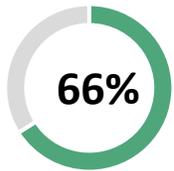


Surgical smoke in France

Healthcare Professionals' Views

According to a survey designed and distributed by EORNA and Stryker, amongst 567 French healthcare professionals in 2020-2021,

1. Awareness levels of surgical smoke and its risks remain extremely low



66%

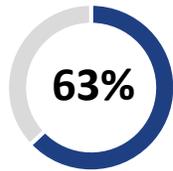
claim to **never have received information** on surgical smoke and associated health risks



80%

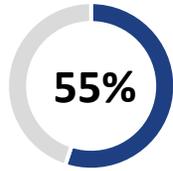
claim **no new information was shared** in the context of the C-19 pandemic

2. Healthcare professionals are concerned and impacted by exposure to surgical smoke



63%

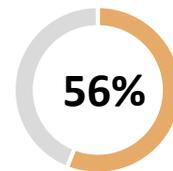
are **worried about health risks** associated with surgical smoke



55%

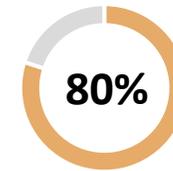
report **headaches** associated with surgical smoke. **38%** also reported experiencing either **coughs** or **rhinitis**

3. Hospital measures currently in place to protect them against surgical smoke are deemed insufficient



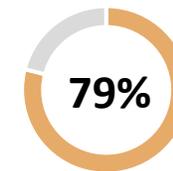
56%

claim their **hospital does not take action** to protect employees



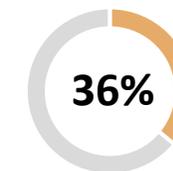
80%

report **regular surgical face masks** are most often used as protection against surgical smoke



79%

report **no new measures or protocols** for surgical smoke were introduced by hospital management during COVID-19



36%

report **use of local smoke evacuation systems**

Recommendations

- In addition to existing occupational safety and health legislation, **surgical smoke should be specifically addressed in the implementation of France's new legislation to strengthen prevention in occupational health**
- Existing guidelines should be properly implemented** throughout France, including from the [National Research and Safety Institute \(INRS\)](#) and the [French Society of Hospital Hygiene \(SF2H\)](#)

“It is a **real problem** in ORs. The majority do not realise the **disastrous consequences** of fumes for lack of either information or training...”

Surgical nurse, Île-de-France (Paris area)

About the Surgical Smoke Coalition

A pan-European initiative, the Coalition's mission is to minimise risk of harm from exposure to surgical smoke, in particular for OR health professionals. It is composed of the European and French OR Nurses Associations (**EORNA**; **UNAIBODE**), the European Specialists Nurses Organisation (**ESNO**), the European Medical Association (**EMA**), the European Union of Private Hospitals (**UEHP**), the German Professional Association of Anaesthetic and Operating Room Technicians (**ATA|OTA**), **Constance Held** and **Stryker**. The Coalition is co-chaired by **May Karam** (EORNA), **MEP Marianne Vind** (S&D; Denmark), and **MEP Dennis Radtke** (EPP; Germany).

About the survey

The survey was conducted in 2020-2021, in eight languages across 11 European countries and the UK, with the view to gain a greater understanding of (1) awareness levels of surgical smoke by hospital staff; (2) experiences & knowledge of symptoms associated with it; (3) risk management measures in place in hospitals. 820 healthcare workers participated to the survey.



Surgical smoke in Germany

Healthcare Professionals' Views

According to a survey designed and distributed by **EORNA** and **Stryker**, amongst **23 German speaking healthcare professionals** in 2020-2021

1. Awareness levels of surgical smoke and its risks remain extremely low

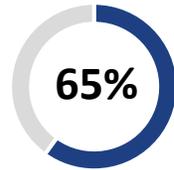


claim to **never have received information** on surgical smoke and associated health risks

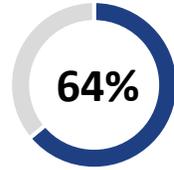


claim **no new information was shared** in the context of the C-19 pandemic

2. Healthcare professionals are concerned and impacted by exposure to surgical smoke

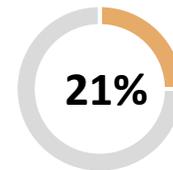


are **worried about health risks** associated with surgical smoke



report **headaches** associated with surgical smoke. **36%** also reported experiencing **stress or fatigue**

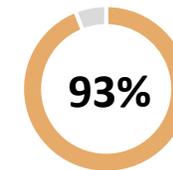
3. Hospital measures currently in place to protect them against surgical smoke are deemed insufficient



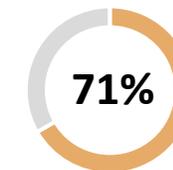
claim their **hospital does not take action** to protect employees



report **regular surgical face masks** are used as protection against surgical smoke



report **no new measures or protocols** for surgical smoke were introduced by hospital management during COVID-19



report **use of local smoke evacuation systems**

According to a study conducted by Michaelis et al

- The median occupational exposure to surgical smoke was **23 years for surgeons** and **10 years for OR nurses**
- OR nurses were much more concerned** about health hazards than surgeons
- 86.1%** of respondents working in hospitals thought that awareness of health hazards in the team was “low” or “non-existent”

“The topic of surgical smoke should be raised more often”
Surgical Nurse, Germany”

Recommendations

- In addition to existing occupational safety and health legislation, **surgical smoke should be specifically addressed in the implementation of Germany's new legislation to strengthen prevention in occupational health**
- Existing guidelines should be properly implemented** throughout Germany, including the GefStoffV and the TRGS-525 recommendations from the Federal Institute for Occupational Safety and Health (**BAuA**)

About the Surgical Smoke Coalition

A pan-European initiative, the Coalition's mission is to minimise risk of harm from exposure to surgical smoke, in particular for OR health professionals. It is composed of the European and French OR Nurses Associations (**EORNA**; **UNAIBODE**), the European Specialists Nurses Organisation (**ESNO**), the European Medical Association (**EMA**), the European Union of Private Hospitals (**UEHP**), the German Professional Association of Anaesthetic and Operating Room Technicians (**ATA/OTA**), **Constance Held** and **Stryker**. The Coalition is co-chaired by **May Karam** (EORNA), **MEP Marianne Vind** (S&D; Denmark), and **MEP Dennis Radtke** (EPP; Germany).

About the survey

The survey was conducted in 2020-2021, in eight languages across 11 European countries and the UK, with the view to gain a greater understanding of (1) awareness levels of surgical smoke by hospital staff; (2) experiences & knowledge of symptoms associated with it; (3) risk management measures in place in hospitals. 820 healthcare professionals participated to the survey.

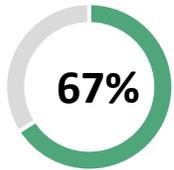


Surgical smoke in Italy

Healthcare Professionals' Views

According to a survey designed and distributed by EORNA and Stryker, amongst 57 Italian healthcare professionals in 2020-2021,

1. Awareness levels of surgical smoke and its risks remain extremely low



claim to **never have received information** on surgical smoke and associated health risks

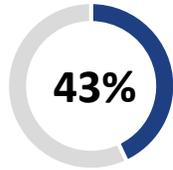


claim **no new information was shared** in the context of the C-19 pandemic

2. Healthcare professionals are concerned and impacted by exposure to surgical smoke



are **worried about health risks** associated with surgical smoke

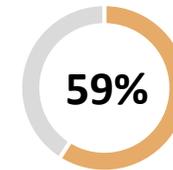


report **headaches** associated with surgical smoke. **33%** also reported experiencing eye irritation

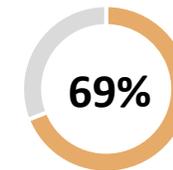
3. Hospital measures currently in place to protect them against surgical smoke are deemed insufficient



claim their **hospital does not take action** to protect employees



report **regular surgical face masks** are most often used as protection against surgical smoke



report **no new measures or protocols** for surgical smoke were introduced by hospital management during COVID-19



report **use of local smoke evacuation systems**

Recommendations

- In addition to existing occupational safety and health legislation, **surgical smoke should be specifically addressed to strengthen prevention in occupational health. Such regulation is not in place in Italy at the moment.**
- New guidelines should be properly developed** throughout Italy to safeguard the health and safety of healthcare professionals.

“Only after the pandemic did health management become aware of the risks of surgical smoke...”

OR Nurse, Lombardy

About the Surgical Smoke Coalition

A pan-European initiative, the Coalition's mission is to minimise risk of harm from exposure to surgical smoke, in particular for OR health professionals. It is composed of the European and French OR Nurses Associations (**EORNA**; **UNAIBODE**), the European Specialists Nurses Organisation (**ESNO**), the European Medical Association (**EMA**), the European Union of Private Hospitals (**UEHP**), the German Professional Association of Anaesthetic and Operating Room Technicians (**ATA|OTA**), **Constance Held** and **Stryker**. The Coalition is co-chaired by **May Karam** (EORNA), **MEP Marianne Vind** (S&D; Denmark), and **MEP Dennis Radtke** (EPP; Germany).

About the survey

The survey was conducted in 2020-2021, in eight languages across 11 European countries and the UK, with the view to gain a greater understanding of (1) awareness levels of surgical smoke by hospital staff; (2) experiences & knowledge of symptoms associated with it; (3) risk management measures in place in hospitals. 820 healthcare workers participated to the survey.

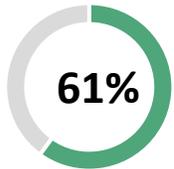


Surgical smoke in Spain

Healthcare Professionals' Views

According to a survey designed and distributed by EORNA and Stryker, amongst 72 Spanish healthcare professionals in 2020-2021

1. Awareness levels of surgical smoke and its risks remain extremely low



61%

claim to **never have received information** on surgical smoke and associated health risks



75%

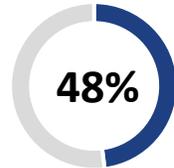
claim **no new information was shared** in the context of the C-19 pandemic

2. Healthcare professionals are concerned and impacted by exposure to surgical smoke



85%

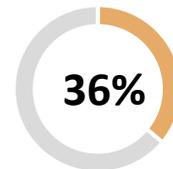
are **worried about health risks** associated with surgical smoke



48%

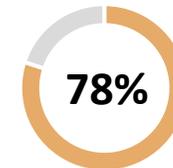
report **headaches** associated with surgical smoke. 48% also reported experiencing **eye irritation**

3. Hospital measures currently in place to protect them against surgical smoke are deemed insufficient



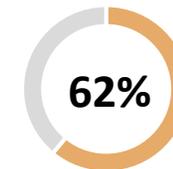
36%

claim their **hospital does not take action** to protect employees



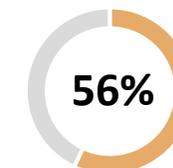
78%

report **regular surgical face masks** are most often used as protection against surgical smoke



62%

report **no new measures or protocols** for surgical smoke were introduced by hospital management during COVID-19



56%

report **use of local smoke evacuation systems**

Recommendations

- In addition to existing occupational safety and health legislation, **surgical smoke should be specifically addressed to strengthen prevention in occupational health. Such regulation is not in place in Spain at the moment.**
- Existing guidelines should be properly implemented** throughout Spain, including the 2009 recommendations of the **Spanish Ministry of Health** on the use of surgical smoke evacuation systems

“It seems incredible to me that at this point we are not protected from surgical smoke. Workers are always the most affected...”

OR Nurse, Murcia

About the Surgical Smoke Coalition

A pan-European initiative, the Coalition's mission is to minimise risk of harm from exposure to surgical smoke, in particular for OR health professionals. It is composed of the European and French OR Nurses Associations (**EORNA**; **UNAIBODE**), the European Specialists Nurses Organisation (**ESNO**), the European Medical Association (**EMA**), the European Union of Private Hospitals (**UEHP**), the German Professional Association of Anaesthetic and Operating Room Technicians (**ATA|OTA**), **Constance Held** and **Stryker**. The Coalition is co-chaired by **May Karam** (EORNA), **MEP Marianne Vind** (S&D; Denmark), and **MEP Dennis Radtke** (EPP; Germany).

About the survey

The survey was conducted in 2020-2021, in eight languages across 11 European countries and the UK, with the view to gain a greater understanding of (1) awareness levels of surgical smoke by hospital staff; (2) experiences & knowledge of symptoms associated with it; (3) risk management measures in place in hospitals. 820 healthcare workers participated to the survey.

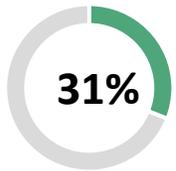


Surgical smoke in Sweden

Healthcare Professionals' Views

According to a survey designed and distributed by EORNA and Stryker, amongst 22 Swedish healthcare professionals in 2020-2021,

1. Awareness levels of surgical smoke and its risks remain extremely low

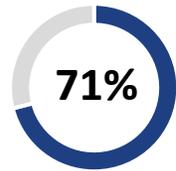


claim to **never have received information** on surgical smoke and associated health risks

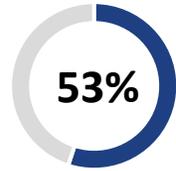


claim **no new information was shared** in the context of the C-19 pandemic

2. Healthcare professionals are concerned and impacted by exposure to surgical smoke

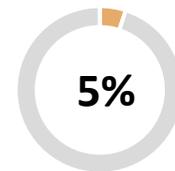


are **worried about health risks** associated with surgical smoke

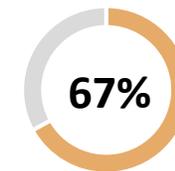


report **cough** associated with surgical smoke. 47% also reported experiencing **asthma or wheezing**

3. Hospital measures currently in place to protect them against surgical smoke are deemed insufficient



Are not sure whether their **hospital takes action** to protect employees



report **no new measures or protocols** for surgical smoke were introduced by hospital management during COVID-19



report **local smoke evacuation systems** are most often used as protection against surgical smoke



report **use of local smoke evacuation systems**

Recommendations

- In addition to existing occupational safety and health legislation, **surgical smoke should be specifically addressed to strengthen prevention in occupational health. Such regulation is not in place in Sweden for the moment.**
- Existing guidelines should be properly implemented** throughout Sweden, including from the [Swedish Agency for Work Environment Expertise \(SAWEE\)](#)

“
A lot has happened on that front in the almost 40 years I have worked as a surgical nurse. But it is a pity that surgeons have to use diathermy so much today...”
”

Surgical Nurse, Gävleborg

About the Surgical Smoke Coalition

A pan-European initiative, the Coalition's mission is to minimise risk of harm from exposure to surgical smoke, in particular for OR health professionals. It is composed of the European and French OR Nurses Associations (**EORNA**; **UNAIBODE**), the European Specialists Nurses Organisation (**ESNO**), the European Medical Association (**EMA**), the European Union of Private Hospitals (**UEHP**), the German Professional Association of Anaesthetic and Operating Room Technicians (**ATA|OTA**), **Constance Held** and **Stryker**. The Coalition is co-chaired by **May Karam** (EORNA), **MEP Marianne Vind** (S&D; Denmark), and **MEP Dennis Radtke** (EPP; Germany).

About the survey

The survey was conducted in 2020-2021, in eight languages across 11 European countries and the UK, with the view to gain a greater understanding of (1) awareness levels of surgical smoke by hospital staff; (2) experiences & knowledge of symptoms associated with it; (3) risk management measures in place in hospitals. 820 healthcare workers participated to the survey.



Surgical smoke in the UK

Professionals' Views

According to a survey designed and distributed by EORNA and Stryker, amongst 35 English healthcare professionals in 2020-2021

1. Awareness levels of surgical smoke and its risks remain extremely low

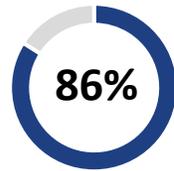


claim to **never have received information** on surgical smoke and associated health risks



claim **no new information was shared** in the context of the C-19 pandemic

2. Healthcare professionals are concerned and impacted by exposure to surgical smoke

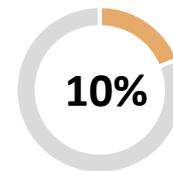


are **worried about health risks** associated with surgical smoke

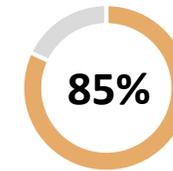


report **cough** associated with surgical smoke. **42%** also reported experiencing **rhinitis**

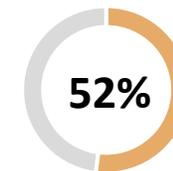
3. Hospital measures currently in place to protect them against surgical smoke are deemed insufficient



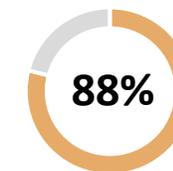
claim their **hospital does not take action** to protect employees



report **regular surgical face masks** are often used as protection against surgical smoke



report **no new measures or protocols** for surgical smoke were introduced by hospital management during COVID-19



report **use of local smoke evacuation systems**

Recommendations

- In addition to existing occupational safety and health legislation, **surgical smoke should be specifically addressed to strengthen prevention in occupational health. Such regulation is not in place in the UK at the moment.**
- Existing guidelines should be properly implemented** throughout UK, including from the British Occupational Hygiene Society (BOHS) and Association for Perioperative Practice (AfPP)

“Not enough is done to raise awareness of the risks of surgical smoke, and if the surgeon decides not to use smoke extraction some staff don't feel able to speak up about it...”
Operating Dept Practitioner, Cheshire

About the Surgical Smoke Coalition

A pan-European initiative, the Coalition's mission is to minimise risk of harm from exposure to surgical smoke, in particular for OR health professionals. It is composed of the European and French OR Nurses Associations (EORNA; UNAIBODE), the European Specialists Nurses Organisation (ESNO), the European Medical Association (EMA), the European Union of Private Hospitals (UEHP), the German Professional Association of Anaesthetic and Operating Room Technicians (ATA|OTA), Constance Held and Stryker. The Coalition is co-chaired by **May Karam** (EORNA), **MEP Marianne Vind** (S&D; Denmark), and **MEP Dennis Radtke** (EPP; Germany).

About the survey

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