

**Thème 2 – Enjeux planétaires contemporains**

**2-B – Les climats de la Terre : comprendre le passé pour agir aujourd’hui et demain**

**How will global warming harm human health ?**

**Using the documents and your knowledge, show how climate change impacts human health then discuss three solutions to climate change.**

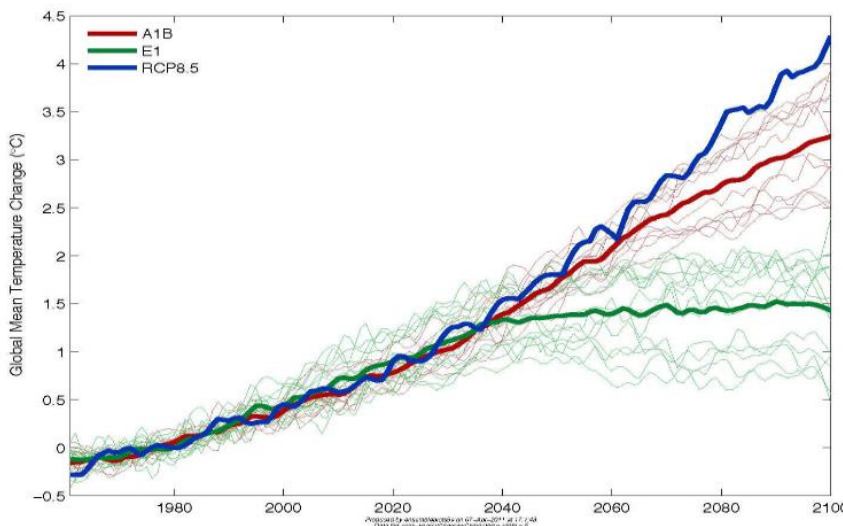
**Document 1.** Malaria in Europe : emerging threat or minor nuisance ?

Malaria, a vector-borne disease, was eradicated from Europe in the 1970s through a combination of insecticide spraying, drug therapy and environmental engineering. Since then, it has been mostly imported into the continent by international travellers and immigrants from endemic regions. Despite the substantial number of imported malaria cases and the documented presence of suitable anopheline vectors, autochthonous transmission has not been widely observed in Europe, probably as a result of early diagnosis and treatment, afforded by efficient healthcare systems. Current climatic conditions are conducive to malaria transmission in several areas of Southern Europe, and climate change might favour mosquito proliferation and parasite development, further facilitating malaria transmission. Temperature is a major regulator of malaria transmission, as it affects mosquito survival and development, whereas rainfall and geomorphology determine the availability of mosquito reproduction sites. The climate in Southern European countries around the Mediterranean, where winters are generally mild and wet and summers hot and dry, has been and still is suitable for malaria transmission.

<https://www.sciencedirect.com/science/article/pii/S1198743X16301203>

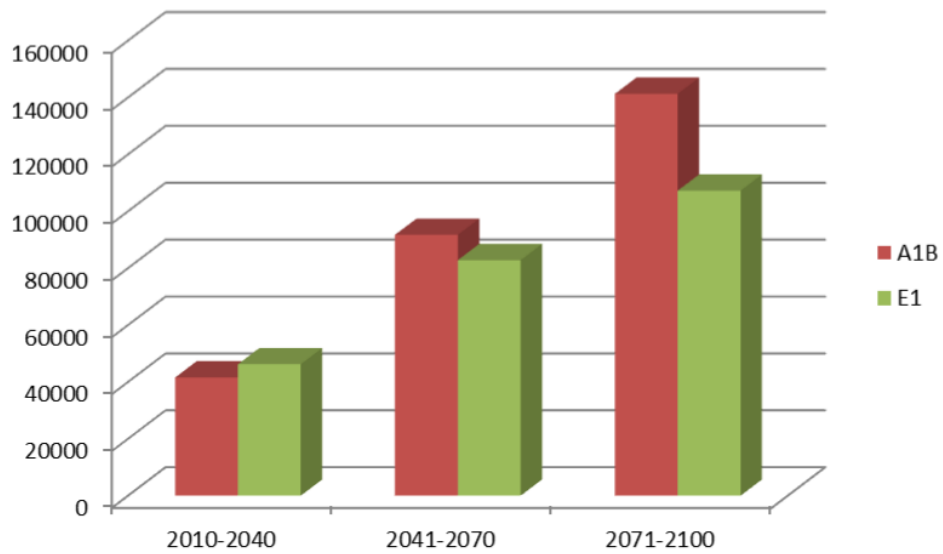
**Document 2.** Human Health Impacts of Climate Change in Europe.

**Document 2a.** Global mean temperature change under three alternative emissions scenarios.



**scenario A1B:** climate predicted scenario with high greenhouse gas emissions ;  
  
**scenario E1 :** climate predicted scenario with low greenhouse gas emission ;  
  
**scenario RCP8.5** is a high-emissions scenario frequently referred to as "business as usual", suggesting that is a likely outcome if society does not make concerted efforts to cut greenhouse gas emissions

**Document 2b.** EU total climate change-attributable mortality (all causes, per year).



Adapted from the Report for the PESETA II project at <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/human-health-impacts-climate-change-europe-report-peseta-ii-project>