

Voluntary Agreement

First campaign – Results

In May 2019 the Formacare General Assembly decided on the implementation of the **Voluntary Agreement regarding the implementation of OELs for formaldehyde**.

Today, the formaldehyde industry faces the situation where different national Occupational Exposure Limits (OEL) for formaldehyde apply in the production plants in the EU 28 and Norway. The exposure conditions for workers vary significantly. In some countries the national values are up to 2ppm.

Therefore, Formacare has decided to launch proactively a voluntary Agreement for implementing the SCOEL recommendations as a pan-European maximum OEL. This voluntary agreement shall accelerate workers' protection and prevention of exposure. Formacare members agreed to voluntarily implement the occupational exposure limit values proposed by SCOEL (the European Scientific Committee on Occupational Exposure Limit), namely 0.3 ppm for the 8-hour TWA OEL and 0.6 ppm for the STEL OEL. This proposed value will be the level of the new EU Binding Occupational Exposure Limit (BOEL).

Therefore, Formacare members commit to collect available data resulting from the implementation of national requirements in all affected plants and to report the results to Formacare. The frequency of the reassessment is determined according to national requirements. Notwithstanding, it should be carried out in the event of significant changes in the manufacturing process, which may have an impact on exposure levels. Depending to the results of the assessment, Formacare members agree to set up an action plan for improving worker prevention and protection, if the reported OEL values are not at or below the level of 0.3 ppm.

Formacare members are committed to sharing best available technical know-how with other members that may face difficulties in improving and reaching the lower OEL in their production plants. This technical assistance commitment is intended to ensure that all Formacare members will be able to fulfil the new and low OEL, within the shortest possible time.

The OEL measurement procedure

In all EU countries where Formacare members are producing OEL measurement procedure are done in a similar, standardized and nationally regulated way.

The technique in all these EU member states is very similar and is described below:

1. A committee identifies the workplaces with exposure to formaldehyde that needs to be measured.
2. The committee members consist of the plant manager, hygiene department, and members of the workers' council.
3. The measurement is done with personal air samplers by an internal or external department/institute with a national accreditation.
4. The OEL reports and results are communicated to the workers and stored safely in the HR departments for at least 10 years (in some countries up to 40 years).

The responsible and personally liable person is in any case the plant manager.

The measurements are done by an internal or external specialized laboratory. In all cases the laboratories must be accredited and independent. In all cases the process is transparent to the workforce, works council or ombudsman.

The measurement equipment are personal air samplers and tubes (for STEL). The equipment and absorber material may differ slightly due to the national requirements. In any case it follows high technical standards and procedures (see below).

The inspecting authorities regularly control the data while visiting the site. In some EU countries these data were sent to the authorities proactively. If one single OEL exceeds the limit, corrective measurements are immediately performed. If this requires some time, personal protective equipment (e.g. a breathing mask) will be used for the interim time. The frequency repeating the OEL-measurement differs within the EU countries. In any case it will be repeated after OEL-relevant technical changes in the plant.

The OEL measurement standards

The norm of the method slightly varies according the national requirements, in all cases the measuring principle is a personal air-sampler DNPH certified.

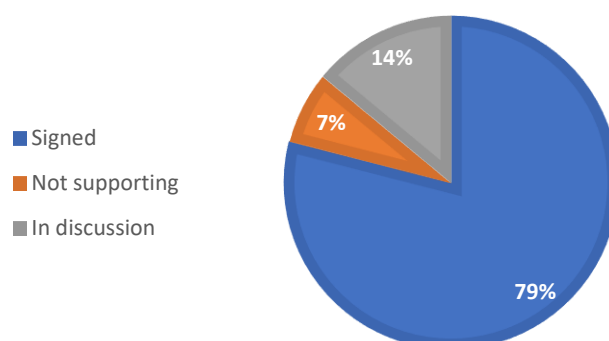
The norms (non exhaustive list) : NIOSH 2016, IFA 6045/7520, NS-EN-689, IBGIA 6045, EPA TO-11/A, TRGS 420, OSHA 1007, NEN-EN 689.

The results

Signing of the voluntary agreement

In the first year of data collection 79 % of the Formacare members signed the voluntary agreement. 4 members did not sign it yet, due to internal legal reviews or other constraints, e.g. changes in the management. 2 companies did not sign and do not want to participate due principal considerations or due to recent changes in ownership of the company. (Both companies produce in EU countries, OELs of 0.3ppm or below are legally binding.)

VA ENDORSEMENT



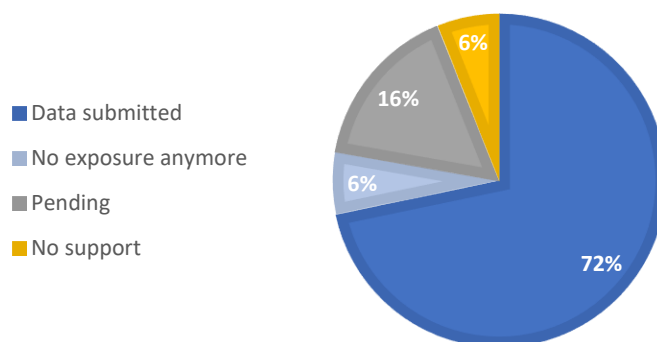
OEL-data reporting

72% of the members submitted OEL-data to Formacare. An additional 6% declared that they do not handle formaldehyde or formaldehyde containing substances anymore, so there is not formaldehyde exposure to the workforce. Data reported represents a total of 7405 workers, both exposed and non-exposed. In comparison with the 30000 persons that work in the formaldehyde value chain, the number may seem on the lower end, but with almost 80% of the Formcare members already represented, the current campaign already reports for the vast majority of the formaldehyde production in Europe (EU+Norway).

16 % of the members did not send the required templates respectively information on exposure in time, but we are expecting to get these data in due time, latest at the next evaluation in 6 months.

6 % declared they are not providing data in this year due to principal consideration or due to a extreme work load situation this year.

OEL DATA REPORTING

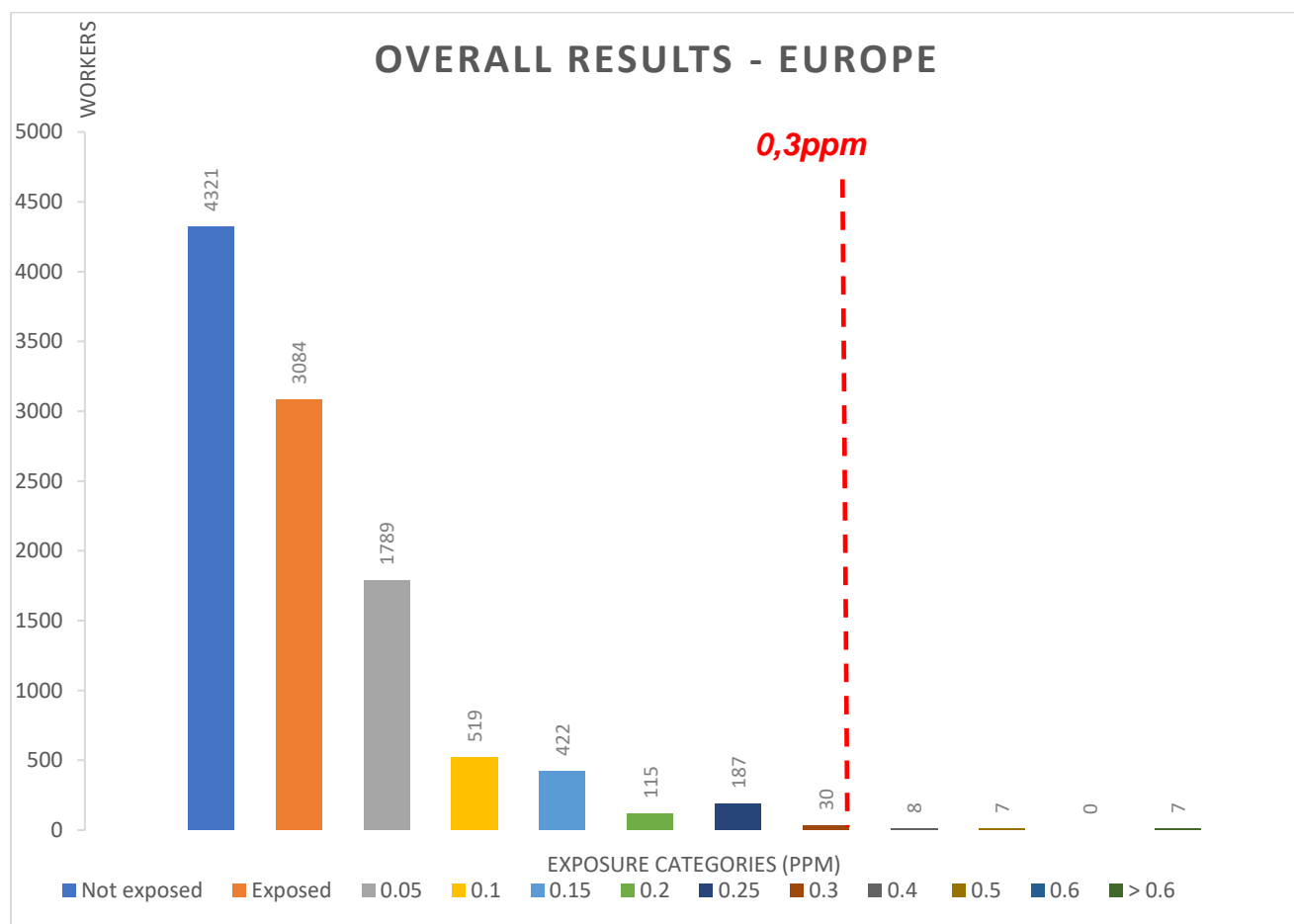


The combined results

The histogram shows the results of 13 EU countries with formaldehyde productions. These countries are Austria, Belgium, Finland, France, Germany, Italy, Netherlands, Norway, Poland, Portugal, Spain, Sweden and United Kingdom.

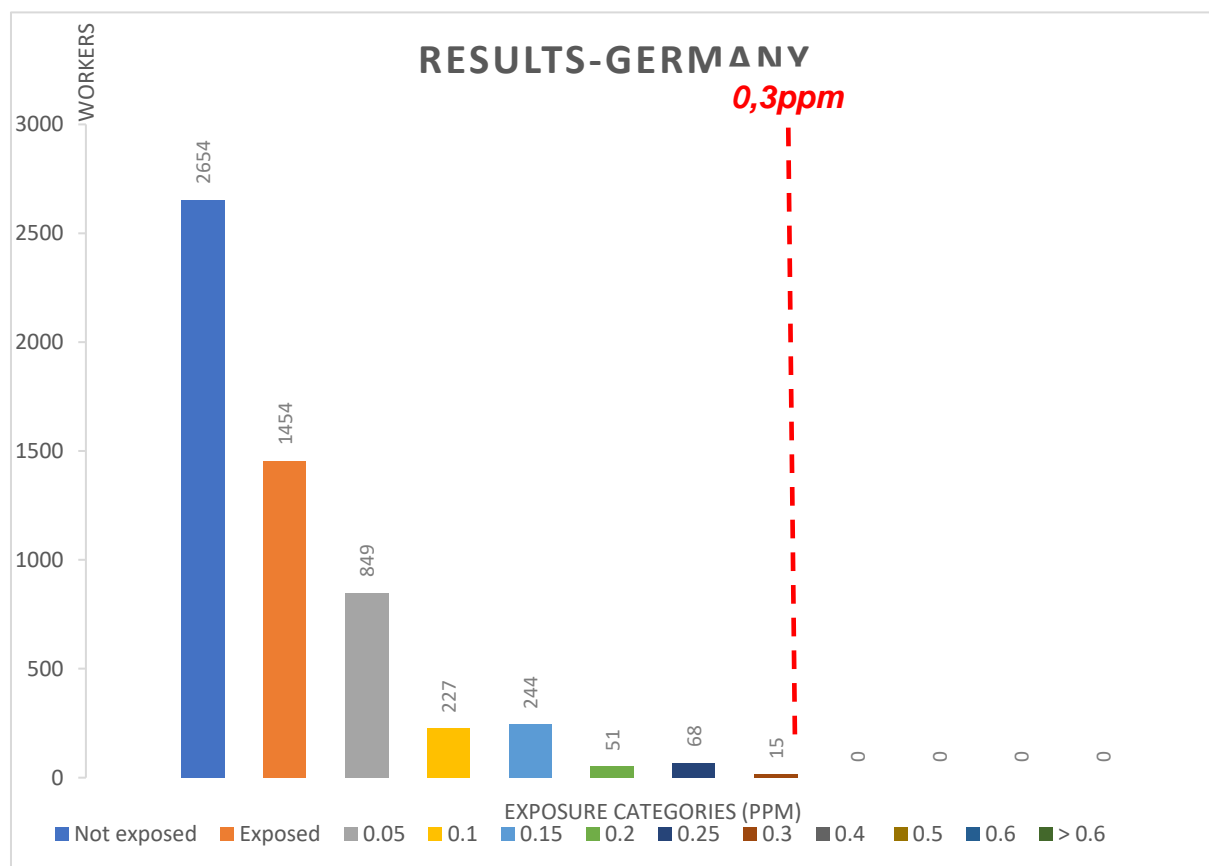
58,35 % of the workforce is not exposed at all, as they are working at sales, purchasing or administrative departments. 36,87 % of the workforce is at a level at or below 0,15 ppm. 4,07 % of the workforce is exposed from 0,2 until 0,25 ppm. 0,41 % of the workforce is exposed at the OEL limit level of 0,3ppm.

Finally, 22 workers (or 0,297% of the workforce) are exposed to levels exceeding the limits of the voluntary agreement. (These exposures do not exceed the national regulations of today, but Formacare will provide knowhow and best practice technics, so that the values become compliant with the 0,3ppm voluntary OEL.

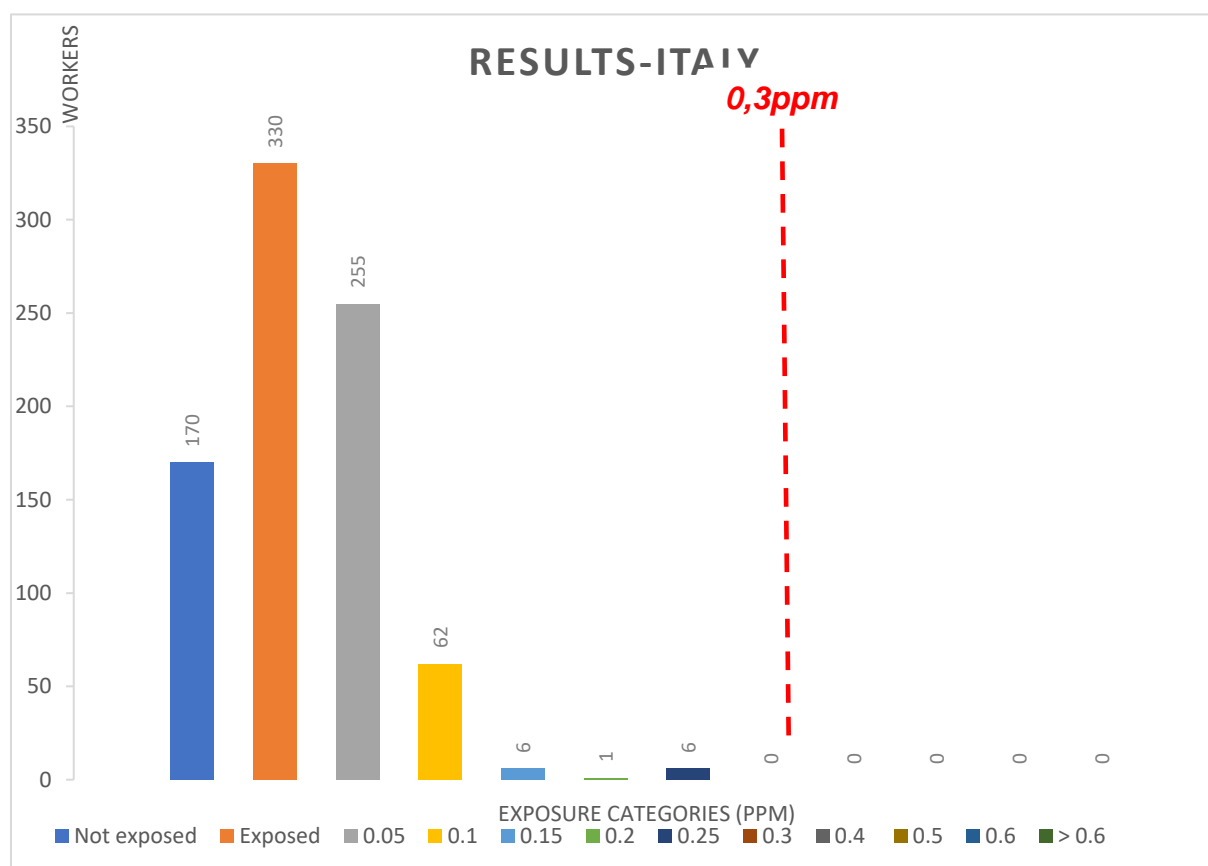


Due to competition law requirements it is not possible to show national data, where not at least 5 companies are producing. Therefore, Germany and Italy had their numbers reported alone while other countries have been grouped in clusters for Eastern and Western/Northern Europe.

Germany

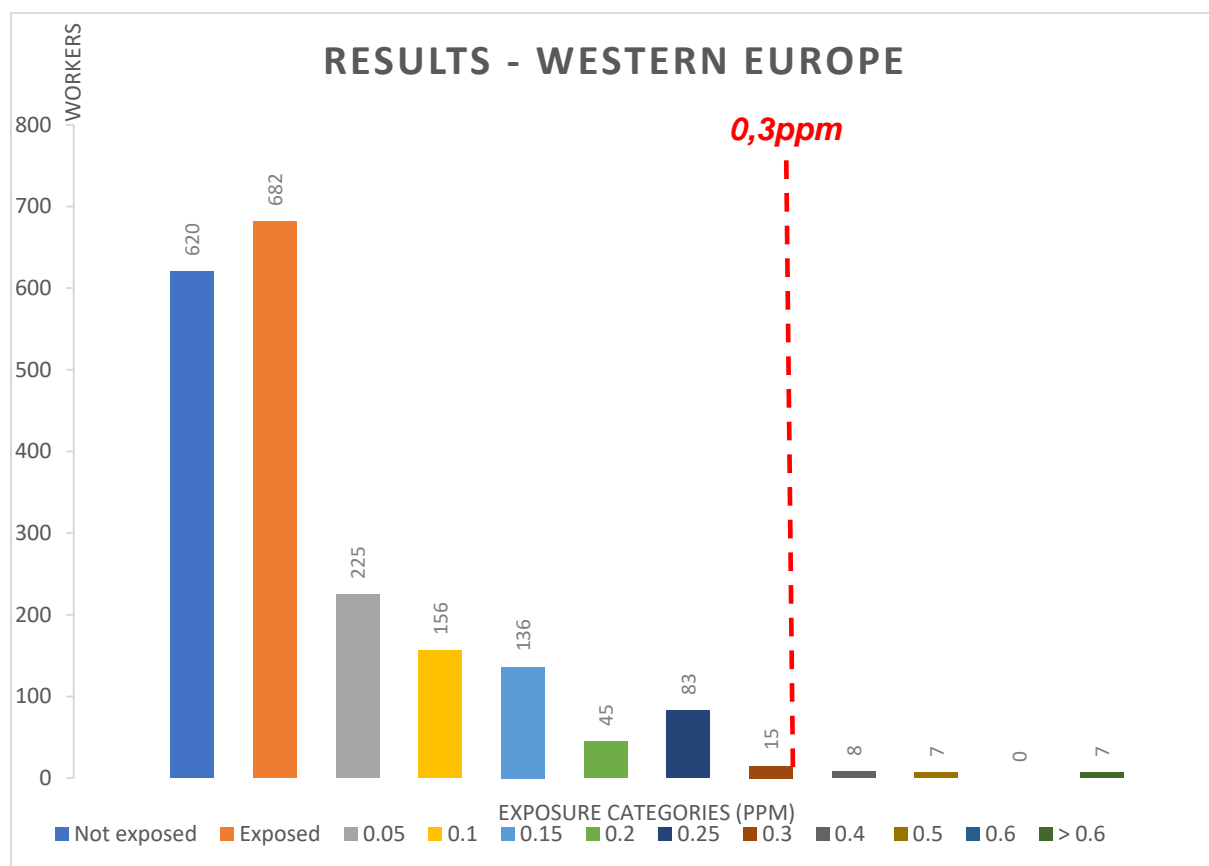


Italy



Western Europe

(Norway, UK, Netherlands, Belgium, France, Spain and Portugal). This cluster is the only one where exposure on workers was reported to be higher than the 0,3ppm TWA OEL in 22 cases. The 22 workers are located in the United Kingdom, where the current TWA OEL for formaldehyde is 2ppm. Formacare has been working on facilitating exchanges of good practices to ensure compliance of the member company with the Voluntary Agreement by the next measurement campaign, by Q3 2020.



Eastern Europe

(Sweden, Finland, Poland, Austria)

