENCO N.13

Rischi ambientali, climatici e genomici: sistema per la prevenzione genomici

Calcola la seguente formula Excel “=SOMMA(B1:B6)” dopo aver inserito i seguenti numeri: 20,35, 47,21,110, 200.

Since the evidence on the effects of climate change on vector-borne infectious diseases is currently still very scarce with reference to the working population, it was decided to focus the analysis on the increased risk of infections in general, and to also consider as possible effect of climate change the altered distribution of vectors. In this case, the conclusion that outdoor workers will experience an increased risk of developing this type of health outcomes was made by deductive reasoning, given the present and future expansion of vectors' habitats. A recent study suggested that climate change and the increasing frequency of extreme events such as desert dust storms are significantly changing the microbial communities of our soils, moving entire microbial communities (bacteria and fungi), including organisms which are extremely resistant and able to survive in different environments far away from their origins

ELENCO N.6

Strumento di Valutazione Impatto Ambientale per individuare e valutare gli effetti sulla salute

Scrivi un testo su file Word inserendo l'interlinea doppia e giustifica testo.

A fourth search strategy was conducted to retrieve the effects of climate change on work productivity. Since both PubMed and EMBASE databases are focused on biomedical topics, and generally do not include studies based solely on economics aspects, in this case it was decided to also conduct the search strategy in SCOPUS, a database which contains abstracts of academic journal articles with a broader focus (Appendix Table 2). In figure 1 the analytic framework developed to guide the selection of studies addressing the topics of interest is shown. An iterative process was used to build the search strategies, as there was no way for us to anticipate some concepts prior to encountering them while performing the review. Therefore, while the review of

the first two topics of interest was carried out systematically, applying a modified versions of the PICO scheme (83), using a search syntax comprising three categories (i) Exposure ii) Setting

Per ordine del Presidente

F.to Il Segretario della Commissione

Sig. Pasquale Flagiello