

Seas, Oceans, and Public Health in Europe

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There is a growing body of evidence that the health of humans and the marine environment are inextricably linked. These linkages encompass both risks and benefits. On the risk side, natural events such as extreme weather and tsunamis can have devastating impacts on coastal populations, while pollution of the seas and global ocean by pathogens and toxic waste can cause illness and death. Conversely, the seas and global ocean can also be the source of essential ecosystem services and potential health benefits through the provision of healthy food, novel pharmaceuticals and related products derived from marine organisms, as well as through a contribution to general wellbeing from a close association with the coastal environment (i.e. the “Blue Gym” effect).

In the US, Oceans and Human Health (OHH) has been recognized as an important research and training area for more than 15 years. The OHH research programme in the US has provided a platform to bring together researchers from a diverse range of disciplines to address complex OHH questions and deliver societally relevant results, with continued funding. Europe has particular OHH needs and challenges. Surrounded by four seas and two ocean basins, and with a coastline of 89,000km, Europe is a truly maritime continent; approximately 43% of the EU population (over 218 million people) live in coastal regions, including in 194 coastal cities. To date, Europe has failed to develop a coherent Oceans and Human Health research collaboration. And on both sides of the Atlantic, there has been a failure to truly bring together the human health and marine communities to address the growing challenges of OHH. Hence, the European research community remains structurally unprepared to comprehensively respond to threats to human health and to optimize the potential for health and wellbeing benefits from our interactions with blue environments.