

Study proposal for EUON: Nano-related information on - and of - workers

From AVICENN @VeilleNanos, in partnership with  &  - July 2022

The following proposal answers the [call for topics](#) launched by the European Union Observatory for Nanomaterials (EUON). The scope of this study would be twofold:

1 - Identification and quantification of workers exposed to manufactured nanomaterials

From research labs and start-ups to (large, medium and small) companies, to dentists and other medical staff, construction workers, craftsmen, hairdressers, farmers, and bakers, maintenance staff, etc. many workers are exposed to manufactured nanomaterials... but how many? Qualitative and quantitative estimates are scarce and out of date¹. Updating the identification and quantification of workers exposed to nanomaterials in an occupational context is highly needed in order to adequately inform and properly protect them.

The outcomes of this part 1 would allow public authorities, trade-unions, OHS actors and workers themselves to benefit from a comprehensive and detailed overview... :

- of the number and of the profiles of workers exposed to nanomaterials in the EU
- of which kind and which quantities of nanomaterials workers are mainly exposed to...
 - by sector (construction, textiles, food processing, cosmetics, medical facilities, energy, automotive, aeronautics, electronics, etc.),
 - by types of facilities/settings (R&D labs / large, medium, small companies / liberal professions / craftsmen / ...)
 - by working processes/conditions, i.e not only in production or transformation facilities, but also during incidental exposures (firefighters and rescue teams during a plant or home fire, or during a road accident with nanomaterials spilled from a truck during transportation) and at the different stages of the life-cycle of the products (cleaning staff and waste management actors, ...)

2 - Information of workers exposed to manufactured nanomaterials

The second part of the study would:

- scrutinize the existing tools* which can be used to inform those workers so that protective measures can be taken,
- collect and share best practices
- and propose additional tools** that could/should be created to close the gap and improve the quality of the information content and transmission.

* A specific focus is needed on the updates of safety data sheets (SDS) regarding information on nanoforms of the substances and mixtures: what percentage of SDS have been "nano-updated" since the [revision of REACH Annex II of June 2020](#) came into force in 2021? What is the quality of the updated nano-related information?

** SDSs do not have to be provided for articles nor for all substances and mixtures, even though they may contain nanomaterials to which workers can be exposed in an occupational context (processing, machining, sawing, grinding, cleaning, etc.). What other useful tool(s) could be improved and/or created² to provide the missing information?

¹ "the direct employment in nanotechnology is estimated at 300 000 to 400 000 jobs in the EU, with an increasing tendency" - European Commission, [Second Regulatory Review on Nanomaterials](#), 2012

² Trade unions, NGOs, MEPs and Member states have been asking for a [European nano-registry](#) to allow stakeholders to identify products containing nanomaterials and to take appropriate measures to protect them if/when needed.