



NEPSI Projects Update

June 2020

Florence Lumen (NEPSI co-chair)

Sectoral Social Dialogue Committee for the Extractive Industry Working Group
meeting on 19 June 2020

NEPSI – European social dialogue agreement



European Silica Network

- In 2006: first European multisectoral Social Dialogue Agreement “Workers' Health Protection Through the Good Handling and Use of Crystalline Silica and Products Containing it”
- Signed by the European trade union **industriALL** and 18 employers organisations: **extractive industry** (UEPG, IMA-Europe, Euromines, EuroRoc), **Ceramics** (Cerame-Unie, EXCA), **Foundry** (CAEF/CEEMET), **Glass** (FEVE, Glass for Europe, GlassFibreEurope), **Mineral Wool** (EURIMA), **Construction Products** (Cembureau, ECSPA, EMO, BIBM and ERMCO, ASTA worldwide)
- NEPSI focuses on good practice implementation in workplaces, to reduce workers' exposure to **RESPIRABLE CRYSTALLINE SILICA (RCS) DUST**. The **NEPSI GOOD PRACTICE GUIDE** draws examples from many companies.

NEPSI Roadmap beneficiary of EC funding under Social Dialogue budget line

3

Dates: February 2019 – May 2021

Union Grant: € **527 272**

IMA-Europe is the Beneficiary, all NEPSI signatories are Associate Organisations

A series of concrete projects:

- 1) Update of the NEPSI Good Practice Guide**
- 2) Development of specific **guidance for SMEs** (incl. micro enterprises)
- 3) Development of **training programme** for the new workers, especially the young generation
- 4) Renewal of the **NEPSI Reporting system** software.
- 5) Development of a standardised respirable crystalline silica **measurement methodology**.

Translation of the different new materials into all EU languages.

Closing Conference

- The content was fully updated from a technical point of view and 13 new Task Sheets were added
- A Communication firm has completely re-designed it

Good Practice Guide New Design: Pages

PART 1: RESPIRABLE CRYSTALLINE SILICA ESSENTIALS
2. SILICA AND THE SILICA INDUSTRY

2.1 WHERE SILICA OCCURS

Crystalline silica, in the form of the mineral quartz, is found in many different materials, with variations being almost guaranteed. Other forms of silica occur but are of little importance occupationally. The table below gives an indication of typical levels of "free" crystalline silica in common mineral sources. For it may be noted that these figures do vary.

MINERAL SOURCE	PERCENTAGE OF CRYSTALLINE SILICA
Bell-sand	8 to 90%
Basalt	Up to 5%
Flinted Gneiss	2 to 10%
Dolomite	Up to 10%
Slag	Greater than 90%
Granite	Up to 92%
Gneiss	Greater than 80%
Iron Ore	7 to 10%
Limestone	Usually less than 1%
Quartzite	Greater than 95%
Sand	Greater than 90%
Sandstone	Greater than 90%
Shale	48 to 60%
Silt	Up to 40%

Sources: ILO handbook, Council of Respirable Crystalline Silica in quartz.

GOOD PRACTICE GUIDE - Workers' Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it

Clean table style

PART 1: RESPIRABLE CRYSTALLINE SILICA ESSENTIALS
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2.2 ACTIVITIES INVOLVING USE OF CRYSTALLINE SILICA CONTAINING MATERIALS

AGGREGATES

Aggregates are a major material used in construction. Nearly 2 billion tonnes of aggregates are produced and used in Europe annually. However, a majority of operations in the sector are small and medium sized enterprises. It is typical and the practice should be employed for 7 to 10 persons. The aggregate industry consists of around 25,000 enterprises in Europe, with 250,000 employees in the EU.

The most common natural aggregates are gravel and crushed rock with a wide range of free silica content from 0% to 100%. Subject to the national risk assessment to be carried out under the Agreement, only the materials with a high content of silica are considered that pose a high hazard. The use of respirable crystalline silica aggregates for concrete are normally low. Aggregates produced from rocks containing a small percentage of silica are without prejudice to individual risk assessments. Help to be sought in cases of high exposure workers' health.

CERAMICS INDUSTRY

The ceramics industry uses silica principally as a mineral ingredient of clay for the need as a major constituent of ceramic glazes. The principal ceramic products containing silica include tableware and ornamental ware, sanitary ware, wall and floor tiles, bricks and roof tiles, refractories etc.

Around 2,000 companies produce ceramics in the EU. The number of employees in the EU ceramics industry is estimated at around 130,000. The ceramic industry is present in virtually all EU Member States.




GOOD PRACTICE GUIDE - Workers' Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it

Use of images and text to create visual impact and help communicate the story

PART 1: RESPIRABLE CRYSTALLINE SILICA ESSENTIALS
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GLASS INDUSTRY

Silica is found in the principal glass-making units and has also been used in the major component in all types of glass. The main glass products include packaging glass bottles, jars and cans, the glass for buildings, mirrors, cars and domestic glass appliances, drinking glasses, bowls, decorative and light glass for reinforcement, windows and special glass for laboratory applications.

More than 1,000 companies produce glass in the EU. The glass industry is present in all European countries and employs more than 330,000 people in the EU.

Other than the one mentioned, there is no crystalline silica any more. There is an occupational hazard.



INDUSTRIAL MINERALS AND METALLIFEROUS MINERALS INDUSTRIES

INDUSTRIAL MINERALS

A number of natural mineral products are composed of silica. Silica is found commonly in the construction site but is also used in an increasing proportion of time. Crystalline silica is hard, chemically inert and has a high melting point. There are great quantities of various industrial uses, mainly in the glass, foundry, construction, ceramic and refractory industries. 140 million tonnes of industrial mineralising materials, mainly silicon-containing materials, including aggregates, health & glass, clay, lime, and are extracted every year in Europe. Although not all industrial materials may contain respirable amounts of crystalline silica.

These industrial materials are produced by 100 companies in groups operating about 400 mines and quarries and 400 plants in 18 EU Member States, and in Switzerland, Norway, Turkey, Bulgaria, Romania and Canada. The industrial mineral industry employs about 80,000 persons in the EU.

METAL ORES

A wide range of metal ores are extracted within the EU and by some, such as mercury, silver, lead, tin, zinc, uranium, copper, iron, gold, nickel, boron, molybdenum, tungsten, nickel, molybdenum, the EU is a relatively significant producer. In some cases, the European production may average the low in production in the world.

Hand ores are produced in 10 EU Member States as well as in Norway, Turkey, Bulgaria, Romania, Russia and India. In the EU, the sector of the mining and quarrying industry employs directly about 210,000 people.

Although not all the metal ores may contain respirable amounts of crystalline silica.




GOOD PRACTICE GUIDE - Workers' Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it

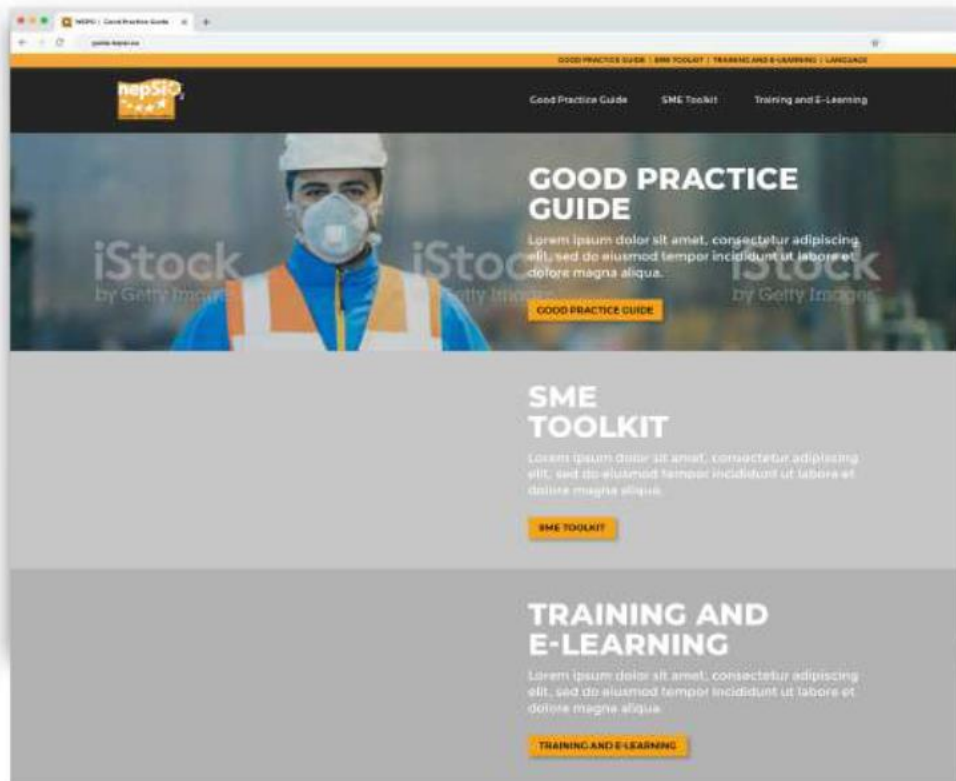
Good Practice Guide New Design: Pages



Clear communication of task sheets categorisation for navigation and visual association

New Website Design for Good Practice Guide, SME Toolkit, Training

Example design of the landing page from the NEPSI website – nepesi.eu/good-practice-guide



All three sections are accessible through the top/main navigation and the three page features

2. Development of NEPSI tools and guidance especially for Small and Medium Enterprises (SMEs)

Development of four tools:

1. Simplified guidance for implementing NEPSI good practices
2. A condensed version of the main principles of the *NEPSI Social Dialogue Agreement on Silica*
3. A condensed and attractive version of the *NEPSI Good Practice Guide*
4. A specific mini website

Start with simplified guidance as basis for other tools

Guided by NEPSI SME working group

+ A series of posters with simple key messages addressed to the workforce

3. Training Tools for new workers using new technologies

Deliverables

- Traditional training material (i.e. leaflets, ppt presentations)
- An technical platform to deliver e-learning trainings in new NEPSI web-app, with an interactive *“introduction to Crystalline Silica good practices”* training module for new workers (mobile and desktop friendly)
- Advice on best ways to interest/attract young target audiences and adapt content/language and tools accordingly

Guided by NEPSI working group

3. Training Tools for new workers using new technologies

Training approach: **Interactive quiz format**

The “magic” ingredients of storytelling

- First articulated by Aristotle circa 2000BC
- Explains the logic of a convincing argument



First: Training explaining topic (with embedded video if relevant)

What does storytelling help to do?



Second: Multiple choice questions

What does storytelling help to do?



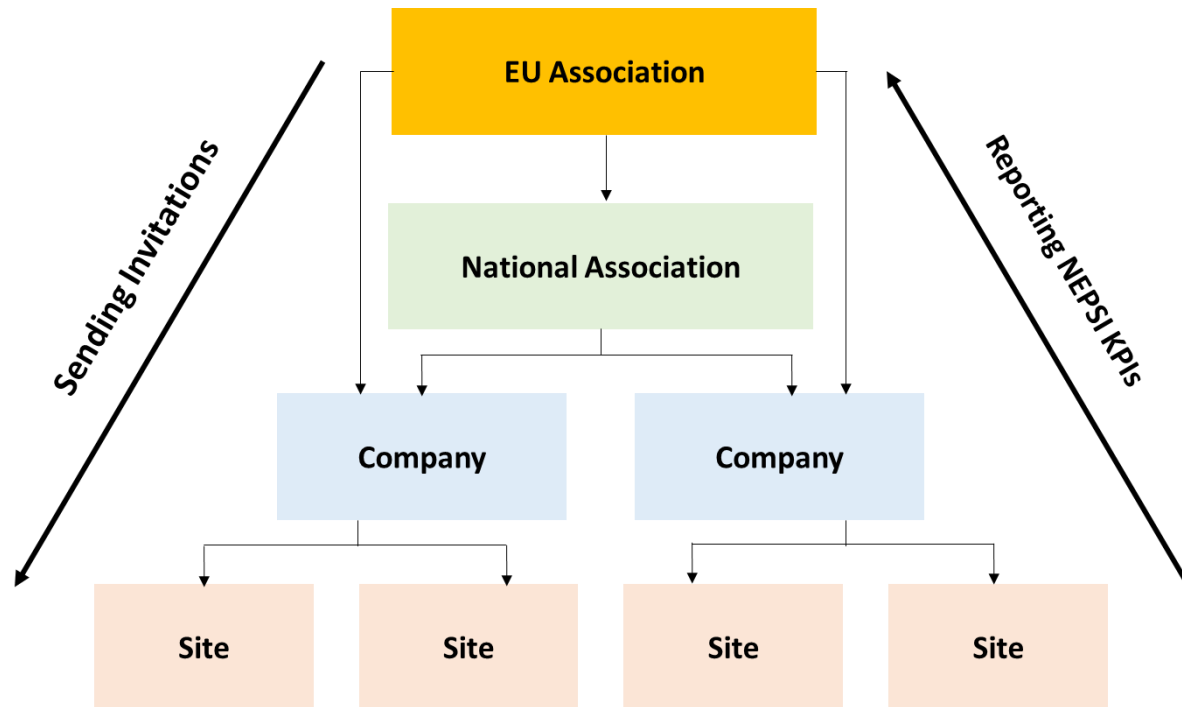
Explanation: Neuroscientists have shown that storytelling engages our senses by activating the brain. It is the best way to create a strong emotional connection with our audience. This is key, because decision-making is much more emotional than it is logical.

Third: Answers and explanation

2020 NEPSI KPIs Reporting

12 KPIs to monitor the protection of employees re. RCS exposure

Reporting started on 22 January and ends on 30 September 2020



Report available in December 2020



NEPSI RCS measurement methodology

Objectives

- Development of **a harmonized methodology** for monitoring exposure to **respirable crystalline silica** (RCS)
- To develop a **common basic methodology** to facilitate sectors without a standardized methodology with a **reference sampling** and **analytical method** and **sampling strategy** for monitoring exposure to RCS
- Collections of RCS exposure data in **a harmonized and representative way**



Status of work June 2020

1. **Development** of actual protocol
2. **Feasibility** test in small pilot project at a few NEPSI partners
3. **In person meeting** with representatives of NEPSI partners to agree upon final protocol (September 2020)

- 10/09/2020: the tools for SMEs and training programme will be finalised after a wide consultation over the summer, as well as the NEPSI RCS monitoring protocol
- All new tools and documents will be translated into all EU languages
- 30/09/2020: end of the NEPSI KPIs reporting
- 10/12/2020: the NEPSI 2020 Report will be discussed by the Council
- 04/03/2021: closing Conference of the EC Grant and presentations of all new tools
- 31/05/2021: end of the EC funding and final report



Thank
you for
your
attention