

inDust EXPERTS MEETING ON DUST EXPOSURE EVENTS & PRODUCTS AND HEALTH EFFECTS

10th and 11th January 2019, Barcelona, Spain

FINAL AGENDA

Venue

AEMET, Carrer de l'Arquitecte Sert 1, 08071 Barcelona, Spain –

<https://www.google.es/maps/place/Delegaci3n+Territorial+de+AEMET/@41.3896571,2.1979778,17z/data=!3m1!4b1!4m5!3m4!1s0x12a4a30df2c51e67:0x936add889abb3a7b!8m2!3d41.3896571!4d2.2001665>

Background

Evidence on the health effects of desert dust remains unclear. Recently, a systematic review commissioned by the World Health Organisation (WHO) reported inconsistent results across different studies and geographical areas, the main sources of heterogeneity being the study settings, the exposure assessment methods and the epidemiological study designs. The report concluded that there is an urgent need to develop a standardized protocol to quantify dust exposure and to conduct epidemiological studies, in and near to hot spots.

The main goal of the inDust (<http://www.cost-indust.eu/>) is to establish a network involving research institutions, service providers and potential end users of information on airborne dust that can assist the diverse socio-economic sectors affected by the presence of high concentrations of airborne mineral dust.

Aim of the meeting

The aim of the meeting is to discuss the current availability of dust measurements/estimates and the potential products to be derived to identify dust events and sources for natural and local contributions to particulate matter, useful to develop a standardized study protocol for epidemiological studies for the short-term health effects in geographical areas located inside or in proximity to hot spots. The outcome of the meeting will be converted into an open access paper providing guidelines for future studies.

The meeting will be divided in two parts. The first day participants will present the state-of-the-art of their research on both areas, health effects of desert dust and methods to identify dust event exposures. The second day, participants will discuss how to propose a standardized methodology to collect data on health outcomes and dust exposures and how to conduct epidemiological time-series studies for the short-term effects using a consensual methodology.

AGENDA

10th January 2019

14:00 – 14:30 **Welcome and introduction**

14:30 – 16:15 **Session 1. Health effects of desert dust**

Chair: M. Stafoggia

Presentations by A. Tobías (WHO systematic review), M. Renzi, E. Samoli and C. Iñiguez (studies in Southern Europe), J. Crook (national study in USA), M. Hashizume & C. Ng (systematic review of Asian studies).

Each participant has a maximum of 15 minutes to present their views, as succinctly as possible, regarding the following questions:

1. *How did you identify dust events and how did you define dust exposure in your study?*
2. *Summary of the main health effects found in your study.*
3. *Strengths and limitations of your study, especially with regard to dust exposure assessment.*

16:15 – 16:40 **Coffee/tea break**

16:40 – 18:20 **Session 2. Methods to define dust event exposures**

Chair: X. Querol

Presentations by X. Querol (Reference method in European studies), M. Hashizume (LIDAR in Asian studies) F. Barnaba (Diapason project), E. Terradellas (WMO observational and forecasting products).

Each participant has a maximum of 20 minutes to present their views, as succinctly as possible, regarding the following questions:

1. *Description of the method to identify dust events and/or to measure/model local/natural sources.*
2. *Summary of the main results you found to identify dust event exposures.*
3. *Strengths and limitations of the method.*

20:30 **Networking Dinner**

Restaurant El Racó de la Vila, Carrer Ciudad de Granada 33, 08005 Barcelona, Spain –

<http://www.racodelavila.com/en/>

<https://www.google.es/maps/place/Racó+de+la+Vila/@41.3974726,2.1968666,17z/data=!3m1!4b1!4m5!3m4!1s0x12a4a3168203e977:0x906586dcaea36ee7!8m2!3d41.3974726!4d2.1990553>

11th January 2019

9:00 – 10:00

Session 3. Which dust products should/can we use for epidemiological studies

Chair: X. Querol

Joint discussion with all participants regarding the following questions:

1. *Consensus on the state of knowledge to identify dust event exposures and measure/model local/natural sources.*
2. *Agreement level between methods based on monitored data and model predictions.*
3. *Recommendations to identify dust event exposures in hot spot geographical areas without monitored data available.*

10:00 – 11:00

Session 4. Methodological issues in time-series regression models

Chair: M. Stafoggia

Joint discussion with all participants regarding the following questions:

1. *Adjustment for temperature, Medpart method vs. DLNM.*
2. *Lagged effects, individual lags vs. DLNM.*
3. *Appropriate definition of interaction terms between dust events and particulate matter.*
4. *How to deal with dust exposures which might reach extreme values, especially in hot spot areas?*

11:00 – 11:30

Coffee/tea break

11:30 – 12:30

Session 5. Distribution of tasks

Chair: A. Tobías

Actions from this workshop to be agreed with all participants:

1. *Data collection on dust measurements and health outcomes in geographical areas inside and near hot spots.*
2. *Sensitivity analysis for dust exposures, previously agreed, on epidemiological time-series studies.*
3. *Follow up meeting at the ISEE 2019 conference in Utrecht.*

12:30 – 13:00

Closing remarks and goodbye