VTV opmerkingen

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Opmerkingen VTV presentatie

- Milieu klein percentage?
  - Vergelijkbaar
  - Onvrijwillig
- Milieu-bijdrage onderschat
- Welke gezondheidseffecten opnemen in DALY? Voorbeeld geluid

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UBD POLICY
THE URBAN BURDEN OF DISEASE ESTIMATION FOR POLICY MAKING

Environmental noise health risk assessment: methodology for assessing health risks using data reported under the Environmental Noise Directive

Authors:

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European Environment Agency

European Topic Centre

Human health and the environment

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Table 3.27: Overview of the proposed ERFs and outcomes to be used in an EU-wide HRA

Outcome	Source	ERF	Reference
High noise annoyance (prevalence in adults)	Road	%HA = 78.9270 − 3.1162·L_{den} + 0.0342·L_{den}^2	Guski et al. (2017)
	Railway	%HA = 38.1596 − 2.05538·L_{den} + 0.0285·L_{den}^2	Guski et al. (2017)
	Aircraft	%HA = -50.9693 + 1.0168·L_{den} + 0.0072·L_{den}^2	Guski et al. (2017)
	Industry	%HA = 1-normal (72 - (-126.52 + (L_{den})·(2.49)))/sqrt(2054.43))	Miedema and Vos (2004)
High sleep disturbance (prevalence in adults)	Road	%HSD = 19.4312 − 0.9336 ·L_{night} + 0.0126·L_{night}^2	Basner and McGuire (2018)
	Railway	%HSD= 67.5406 − 3.1852·L_{night} + 0.0391·L_{night}^2	Basner and McGuire (2018)
	Aircraft	%HSD=16.7885 − 0.9293·L_{night} + 0.0198·L_{night}^2	Basner and McGuire (2018)
	Industry	%HSD=1-normal(72 - (-90.70 + (L_{night})·(1.80)))/sqrt(1,789 + 272))	Miedema and Vos (2007)
All-cause mortality (adults)	Road, rail and aircraft	Relative risk (RR) derived from road noise RR= 1.055 (95%-CI: 1.014-1.069) per 10 dB	Meta-analyses Chapter 3.3.1
Cardiovascular disease (incidence in adults)	Road, rail and aircraft	Relative risk (RR) derived from road noise RR=1.032 (95%-CI: 1.013-1.051) per 10 dB	Meta-analyses Chapter 3.3.2
Diabetes (incidence in adults)	Road, rail and aircraft	Relative risk (RR) derived from road noise RR=1.062 (95%-CI: 1.036-1.088) per 10 dB	Meta-analyses Chapter 3.3.3
Reading Comprehension (prevalence in children)	Aircraft	P(reading)= 1/(1 + exp(- (ln(0.1/0.9) + (ln(1.38)/10·(L_{den} - 50)))) if L_{den} ≥ 50 dB and 0.1 if L_{den} < 50 dB	Clark et al. (2006) and van Kempen (2008)

Table 4.1: Overview of disability weights

Health condition	Disability weight (i.e. severity on health)[a]
Long-term high annoyance	0.011 (Charalampous et al., 2024; WHO Europe, 2024)
Long-term high sleep disturbance	0.010 (Charalampous et al., 2024; WHO Europe, 2024)
Cardiovascular Disease	DALYs of CVD outcomes in GBD Study 2019 https://ghdx.healthdata.org/record/ihme-data/gbd-2019-disability-weights
Diabetes	DALYs of Diabetes Type 2 in GBD Study 2019 https://ghdx.healthdata.org/record/ihme-data/gbd-2019-disability-weights
Reading comprehension	0.006 (WHO Europe, 2018)

Optellen verschillende stressoren

- Verschillende luchtvervuilende stiffen
- Lucht, geluid, groen

Single- and two-pollutant concentration-response functions for $PM_{2.5}$ and NO_2 for quantifying mortality burden in health impact assessments

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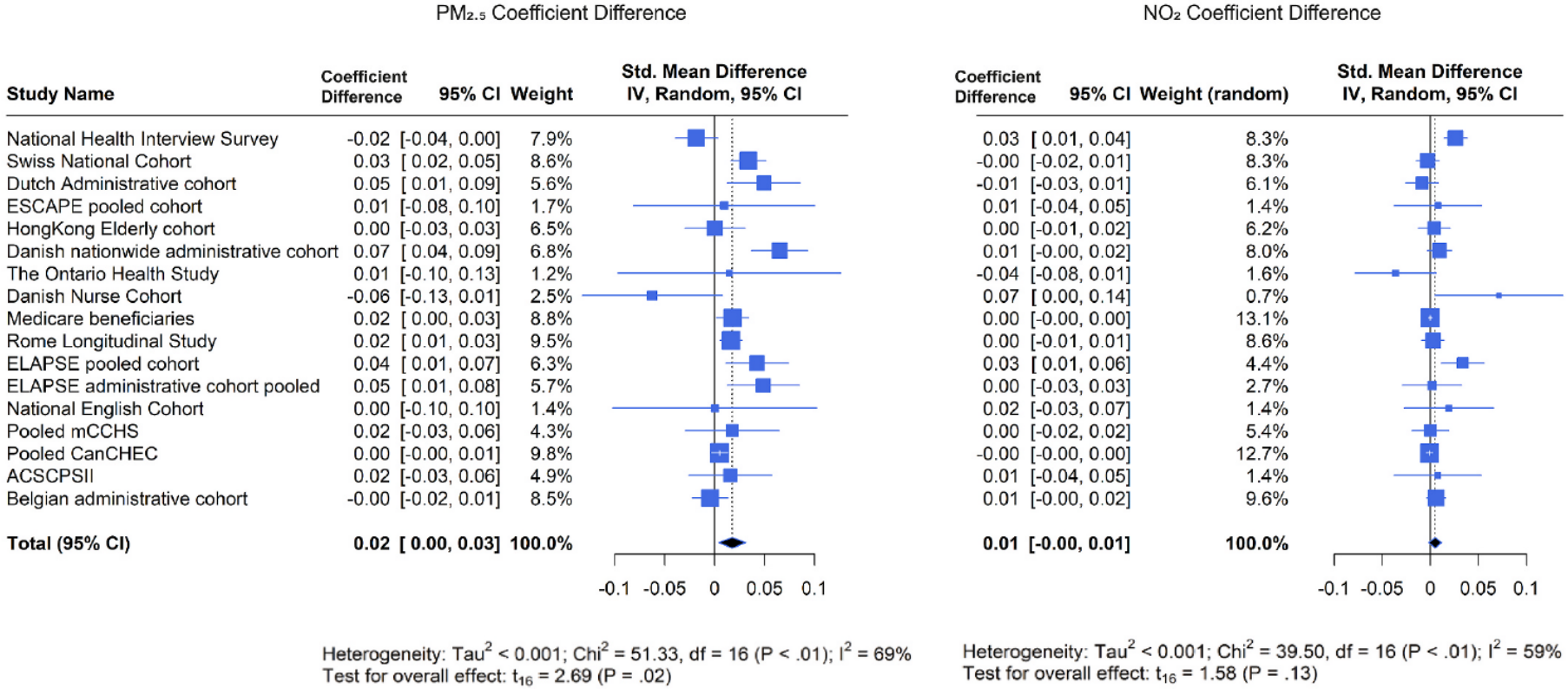

Fig. 5. Study-specific and pooled coefficient difference in ln (HR) between single- and two-pollutant models for $PM_{2.5}$ and NO_2 using Delta methods. The pooled coefficient difference using random effect meta-analysis for (A) $PM_{2.5}$ and (B) NO_2.

C oefficient Difference = In(HR1) − In(HR2). HR1 is the Hazard ratio (HR) for the pollutant in the single-pollutant model; HR2 is the HR for the pollutant in the two-pollutant model. The coefficient differences were calculated using HRs for a 5-μg/m^3 *increment in* $PM_{2.5}$ *and a* 10-μg/m^3 *increment in* NO_2.

Opmerkingen VTV presentatie

- Omgeving breder dan luchtverontreiniging, geluid, stoffen
- Groen?
- Meer generiek invloed op fysieke activiteit
- Voedselomgeving
- Sociale ongelijkheid en ziektelast

- Zoals all HIAs is VTV een (goede) schatting