

# “Controversies around NO<sub>x</sub> health impact assessment”

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# Impacts and mitigation of excess diesel-related NO<sub>x</sub> emissions in 11 major vehicle markets

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~6,800 premature deaths annually from LDDV excess NO<sub>x</sub> emission in EU (aggreg.)

## Public health impacts of excess NO<sub>x</sub> emissions from Volkswagen diesel passenger vehicles in Germany

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~cumulative 1,100 premature deaths from Volkswagen over 2008-2015 excess NO<sub>x</sub> emission in Germany

## Impact of excess NO<sub>x</sub> emissions from diesel cars on air quality, public health and eutrophication in Europe

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~4,500 premature deaths annually from LDDV excess NO<sub>x</sub> emission in EU+CH+N (with details per country)

## Dieselgate, ogni anno in Italia 1.250 morti causati dall'eccesso di emissioni

Il nostro Paese è il più colpito. Gli esperti: «Situazione critica soprattutto al nor

## Dieselgate : vers un scandale de santé publique ?

Le dieselgate aurait provoqué la mort de 5 000 personnes par an en Europe, selon une étude scientifique. Cette affaire de tests de pollution truqués sur les moteurs diesel de plusieurs constructeurs européens vire au scandale de santé publique.



## Diesel-Studie - Leichtfried: „Müssen den Verkehr sauber machen“

Inicio > Opinión



La opinión de

Aarón Pérez

## Verdad o mentira: ¿retirar los motores diésel evitaría 8.000 muertes al año?



What's New

Andreas Mayer: Open letter on NO<sub>2</sub> health effects

# Issues for health impact assessment (here)

- **Uncertainties** ( $\pm 50\%$ ) resulting primarily from health risk functions, then from PM formation modeling, thirdly from actual meteorology

## Fundamental issues

- What's health impact from  $\text{NO}_2$  directly? At ambient 20-40  $\mu\text{g}/\text{m}^3$ ?
- How big overlap with impacts from PM?
- Same impact from ( $\text{NO}_x$  induced) sec. aerosols as average  $\text{PM}_{2.5}$ ?
  - Do marginal changes really result in impacts? Linearly?