



ENVIRONMENT&HEALTH INDICATORS

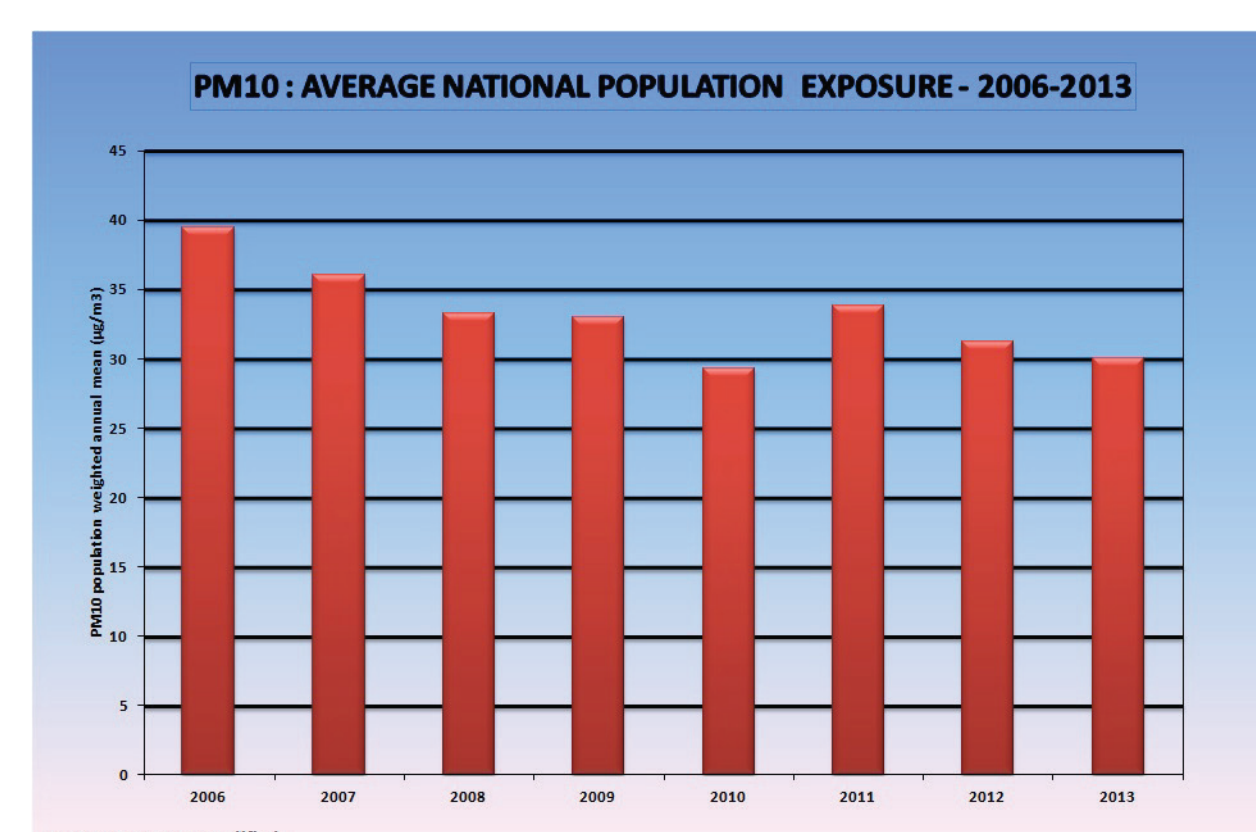
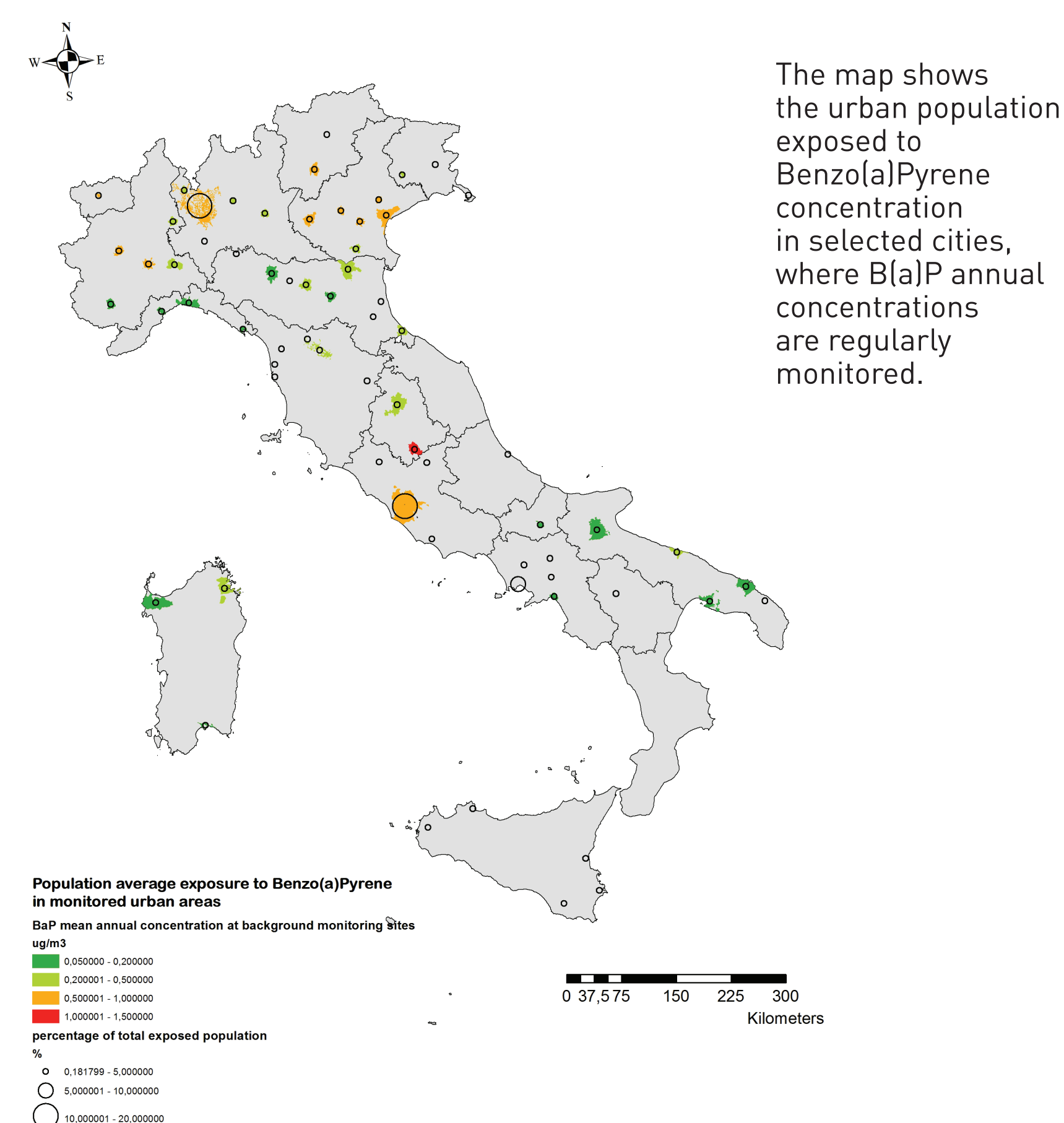
an environment and health policies supporting tool

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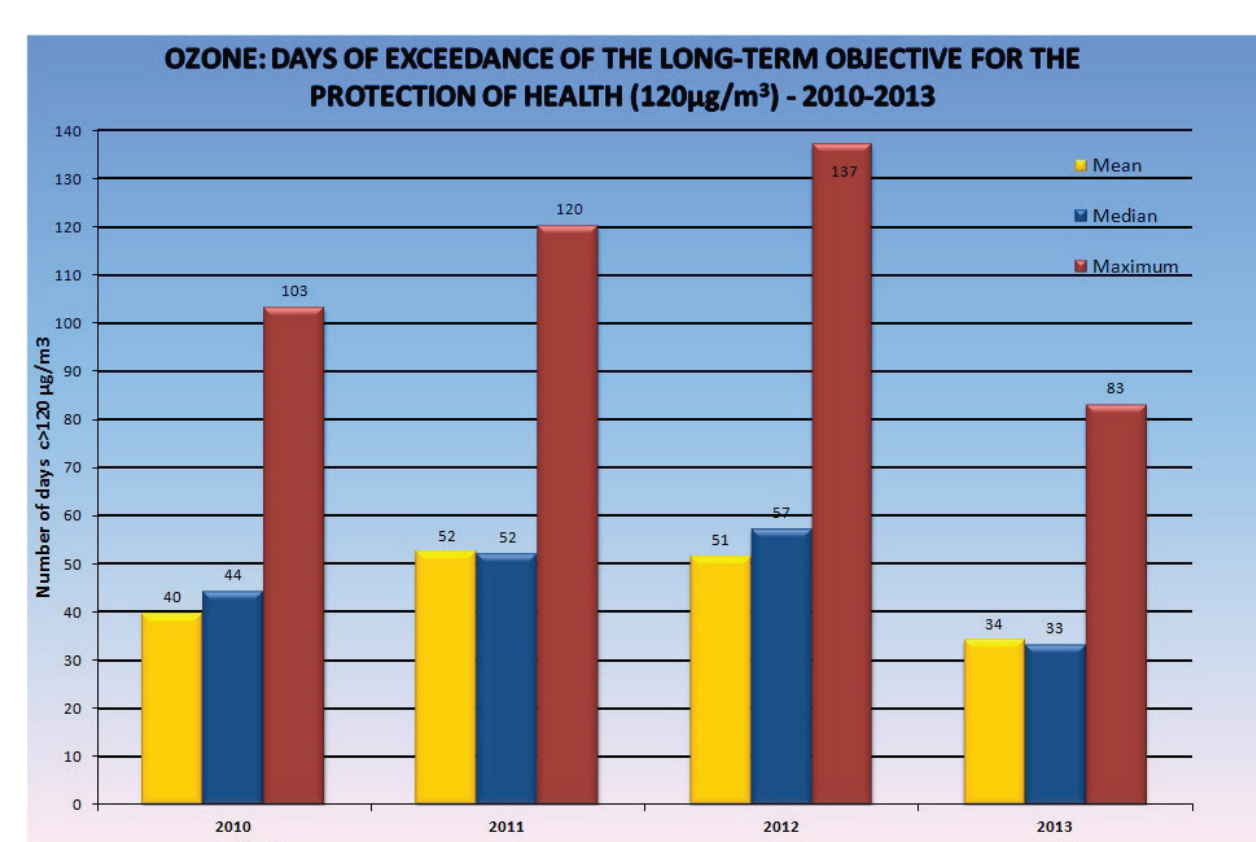
Environment and Health Indicators in ISPRA

ISPRA has an extensive experience in national environmental reporting and indicators based reporting, with institutional relevance. Since 2004 our Environment and Health (E&H) Unit was active member in EU/WHO-Euro projects such as ECOEHIS and ENHIS-2, for the implementation of the Environment and Health Information System In Europe. A feasibility study has been realized, in order to provide national environment & health indicators. Since 2007, ISPRA annually supply environment & health indicators, selected to be evidence based and have a strong scientific background. E&H indicators are published in ISPRA Institutional reporting (Environmental Data Yearbook) alongside other environmental indicators and in other different institutional reports for environment and Health topics of interest. An example of ISPRA E&H indicators are shown in the pictures below.

Population exposed to airborne pollutants: PM10, Ozone, Benzo(a)pyrene



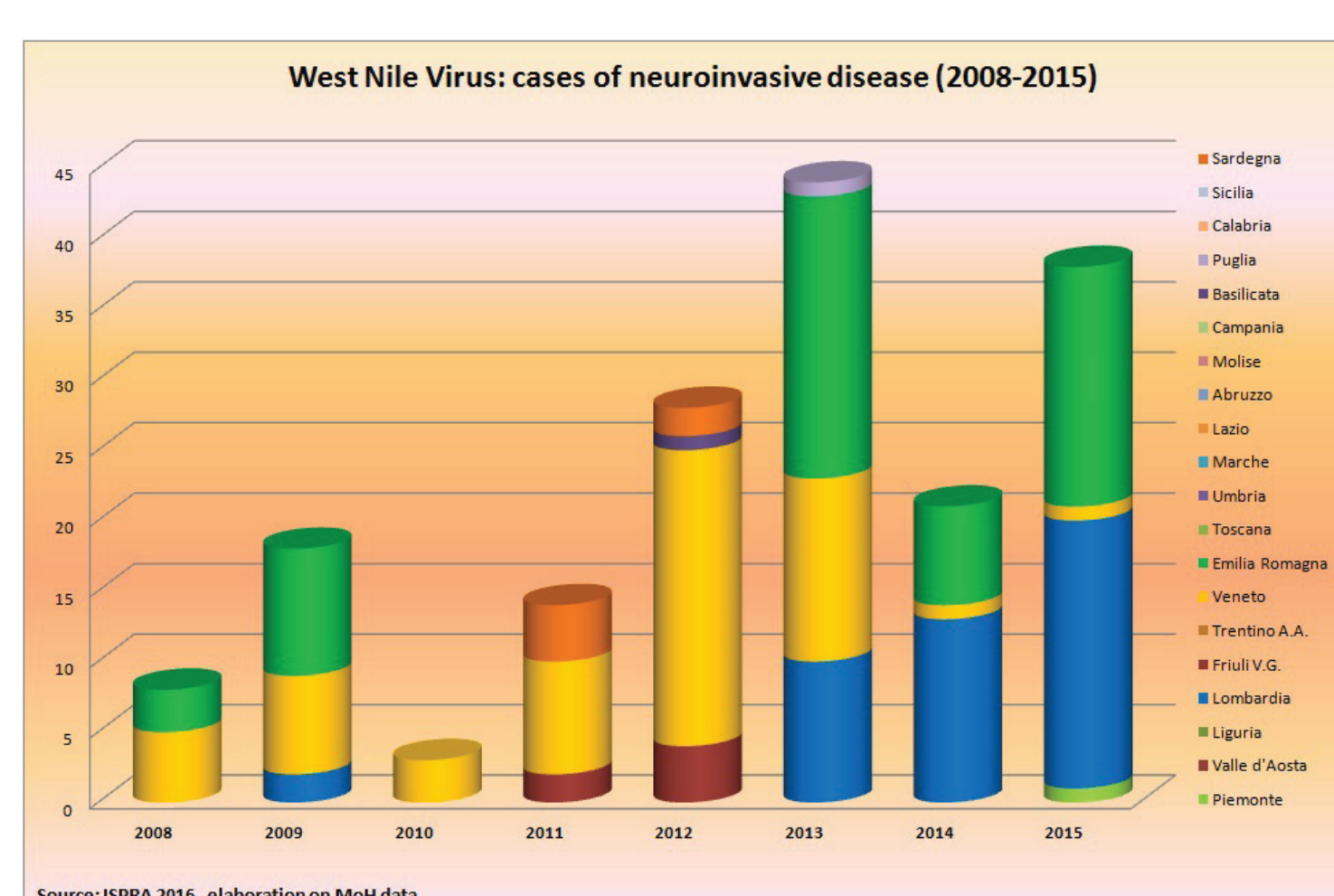
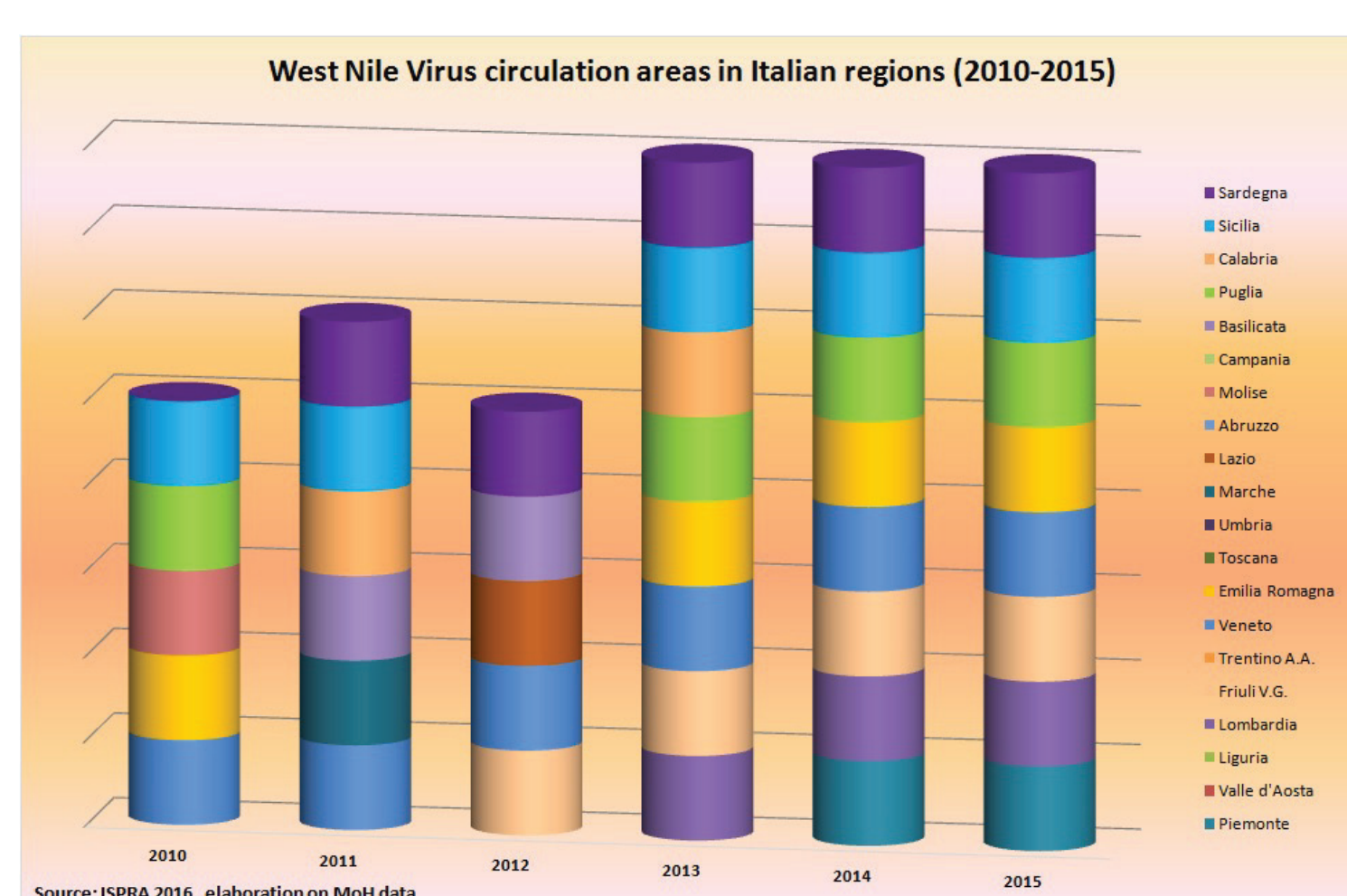
National population exposure to PM10 (annual mean concentration at background sites weighted on residential population) shows a slow decrease over the years



National population exposure to Ozone (mean, median and maximum days of exceedance at background sites) Ozone concentrations don't have a regular trend being linked to variability of summer solar radiation and meteorological conditions.

Climate Change, Biodiversity and Health: the case of Vector Borne Disease

ISPRA E&H Unit was member of ad hoc national working group supporting the development of the health chapter of **National Biodiversity Strategy (SNB)** and the **National Strategy for Climate Change Adaptation**. Among other activities on the issue of climate change impacts on biodiversity **West Nile disease (WND)** indicators were developed based on Ministry of Health data.



In the right chart is shown the increase of the regional distribution and the number of human cases of neuroinvasive form of WND, the more severe clinical consequence of the disease transmitted by Culex spp.

The left chart shows the growing territorial extension in the last five years of areas affected by WN virus circulation which required ad hoc environment monitoring, epidemiologic surveillance and vector control measures.