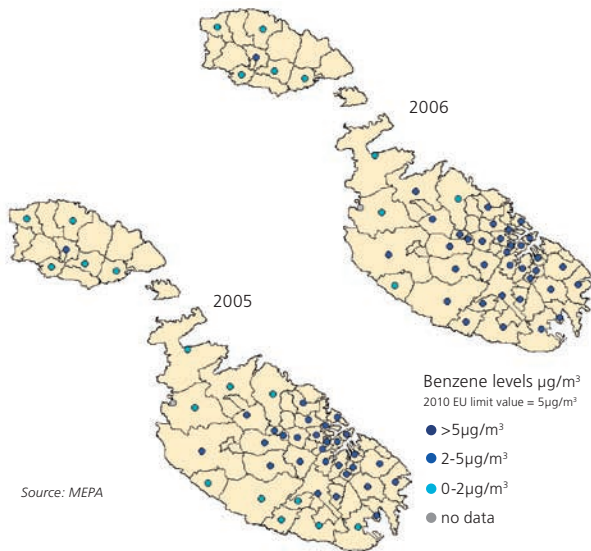


A3 BENZENE CONCENTRATIONS

😊 Key policy question: Do benzene concentrations meet EU air quality standards?



Benzene becomes a pollutant in air when it is released through distribution of petrol and through incomplete combustion of petrol in vehicle engines. Benzene is mutagenic and carcinogenic and is considered to be harmful in any dose.¹⁸ As in previous years, average annual benzene concentrations in no localities in Malta exceeded the EU limit value of $5\mu\text{g}/\text{m}^3$, however average concentrations increased by 8% between 2005 and 2006, from $2.46\mu\text{g}/\text{m}^3$ to $2.66\mu\text{g}/\text{m}^3$. In terms of particular sites, 5 streets recorded an exceedance of EU quality standards. St. Anne's Street in Floriana had the highest benzene concentration in 2006 at $7.14\mu\text{g}/\text{m}^3$, increasing by 4% over the 2005 value. This was followed by Manuel Dimech Street in Sliema, which recorded an increase of 10%, up from $4.73\mu\text{g}/\text{m}^3$ in 2005 to $5.20\mu\text{g}/\text{m}^3$ in 2006. While these results appear to contrast with the decreasing trends evident in previous years (average annual benzene concentrations decreased by 27% in 2005), since the values are low, the increase is still within the limits of variation, and the overall decreasing trend may be assumed to continue.

¹⁸ Nolle *et al.* 2005.