Weight of Evidence (WoE) paper for the evidence supporting the expansion of Smoke and Aerosol Free Environments (SAFE) in the EU: Assessment of barriers, opportunities and best practices for SAFE

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JATC2 JOINT ACTION ON TOBACCO CONTROL

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Document history and contributors

This Weight of Evidence paper (WoE) is a deliverable of JATC2-Work Package 8 (D8.1)

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Disclaimer

Executive summary

In this WoE report, we compiled the findings from recently published reports as well as from other not yet published results from a consultation to experts on SAFE in Europe.The current coverage and compliance with legislation, the available evidence to support the expansion, the barriers and opportunities and the formally assessed best practices for the expansion of SAFE, are synthesized in this report. The main conclusions of this WoE are as follow:

1) There are important gaps in both the current smoke-free legislation and its implementation across EU countries.
2) The current smoke-free legislation does not cover new tobacco products such as electronic cigarettes and heated tobacco products in most EU countries, and compliance in countries with such legislation is far from satisfactory.
3) Some EU members have started the extension of smoke-free environments to several outdoor places and private indoor places but both inforcement and compliance are poor.
4) Exposure to second-hand smoke and aerosol continues to be present at several places across EU countries.
5) There are social inequalities in second-hand smoke (SHS) exposure across the EU, both between and within countries, with an inverse association between the level of exposure to SHS and socioe-conomic status.
6) The strong support of EU citizens to smoke-free settings, including areas that are already smoke-free according to national laws, indicates the feasibility and opportunity of extending smoking bans to outdoor settings.
7) The main barriers against enforcement of current legislation are the lack of human and financial capacity, reluctance of governments, lack of training for authorities and/or public sector, as well as the lack of dedicated funding for tobacco control research and interventions.
8) The main barriers against the expansion of SAFE legislation are the industry lobby, the reluctance of governments, the lack of monitoring and sales regulation, and claims of specific settings against the expansion.
9) There are several opportunities for the expansion of SAFE policies across the EU, including outdoor places such as beaches, parks, crowded places, places where children are present, terraces or patios of hospitality venues, balconies of private homes, and private vehicles.

Background information

The expansion of Smoke and Aerosol Free Environments (SAFE) across EU countries is one of the objectives of the Second Joint Action on Tobacco Control (JATC2) prompted by the European Commission.

Article 8 of the World Health Organisation Framework Convention on Tobacco Control (WHO FCTC) [1] acknowledges the effects of second-hand smoke on health and aims to protect citizens from its adverse effects.

Both the Conference of the Parties in decision FCTC/COP1 and the WHO, reported on the global tobacco epidemic 2021 [2] highlighting that no safe levels of exposure to second-hand smoke exist. Engineering approaches, such as ventilation, air exchange and the use of designated smoking areas, do not protect against exposure to tobacco smoke,[3, 4, 5, 6].

Increasing scientific evidence to expand SAFE policies and improve compliance over all kind of settings, including indoor and outdoor and public and private ones in EU countries, has been compiled over the recent decades. The current Weight of Evidence (WoE) paper within the JATC2 is aimed to keep updating the situation and address questions on barriers, opportunities and best practices to support the expansion of SAFE in EU countries, more specifically, on compliance and enforcement.

Objectives of this WoE paper

To assess and create the framework for the expansion of SAFE in Europe including outdoor areas and some private settings.

Methods

We followed the existing guides to elaborate Weight of Evidence reports available from chemistry and toxicology disciplines [7, 8] and adapted them to a more social and public health scope, in this instance, the expansion of SAFE policies in EU.

We first defined the questions for the WoE assessment and then we followed the three steps: 1- Assemble the evidence; 2- Weigh the evidence; 3- Integrate the evidence. All these steps are summarized in the section “Results: Reporting WoE”.

To support the expansion of SAFE policies in EU countries we considered the following questions:

1. What is the current situation on coverage and compliance of SAFE legislation?
2. What is the evidence for the expansion of SAFE?
3. What are the barriers to the expansion, compliance with and enforcement of SAFE policies?
4. What are the opportunities for the expansion, compliance with and enforcement of SAFE policies?
5. Currently, are there any assessed practices for SAFE?

Step 1: Assemble the evidence

From a list of potentially relevant evidence, we selected those to be weighted and grouped into lines of evidence (LoE). There are no fixed rules for how to form lines of evidence, but it can be helpful to distinguish those which are stand-alone, and those that are complementary. If the lines of evidence are complementary, they may be grouped according to the contribution they make to answer the question (e.g. exposure, hazard, etc.). Stand-alone lines of evidence may comprise evidence on the same aspect of the assessment but generated by different methods (e.g. different study types), with different subjects (e.g. species, chemicals, etc.) and in different conditions. This will tend to

group evidence that has similar relevance and/or reliability. The lines of evidence and the rationale for constructing them should be documented, identifying which are stand-alone and which are complementary. [7]

Lines of evidence

The lines of evidence are listed giving information on what they contain and how they differ. We also identify any LoE that are required (e.g. by legislation or guidance documents) but missing, (i.e. data gaps) and we highlight the data gaps as areas that need to be considered for further correction. [7]

The evidence for the expansion of SAFE policies was assembled by: first, using the most recent information on SAFE legislation in Europe that is provided by the Smoke Free Partnership in 2022 https://www.smokefreepartnership.eu/smokefree-map [9], the position paper "Smoke Free Partnership Response to the European Commission's call for evidence on the smoke-free environments" [10], the Report from the Study on smoke-free environments and advertising of tobacco and related products [11]. (Table 1, self-compiled) and (Table 2, extracted from the EU report), along with information contained in the Tobacco Control Scale [12]. Second, with the information gathered on a consultation to experts using an online questionnaire (Annex 1 & 3) and third, by conducting an extensive literature review (Annex 2).

The abovementioned online questionnaire asked about barriers and opportunities for expansion and enforcement of SAFE and checked main criteria to define a best practice as follows: whether the practice showed evidence of effectiveness and efficiency, possible replicability in another setting, sustainability, equity and ethical soundness, relevance, and community and stakeholder participation.

The literature review aimed to assess the extent of available evidence to support the expansion of SAFE in outdoors, indoors, public, and private settings.

The tobacco and related products considered in this report are succinctly and concisely classified as traditional tobacco products, heated tobacco products and e-cigarettes. This is in line with recent research [13] advocating for a neutral way to name the products that are being placed in the market with appealing namings from the tobacco industry.

Step 2: Weigh the evidence

Through the consultation to experts conducted using an online questionnaire we obtained "the best professional judgement", this is the qualitative integration of multiple lines of evidence.

The general considerations for weighing the evidence are: reliability (to what extent the information provided to support evidence is correct), relevance (what is the contribution of the evidence to answer the question under study) and consistency (confidence in the argument for or against a candidate cause is increased when many types of evidence consistently support or weaken it). [7]

Step 3: Integrate the evidence

To reach a conclusion on the weight of evidence question, integration is necessary both within and between lines of evidence. When there are data gaps, due to the absence of data that are normally required, this situation affects the process of integration of the evidence. When appropriate, the impact of this may be mitigated by the contributions of other evidence (e.g. read-across), or taken into account by use of assessment factors (which should themselves be evidence-based). [7]

Results: Reporting WoE

The questions to report results are the following:

1. What is the current situation on coverage and compliance of SAFE legislation?
2. What is the evidence for the expansion of SAFE?
3. What are the barriers to the expansion, compliance with and enforcement of SAFE policies?
4. What are the opportunities for the expansion, compliance with and enforcement of SAFE policies?
5. Currently, are there any assessed practices for SAFE?

1. What is the current situation on coverage and compliance of SAFE legislation?

To answer this question we refer to the 2022 Smokefree map, a project from Smoke Free Partnership (SFP): https://www.smokefreepartnership.eu/smokefree-map.

The information is based on a survey that was circulated to organizations in 43 countries in the course of 2021 and the data used refers to the legislation passed as of 1st June 2022. The newly released smokefree partnership map shows that an ambitious revision will be needed to provide guidance to European countries on comprehensive 100% smoke-free measures to protect children and vulnerable groups from tobacco smoke.

According to this map: 6 EU countries are strongly enforcing Article 8 of the WHO FCTC. 12 follow and enforce it. 6 offer limited protection (there are many smoke-free public areas, but weak compliance limits the efficiency of the legislation). Finally, 4 EU countries offer little or no protection to citizens and have weak or unenforced smoke-free legislation. In summary, 18 out of 28 EU countries are complying with the international smoke-free obligations under Article 8 of the WHO FCTC. Among them, the Netherlands is the country that made the most significant progress while Germany is the one for which smoke-free policies and their level of implementation are particularly worrying. Furthermore, Sweden is the first and only country that has a complete smoking ban in terraces. Progress is currently being made also with regards to extending bans to heated tobacco products and other products on the market.

In addition, the EU report that explores self-reported coverage of legislation among 30 EU countries [11] shows that: the settings with highest implementation of full bans for tobacco smoke, e-cigarettes and HTPs are schools and universities (indoor), public places (indoor) and public transports (indoor and outdoor) with more than 15 countries applying these. Full bans for tobacco smoke only are also applied to health care facilities (indoor), restaurants/bars (indoor) and playgrounds (outdoor) in more than 15 countries. On the other hand, the settings where smoke-free legislation has highest difficulties to be implemented are workplaces (outdoor), private rental homes, restaurants/bars (outdoor), parks (outdoor) beaches, private cars and homes **(Table 1&4).**

We have also used the findings from the Tobacco Control Scale (TCS), a long-standing project initiated by Luk Joossens and Martin Raw and continued by the WHO Collaborating Center for Tobacco Control at the Catalan Institute of Oncology and Smoke Free partnership [14]. The TCS quantifies the implementation of tobacco control policies at a country level, including SAFE, and is based on six policies described by the World Bank, as well as the recommendations from the WHO Framework Convention for Tobacco Control, according to which comprehensive tobacco control programmes should be prioritised. The 2021 TCS report describes the results of a survey of tobacco control activity in 37 European countries in 2021, and its main findings regarding smoke-free legislation are presented in **Table 3.**

Table 1: Self-reported level of coverage of national aerosol and smoke-free rules from 30 countries in the EU

	Number of countries self-reported level of coverage of SAFE legislation		Traditonal products for smoking			E-cigarettes			Heated tobacco products		
	Type of setting	*Type of ban*	*Full*	*Partial*	*None*	*Full*	*Partial*	*None*	*Full*	*Partial*	*None*
1	**Gral work**	**Indoor**	13	16	0	9	16	5	11	13	6
2		**Outdoor**	0	14	16	0	9	21	0	9	21
3	**Enclosed public**		18	12	0	14	11	5	15	11	4
4	**Health care**	**Indoor**	14	16	0	12	13	5	12	14	4
5		**Outdoor**	5	13	10	5	10	14	5	11	13
6	**Residencial care**		9	21	0	7	18	5	7	19	4
7	**Educational**	**Schools**	27	3	0	22	3	5	24	2	4
8		**Universities**	25	5	0	20	5	5	20	6	4
9	**Public transports**		21	9	0	18	8	2	20	6	4
10	**Prisons**		7	21	2	5	18	6	5	20	5
11	**Hotels**	**Hotels**	5	24	1	3	21	6	3	23	4
12		**Private rental homes**	1	10	19	1	9	20	1	10	19
13	**Eating and drinking establishments**	**Restaurants indoor**	16	14	0	11	10	9	14	9	7
14		**Bars indoor**	15	15	0	11	10	9	13	10	7
15		**Restaurants out-door**	2	11	17	2	5	23	2	7	21
16		**Bars outdoor**	1	12	17	2	5	23	2	7	21
17	**Playgrounds young**		16	4	10	13	2	15	13	2	14
18	**Outdoor public**	**Parks**	2	6	22	2	3	25	3	3	24
19		**Beaches**	1	5	23	1	4	24	1	4	24
20	**Private areas**	**Cars**	2	9	19	1	6	23	2	7	21
21		**Homes**	1	3	26	1	1	28	1	2	27

Source: ICF analysis of responses to the country written questionnaire 2021
Source : Self-compiled from the Study on smoke-free environments and advertising of tobacco and related products, EU, 2021.

Regarding compliance, the findings of the EU report, as a mean of all EU countries, show a **high level of compliance** with the bans on all three types of tobacco products in the following venues: indoor venues such as workplaces, healthcare, residential and educational facilities, bars and restaurants, public transport and hotels. Also, in some outdoor areas such as outdoor health care facilities and terraces. On the other hand, a **low level of compliance** is reported for the bans on traditional tobacco products in public parks outdoor and for HTPs and e-cigarettes in outdoor workplaces and health care facilities. **(Table 2 & 4)**

Table 2: Self-reported level of compliance of national aerosol and smoke-free rules from 30 countries in the EU

		Traditional products for smoking	E-cigarettes	Heated tobacco products
General workplaces	Indoor workplaces	High	High	High
	Outdoor workplaces	Moderate	Low	Low
Enclosed public spaces (e.g. town hall, public library)		High	High	High
Health care facilities	Indoors	High	High	High
	Outdoors (e.g. outside, but on facilities' grounds)	Moderate	Low	Low
Residential care facilities		High	High	High
Educational facilities	Schools (e.g. primary and secondary)	High	High	High
	Adult learning premises (e.g. universities and vocational learning centres)	High	High	High
Public transports		High	High	High
Prisons		Moderate	High	High
Hotels and accommodation	Hotels	High	High	High
	Private home rentals	High	High	High
Eating and drinking establishments	Restaurants and eating establishments, indoors	High	High	High
	Bars and drinking establishments, indoors	Moderate	High	High
	Eating and drinking establishments, outdoors (e.g. terraces, garden seating)	High	High	High
Outdoor public places	Playgrounds or other spaces frequented by children and young people	Moderate	High	High
	Public parks	Low	Moderate	Moderate
	Public beaches	Moderate	High	High
Private areas	Cars	Moderate	Moderate	Moderate
	Homes	Moderate	Moderate	Moderate

Source: ICF analysis of responses to the country written questionnaire (2021).

Similarly, the information provided by the survey conducted and compiled in the Tobacco Control Scale-2021 regarding smoke-free places, shows that complete bans in educational, health, government and cultural places, as well as within trains and other public transport, are in place in all 37 EU countries. More particularities apply to the bans affecting bars/restaurants and workplaces, where the enforcement of complete bans is only happening in 12 and 8 countries, respectively. Nonetheless, the ban affecting private cars when minors or children are present seems to be quite followed in 16 countries. **(Table 3)**

Table 3: Survey of Tobacco control scale: smoke-free public places from 37 countries in the EU

Policy domain	Points	N countries
Bars and restaurants (max=10 points)		
Complete ban; enforced	8	12
Complete ban, but with closed, ventilated, designated smoking rooms (not areas or places); enforced	6	14
Meaningful restrictions; enforced (50% of bars and restaurants are smoke-free)	4	10
Legislative restrictions, but not enforced (less than 50% of the bars and restaurants are smoke-free)	2	1
Public transport (max=2 points)		
Complete ban in trains without exceptions	2	32
Complete ban in other public transport without exceptions	1	5
Ban in private cars when minors or children are present (max= 1 point)	1	16
Complete ban in educational, health, government and cultural places (max= 1 point)	1	37
Workplace (max= 10 points)		
Complete ban without exemptions (no smoking rooms); enforced	10	8
Complete ban, but with closed, ventilated, designated smoking rooms under very strict rules; enforced	8	4
Complete ban, but with closed, ventilated, designated smoking rooms (not areas or places); enforced (at least 75% of the workplaces are smoke-free)	6	14
Meaningful restrictions; enforced (more than 50% of the workplaces are smoke-free)	4	10
Legislative restrictions, but not enforced (less than 50% of the workplaces are smoke-free)	2	1

Source: Self-compiled table from TCS 2021

Table 4: Reporting WoE for the current situation on coverage and compliance of SAFE legislation in the EU

Question 1		What is the current situation on coverage and compliance of SAFE legislation?
Assemble evidence	Select evidence	From the 2022 smokefree map of Smoke Free Partnerhship. From the EU study on the legislation on smoke-free environments; enforcement of the legislation; progress made to protect children and adolescents; measures for cessation; multi-sectoral approaches; and impacts of rules on smoke-free environments. From the survey to produce the 2021 Tobacco Control Scale: a questionnaire sent to correspondents in European countries, using a scoring system designed with the help of a panel of international tobacco control experts.
	Lines of evidence (LoE)	**LoE 1:** Level of coverage of SAFE legislation in 21 different settings/locations from 30 EU countries in 2021 (Table 1) and from 42 countries updated by the SFP in 2022. **LoE 2:** Level of compliance of SAFE legislation in 21 different settings/locations (Table 2) and from 42 countries updated by the SFP in 2022. **LoE 3:** Level of coverage and compliance of SAFE legislation. Scoring of the TCS for bans/restrictions on smoking in public and workplaces in 37 countries in 2021 (Table 3)
Weigh the evidence	Methods	**LoE 1 & 2:** Level of coverage and compliance of SAFE legislation assessed by EU survey and SFP. According to the methods described by SFP [9], they did the analysis of the smoke-free legislation and compliance in 42 countries (EU countries + Albania, Belarus, Bosnia and Herzegovina, Iceland, Israel, Kosovo, Moldova, Montenegro, North Macedonia, Norway, Serbia, Switzerland, Turkey, Ukraine, and the United Kingdom). Based on this, a user-friendly interactive map was set up, with a traffic-light style colour rating, which enables viewers to get a fast, comparative overview of the level of protection from second-hand smoke in each country. The information is based on a survey that was circulated to organizations in 43 countries in the course of 2021 and the data used refers to the legislation passed as of 1st June 2022. To produce the EU report [11], the experts consulted by DG Santé used the following methods: "Relevant qualitative and quantitative information gathered from desk research -including an extensive collection of peer-reviewed and grey literature sources-, as well as a mapping of national rules, were reviewed and assessed against the guiding study questions. The consultation approach sought to collect further information and feedback on various aspects of the key topics from several stakeholder groups, which further fed into the assessment and analysis. Stakeholder consultations were structured around a variety of different sub-tasks, including targeted stakeholder surveys, phone interviews, focus groups, a citizen's survey of a sample of at least 500 respondents from each of 10 EU/EEA countries, and observational research. Findings presented in the report are based on analysis and triangulation of the data gathered from these various sources. A draft report was peer-reviewed by three independent external experts whose suggestions have been integrated in the final report." **LoE 3:** Level of coverage and compliance of SAFE legislation assessed through TCS for bans/restrictions on smoking in public and workplaces in 37 countries in 2021. From a survey of tobacco control policies in 37 European countries in 2021 using the Tobacco Control Scale (TCS). The TCS monitors 6 policies related to tobacco control in EU and allocates scores to each policy with a maximum score of 100 points. One of the monitored policies is bans / restrictions on smoking in public and workplaces with a maximum of 22 points allocated to this policy. Within the policy "public and workplaces" there are subcategories that are presented in Table 3 with results from the survey conducted in 2021.

	Results	**LoE 1:** Level of coverage of SAFE legislation in 21 different settings. According to the EU report, there are importants gaps in the implementation of the Council recommendation and smoke-free legislation as follows: - The continuing existence of designated smoking areas (usually smoking rooms) and allowing smoking in certain semi-open environments (e.g. terraces, bus shelters and open-air railway stations). - Difficulties with the definition of indoor public places, especially with semi-open terraces. - The opposition of the hospitality sector to smoke-free measures and the difficulty to impose 100% smoke-free environments without allowing for designated smoking areas. - Implementation of the legislation is less adequate for heated tobacco products and e-cigarettes compared to traditional tobacco products. Nonetheless: - The number of EU Member States (MS) completely banning the use of tobacco products for smoking (instead of having only partial bans) significantly increased since the 2013 report on the implementation of the Council Recommendation of 30th November 2009 on smoke-free environments, especially in indoor workplaces, enclosed public spaces, prisons and hotels. - The environments with the highest rates of bans on using e-cigarettes and heated tobacco products were educational facilities (e.g. schools and adult learning premises); public transport; and enclosed public spaces. - The environments that had the least bans on use of e-cigarettes and heated tobacco products were outdoor workplaces, private homes, public parks and public beaches. **LoE 2:** Level of compliance of SAFE legislation in 21 different settings. According to the EU report, moderate or low compliance were observed: - In bars and restaurants, workplaces, residential care facilities, prisons and outdoor educational and healthcare facilities. - Much lower compliance for e-cigarettes and/or heated tobacco products compared to traditional tobacco products. **LoE 3:** Level of coverage and compliance of SAFE legislation in 37 different settings. According to the TCS 2021: - Complete ban in educational, health, government and cultural places, as well as within trains and other public transport, is in place in all 37 EU countries. - Complete ban in bars/restaurants and work place is only existing in 12 and 8 countries, respectively. - The ban affecting private cars when minors or children are present seems to be quite followed in 16 countries.

Integrate the evidence	Conclusions	There are a number of **concluding lessons and recommendations** on smoke-free environments, related to: 1- The identified gaps in the current regulatory framework. 2- Implementation and application challenges. 3- Compliance challenges. 4- Enforcement challenges. 1- The 2009 Council Recommendation is limited as it only covers 'tobacco smoke' and does not include vapour from e-cigarettes and the emissions of heated tobacco products. Many countries and study stakeholders recommended extending the current Council Recommendation to other products such as e-cigarettes and heated tobacco products. Extending rules more consistently would have the following impacts: - Consumers would find rules much less confusing. - The tobacco industry would be less able to exploit gaps. - E-cigarettes and heated tobacco products would be perceived as equally harmful as traditional tobacco products for smoking. 2- While the 2009 Council Recommendation refers to 'indoor workplaces, indoor public places, public transport and, as appropriate, "other public places", it does not explicitly include specific outdoor public spaces (e.g. restaurant and bar terraces, public parks, beaches or streets) or private areas (e.g. homes and cars) schools or universities, playgrounds, parks/ areas where children are present and multi-unit housing (MUH). Extending bans to public parks and beaches could help smokers to stop associating smoking with pleasant venues or activities, and, in turn, would reduce their willingness to smoke. Regulating private areas such as private homes would probably not be feasible or appropriate in most countries. However, certain targeted bans could be enacted (e.g. in cars or multi-unit housing). 3- In terms of monitoring and enforcing rules on smoke-free environments there is a need to: - Increase financial and human resources available for such activities. - Exchange of best practices between national competent authorities in the EU, as well as discussions on challenges faced and steps taken to overcome them. This could be done via meetings of the expert groups (such as the Group of experts on tobacco policy), or at regional WHO workshops and conferences. 4- Enforcement of smoke-free rules should go hand in hand with strong communication and advocacy campaigns explaining the benefits of such rules. Since 2013, countries have continued to increase the level of protection for children and adolescents, as stated in the Recommendation. For example, protection measures have been reinforced in educational establishments (the majority of EU Member States have now banned smoking altogether in educational establishments) and some of them have extended this ban to other places where children might be present such as sport venues, playgrounds and open stadiums. Another positive development is that some countries have introduced a smoking ban in private cars when minors are present. Although there is no comprehensive legislation at the EU level to protect children from second-hand smoke exposure in private cars, there is a large public support (which has been increasing in the last few years) for smoke-free cars' legislation. Furthermore, there has been a shift from reports of households having partial restrictions to reports of completely smoke-free homes. Finally, according to TCS 2021: Only total bans work well and comply with Article 8 of the WHO FCTC and Council Recommendation on smoke-free environments of 30th November 2009 (2009/C 296/02). This is emphasized since there are indoor workplaces and other indoor public places with adjacent areas where smoking is allowed.

2. What is the evidence for the expansion of SAFE policies in the EU?

To answer this question we refer to the literature review conducted within the frame of the JATC2-WP8,Task 8.2b.1. The objective of this literature review is to assess the extent of available evidence to support the expansion of Smoke and Aerosol Free Environments (SAFE) in outdoor, indoor, public, and private settings.

Table 5: Reporting WoE on the evidence for the expansion of SAFE policies in the EU

Question 2		What is the evidence for the expansion of SAFE policies in the EU?
Assemble evidence	Select evidence	The literature review was performed in PubMed and Science Direct databases on papers published after January 2010 and prior to August 2022 as well as Google Scholar web search engine, with the following key words: Smoke-free environments, second-hand smoke (SHS), aerosol-free environments, vaping, tobacco, e-cigarettes, novel tobacco products, indoor, outdoor, protection, exposure, legislation, public places and private places. **(See Annex 2)**
	Lines of evidence (LoE)	**LoE 1:** Environmental markers. **LoE 2:** Bio-markers. **LoE 3:** Self-reported SHS exposure. **LoE 4:** Venue type. **LoE 5:** Type of exposure (SHS and or SH Aerosol from e-cigarettes and second-hand heated tobacco products aerosol).
Weigh the evidence	Methods	Types of studies included were cross-sectional studies, uncontrolled pre and post bans or implementation of policies, prospective panel studies, literature review studies, prospective cohort studies, letters, quasi-experimental studies, randomized controlled trials and letters to the editors.

	Results	A total of eighty-three papers were retrieved **(See Annex 2).** **LoE 1:** Environmental markers Twenty-five studies used environmental markers to assess SHS exposure, including (n=19) studies that measured particulate matter (PM) ≤2.5 μm in diameter (PM2.5). Airborne nicotine (n=15), carbon monoxide (CO) (n=1), carbon dioxide (CO2) (as an index of ventilation rate) (n=1), particulate polycyclic aromatic hydrocarbons (PPAHs) (n=2) and 4-methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK) (n=1) were used mostly to complement PM2.5 assessment, self-reported SHS exposure and observational data. Most of these studies were conducted in the hospitality sector, public offices, work areas, airports, homes, vehicles and multi-unit housing. Both, at indoor and outdoor settings and at indoor locations adjacent to outdoor smoking areas. These studies indicate high SHS exposure in all these settings. According to research findings, PM2.5 concentrations in cars where smoking takes place, are high and greatly exceed international indoor air quality guidance values. **LoE 2:** Personal bio-markers Seven studies used cotinine [salivary cotinine (SC) (n=4), urinary cotinine (UC) (n=3), and plasma cotinine (PC) (n=1)] to assess SHS exposure among participants. Bio-markers were mostly assessed to complement self-reported SHS exposure and airborne markers. Moreover, a third hand smoke (THS) marker, using liquid chromatography-triple quadruple mass spectrometry was also assessed in one study. Most of these studies were done at private homes and vehicles and some multi-unit housing. The findings showed that PC levels increased 4-fold, UC increased over 6-fold, while urine NNAL increased 27-fold after 1 h of SHS exposure in a car. Authors advocate that smoking in cars leads to extremely high exposure to SHS and increased concentration of atmospheric markers of exposure, even in the presence of air-conditioning or increased airflow from open windows **LoE 3:** Self-reported SHS/SHA exposure Self-reported SHS or SHA exposure was assessed in thirty-nine studies, including (n=28) studies which results were not complemented from any airborne or bio-markers on any supplement observational data. Among those thirty-nine studies, two studies assessed self-reported exposure to second-hand HTP aerosol and two studies assessed exposure to HTP as well as SHA exposure from e- cigarettes and SHS exposure. Most of the findings come from studies conducted in different indoor and outdoor settings, especially, working and public places, private vehicles, homes and multi-unit housing. The findings suggest that, even in countries with comprehensive smoke-free legislation, exposure to SHS at home continues to be the main source of exposure for non-smokers who live in non-smoke-free homes. Also, regarding children's SHS car exposure, research findings correlate higher exposure with lower social status, lower parental education, migration and parental or peer smoking. A systematic review and meta-analysis conducted to identify the pooled prevalence, estimate of SHS at smoke-free workplaces and the factors associated with SHS exposure at the workplace, indicated that despite the existence of smoke-free policies at the workplace, nearly all studies reported exposure to SHS. **LoE 4:** Venue type Sixteen studies were conducted in hospitality venues such as pubs, restaurants, bars, cafes, and outdoor dining areas or outdoor area of the main entrance and patios. Eleven studies measured SHS in other outdoor locations such as school outdoor areas and entrances, universities, parks and beaches, stadia, parks, hospital campuses, children playgrounds, public and office main entrances, airport terminals and public transport stops. Thirty-nine studies were conducted in indoor areas such as workplace, home,

		multi-unit housing and vehicles (among those, seven studies were conducted in cars and seven in multiunit housing). Seven studies assessed SHS exposure in both outdoor and indoor areas and in different settings. Six studies assessed SHS exposure in outdoor areas and in different settings. Four studies assessed SHS exposure in indoor areas and in different settings. From the studies conducted within the frame of the European project Eurest-plus, in 6 european countries was found that SHS exposure in public places was significantly less likely in the countries with total bans as compared to those countries with partial bans. A research review conducted to summarize existing scientific literature relevant to smoke-free MUH indicates that a majority of MUH residents, including many smokers, support smoke-free building policies. Another study conducted in California presents evidence that smoking prevalence is significantly higher among MUH residents than single family housing residents and that MUH smokers have 32% higher rates of exposure to SHS at home than single family housing smokers. A study conducted in Japan, aimed to reveal the association between a workplace smoke-free policy and SHS-SHA exposure among non-smoking employees, concluded that the effect of partial bans was limited, and temporary closure of smoking spaces might contribute to increased exposure to second-hand HTP aerosol. Complete smoking bans in the workplace were reaffirmed as the best way to reduce SHS exposure from cigarettes and exposure to second-hand HTP aerosol. Finally, within the TackSHS project, researchers objectively assessed SHS exposure concentrations at outdoor terraces in hospitality venues that were located in large urban areas from 11 European countries. According to the results obtained, nicotine was present in 93.6% of the 220 sites explored. Authors' conclusions suggest that current restrictions in outdoor hospitality venues across Europe have a limited protective effect and justify the adoption of total smoking bans in outdoor areas of hospitality venues. **LoE 5:** Type of exposure (to SHS and/or SHA) Seventy-seven studies assessed SHS exposure alone. Three studies assessed SHA exposure from e-cigarettes alone. One study assessed SHA exposure from HTP alone. Two studies assessed SHS and SHA exposure from cigarettes, HTP and e-cigarettes. One study assessed SHS and SHA exposure from cigarettes and e-cigarettes. The only study that assessed SHS and SHA exposure from cigarettes and HTP was conducted in a MUH of US. This study found that SHS incursions were greater among women, younger adults and those with lower income living in MUH. The studies on SHA exposure from e-cigarettes were conducted in several types of venues and their findings advocated for extension of tobacco smoke-free legislation to e-cigarettes and restrictions of e-cigarette use outdoors to protect the health of bystanders, particularly in areas where children may be present. The study on SHS and SHA exposure from e-cigarettes concluded that legislation banning smoking inside public places that was introduced in England in 2007, prompted more homes to become smoke-free.

Integrate the evidence	Conclusions	This literature review clearly indicates high SHS exposure at some public and private, indoor and outdoor settings, and at indoor locations adjacent to outdoor smoking areas. Exposure to SHS mostly occurs anywhere there is permission to smoke, such as homes, workplaces and other public places. The WHO FCTC has concluded that, in order to adequately protect the public's health from the harmful effects of SHS, 100% smoke-free environments are required (WHO, 2007). Smoke-free policies are cost-effective and strongly supported by the public within the EU. The strong support of EU citizens for some smoke-free settings, including areas that are already smoke-free according to national laws, suggests the feasibility of extending smoking bans to several outdoor settings. Social inequalities in SHS exposure clearly exists across the EU, not only between, but within countries as well. The more deprived the social class, the higher the exposure. To reduce SHS exposure, there is an urgent need for evidence-based interventions with an equity perspective, while smoke-free laws must continue to be refined in terms of their legal boundaries as well as implementation strategies to eliminate disparities in SHS exposure in certain types of venues. Implementing comprehensive smoke-free legislation and ensuring its strict enforcement should be the way forward for EU MS and beyond. Policy makers worldwide should prioritize pushing forward public smoking bans at a legislative level. While the regulation of SHS exposure in public places is possible, should strict enforcement take place, the regulation of household SHS exposure may be feasible through educational interventions, via the mass media or schools' intervention programmes. In conclusion, there is an urgent need for health promotion programmes and for implementation of strict comprehensive nationwide tobacco control policies, especially among the segment of the population with lower socioeconomic status and education and among the smoking population.

3. What are the barriers to the expansion, compliance with and enforcement of SAFE policies?

To answer this question, we used the JATC2 consultation on SAFE policies to European experts on tobacco control. Out of the 110 invited experts to the JATC2 consultation on SAFE policies, 63 experts from 29 countries responded to questions assessing barriers and opportunities for the expansion and improvement of compliance with SAFE policies (response rate: 57%).

The Report from the study on smoke-free environments and advertising of tobacco and related products in the EU [11], which provides information on barriers and opportunities in relation to compliance or enforcement of SAFE, is also considered in this chapter.

Barriers to the expansion of SAFE policies

Out of the 63 respondents, 42 (66.7%) identified **barriers to the expansion of SAFE policies.** The majority of identified barriers were related to lobbying and funding activities of the tobacco industry **(Table 6),** including lobbying towards parliamentarians, public servants, health professionals or members of small business, and funding 'smoke-free' and 'harm reduction' campaigns (e.g., in social media), as well as funding events promoting HTPs social acceptability in enclosed places. Additionally, they mentioned reluctance and low commitment of the government and authorities for the expansion of SAFE policies. The experts also mentioned a lack of development and implementation of legislation for SAFE outdoor places, lack of monitoring and lack of sales regulation.

Claims of specific settings against the expansion were reported as a barrier in similar proportion than the previous category. Specific settings included the hospitality and tourism sector, the small business sector, and private homes where expanded SAFE policies could be contrary to human rights. About one-tenth of the responding experts mentioned misinformation about novel nicotine and tobacco products as a barrier for the expansion of SAFE. That is, they perceived that the public as well as health professionals are misinformed or lack information about HTPs and e-cigarettes, and believed the absence of evidence on the harmful health effects of novel nicotine and tobacco

products. Lack of capacity and public or professional support for enforcing SAFE policies and some other barriers like not stigmatizing smokers were also mentioned.

Barriers to the compliance with or enforcement of SAFE policies

Half of the respondents to the consultation (n=32, 50.8%) identified some **barriers to the compliance with or enforcement of SAFE policies.** Almost one-third of respondents reported that the major barriers are the lack of human and financial resources and capacities to effectively control the compliance with SAFE policies and applying sanctions if necessary. Besides, the reluctance and low commitment of government and authorities to the improvement of compliance with or enforcement of SAFE policies were also often reported, such as lack of comprehensive and clear legislations for SAFE, as well as lack of institutional internal policies or legal frameworks for the enforcement of SAFE policies.

Further identified barriers to the compliance with SAFE policies were lack of training for competent authorities' staff to communicate the importance of SAFE policies and lack of education about the health harms of outdoor SHS/SHA exposure and possibilities for behavior change strategies. Tobacco industry lobby towards parliamentarians, public servants, small business, and health professionals could also result in poorer compliance with SAFE policies. Some other barriers were mentioned sporadically, like low public support, lack of bonus/malus system in health insurance for smokers, or difficulty to expand SAFE policies in private homes.

Table 6: Reporting WoE on barriers to the expansion, compliance with and enforcement of SAFE policies in the EU

Question 3		What are the barriers to the expansion, compliance with and enforcement of SAFE policies?
Assemble evidence	Select evidence	From the online questionnaire open ended questions and narrative reports from experts: identified barriers and opportunities for expansion of SAFE. From the study on smoke-free environments and advertising of tobacco and related products in the EU [11]. From the Tobacco Control Scale 2021 [12]
	Lines of evidence (LoE)	**LoE 1:** Barriers informed by experts. **LoE 2:** Level of compliance with and enforcement reported by the EU report. **LoE 3:** Barriers informed by the Tobacco Control Scale 2021.
Weigh the evidence	Methods	**LoE 1:** The information from experts on tobacco control was collected through an online questionnaire open-ended questions and narrative reports from experts. **LoE 2:** To produce the EU report [11], the experts consulted by DG Santé used the following methods: "Relevant qualitative and quantitative information gathered from desk research, including an extensive collection of peer-reviewed and grey literature sources, as well as a mapping of national rules, was reviewed and assessed against the guiding study questions. The consultation approach sought to collect further information and feedback on various aspects of the key topics from several stakeholder groups, which further fed into the assessment and analysis. Stakeholder consultations were structured around a variety of different sub-tasks, including targeted stakeholder surveys, phone interviews, focus groups, a citizen's survey of a sample of at least 500 respondents from each of 10 EU/EEA countries, and observational research. Findings presented in the report are based on analysis and triangulation of the data gathered from these various sources. A draft report was peer-reviewed by three independent external experts whose suggestions have been integrated in the final report." **LoE 3:** TCS quantifies the implementation of tobacco control policies at country level and more specifically aligned with this WoE, we collect information on bans/restrictions on smoking in public and work places.

	Results	**LoE 1:** Barriers informed by experts Out of 42 responses from experts the main **barriers to the expansion** identified were: - Tobacco industry lobby and funding activities (15 out of 42) (35.7%). - Reluctance and low commitment of government and competent authorities for the expansion (30.9%). - Claims of specific settings against the expansion (30.9%). - Misinformation about novel nicotine and tobacco products (16.7%). - Lack of capacity and public or professional support for enforcing (14.3%). - Other barriers not specified (9.5%). Out of 32 respondents the main **barriers to the enforcement** of SAFE were: - Lack of human/financial capacity for supervision/enforcement (20 out of 32) (62.5%). - Reluctance and low commitment of government and authorities to the improvement of compliance with or enforcement of SAFE policies (34.4%). - Lack of training/education for authorities and/or the public (28.1%). - Other barriers not specified (21.9%). - Tobacco industry lobby and funding (12.5%). **LoE 2:** Level of compliance with and enforcement of SAFE reported by the EU report: - Lack of comprehensiveness of provisions to protect children and adolescents, in schools or universities, playgrounds, parks and areas where children are present. - There is a gap in the legislation of exposure to smoking in multi-unit housing. - Difficulties to monitor smoke-free measures in private places (for example, homes and cars). **LoE 3:** Barriers to tobacco control in general: - Lack of funding for tobacco control. - Tobacco industry interference, which remains the largest obstacle to the introduction of effective tobacco control policies.
Integrate the evidence	Conclusion	According to the experts' opinion obtained through the JATC2 consultation on SAFE within WP8, the most important barriers to the expansion on SAFE policies are the industry lobby, followed equally by the reluctance of governments and specific settings (e.g. hospitality sector). Equally, the barriers to the enforcement of SAFE were related to the lack of human and financial capacity, reluctance of governments and lack of training for authorities and/or public sector. These findings are in line with those reported by EU [11] that highlight lack of financial and human resources as the main challenge with monitoring and enforcing rules. However, other challenges were mentioned, including differences in the ease of enforcement depending on the environment type. According to TCS, a major concern is the lack of funding for tobacco control. 2020 and 2021 were special years due to the Covid-19 pandemic. In the 2021 WHO Global tobacco epidemic report, no country in the European region reported its tobacco control budget for 2020. In this TCS edition, none of the 37 countries spends €2 per capita on tobacco control, with only Iceland coming close. The TCS scores for spending are extremely low and we are seeing reduced funding in several countries. The second major issue of concern is the tobacco industry interference, which remains the largest obstacle to the introduction of effective tobacco control policies.

4. What are the opportunities for the expansion, compliance with and enforcements of SAFE policies?

To answer this question, we used the JATC2 consultation on SAFE policies to European experts on tobacco control conducted within WP8. Out of the 110 invited experts to the JATC2 consultation on SAFE policies, 63 experts from 29 countries responded to questions assessing barriers and opportunities for the expansion and improvement of compliance with SAFE policies (response rate: 57%).

The Report from the study on smoke-free environments and advertising of tobacco and related products in the EU [11] provides information on barriers and opportunities for the compliance with or enforcement of SAFE that is also considered in this chapter.

Opportunities for the expansion of SAFE policies

Thirty-nine out of 63 experts (61%) identified **opportunities for the expansion of SAFE policies.** More than one-quarter of experts (17 out of 39) believed that there would be opportunities for expanding SAFE policies to certain outdoor places such as beaches, parks, crowded places, places where children are present, hospitality venues, balconies of private homes, and cars. Improving supporting attitudes towards SAFE policies by citizens, politicians, governmental organizations, and NGOs could also serve as an opportunity according to eight respondents. Seventeen experts mentioned as an opportunity ongoing or recently started national 'smoke-free' or 'smoke-free generation' strategies as well as local campaigns and education for the general population to understand SAFE policies. Eight respondents also indicated broad range of other opportunities including transparency of industrial financial operations, funding for cessation services or for enforcing SAFE policies, and imposing a significant fine to deter. Finally, three experts advocated for the extension of SAFE legislation for novel nicotine and tobacco products, while two experts opposed to expand smoke-free policies to these products.

Opportunities for the compliance with or enforcement of SAFE policies

Slightly more respondents identified **opportunities for the compliance with or enforcement of SAFE policies** (n=35, 55.6%) than barriers to it. The majority of them recommended that competent authorities should have higher capacities to enforce SAFE policies. Authorities should require and accept recommendations from tobacco control NGOs. Fifteen respondents also consistently mentioned public education, awareness raising campaigns and regular communications about the importance of SAFE policies. Besides implementing such public campaigns, funding opportunities would also be necessary for nicotine and tobacco use prevention and for continuous monitoring. Five experts highlighted as an opportunity to expand comprehensive SAFE policies for additional indoor and outdoor areas. Several other possible opportunities were identified, such as applying tax and TAPS measures on heated or nicotine products, resolving conflicting stances of health and financial ministries, promoting cultural changes towards SAFE and controlling tobacco industry interference especially related to heated tobacco products.

Table 7: Reporting WoE on opportunities for the expansion, compliance with and enforcement of SAFE policies in the EU

Question 4		What are the opportunities for the expansion, compliance with and enforcement of SAFE policies?
Assemble evidence	Select evidence	Online questionnaire open-ended questions to experts and narrative reports from experts: identified barriers and opportunities for expansion of SAFE. From the EU Study on smoke-free environments and advertising of tobacco and related products in the EU. The information provided by the Tobacco Control Scale, TCS-2021.
	Lines of evidence (LoE)	**LoE 1:** Opportunities for expansion and compliance informed by experts. **LoE 2:** Opportunities highlighted in the EU report. **LoE 3:** Opportunities informed in TCS.
Weigh the evidence	Methods	**LoE 1:** The information from experts on tobacco control was collected through an online questionnaire with open-ended questions and narrative reports from the experts. **LoE 2:** To produce the EU report [11], the experts consulted by DG Santé used the following methods: "Relevant qualitative and quantitative information gathered from desk research, including an extensive collection of peer-reviewed and grey literature sources, as well as a mapping of national rules, was reviewed and assessed against the guiding study questions. The consultation approach sought to collect further information and feedback on various aspects of the key topics from several stakeholder groups, which further fed into the assessment and analysis. Stakeholder consultations were structured around a variety of different sub-tasks, including targeted stakeholder surveys, phone interviews, focus groups, a citizen's survey of a sample of at least 500 respondents from each of 10 EU/EEA countries, and observational research. Findings presented in the report are based on analysis and triangulation of the data gathered from these various sources. A draft report was peer-reviewed by three independent external experts whose suggestions have been integrated in the final report." **LoE 3:** TCS quantifies the implementation of tobacco control policies at country level and more specifically aligned with this WoE, we collect information on bans/ restrictions on smoking in public and work places.

	Results	**LoE 1:** Opportunities for expansion and compliance informed by experts Out of 39 responses from experts, the main opportunities for expansion identified were: - Expanding SAFE policies to certain outdoor places (43.6%). - Supporting attitude of citizens/politicians/governmental organizations /NGOs towards SAFE policies (20.5%). - Other opportunities not specified (20.5%). - National 'smoke-free' or 'smoke-free generation' strategy (15.4%). - Local campaigns and education for understanding SAFE policies (12.8%). - Extension of SAFE legislation for novel nicotine and tobacco products (7.7%). Out of 35 responses from experts, the main opportunities for improvement of compliance or enforcement identified were: - Funding for public education, awareness raising/communication campaign (42.9%). - More powerful enforcement by authorities, with increased capacities (37.1%). - Other (28.6%). - Comprehensive SAFE policies should be expanded to other indoor/outdoor areas (14.3%). **LoE 2:** Opportunities highlighted in the EU report As well as for barriers, the opportunities for expansion, compliance with and enforcement of SAFE policies relate to the main national, regional and local actors. A large majority of countries reported: a). capacity to ensure monitoring and enforcement within the national legislation on smoke-free environments, b). responsibility for compliance placed on the owner of premises to post clear signs at entrances. Fewer countries reported legal responsibility to remove ashtrays from premises and have ashtrays outside the entries of premises. The approaches taken to monitoring and enforcing rules are: a). dedicated agencies to monitor and enforce requirements b). inspections, c). complaint systems and d). support from civil society. The most commonly used punitive measure for owners of premises violating the law is the use of fines, but also suspension or cancellation of licenses. Fines are also the most commonly used punitive measure for smokers although they are less frequent than fines to owners. A few countries mentioned having provisions in place to imprison offenders (smokers). **LoE 3:** Opportunities informed in TCS 2021 Since 2013, there are 17 countries that have introduced a smoking ban in private cars when minors are present (Ireland, UK, France, Finland, Italy, Malta, Cyprus, Lithuania, Slovenia, Luxembourg, Austria, Greece, Belgium, Turkey, Estonia, Latvia and Slovakia).
Integrate the evidence	Conclusions	According to the experts' opinion obtained through the JATC2 consultation on SAFE, the most important opportunities for expansion on SAFE policies apply to certain outdoor places such as beaches, parks, crowded places, places where children are present, hospitality venues, balconies of private homes, and cars. Regarding opportunities for enforcement, these relate mainly to funding for public education, awareness raising/communication campaigns and increased capacity of authorities to enforce. This is also in line with the EU report in which the capacity to ensure monitoring and enforcement is highlighted. As well as identifying clear responsibles and clear punitive measures to ensure compliance of the law.

5. Currently, are there any assessed practices for SAFE in the EU?

The consultation to experts conducted within the frame of WP8-JATC2 produced a list of 38 practices for SAFE. Experts informed ten of these practices as formally evaluated. Five by an external evaluator and the other five through an internal evaluation.

Table 8: Reporting WoE on best practices for SAFE in the EU

Question 5		What are the currently assessed practices for SAFE?
Assemble evidence	Select evidence	**Online questionnaire with open ended questions and narrative reports from experts**
	Lines of evidence	**LoE:** experts participating in the online consultation on SAFE informed about these practices as formally evaluated.
Weigh the evidence	Methods	Online questionnaire with open-ended questions to experts and narrative reports from experts.
	Results	Forty-three experts from 20 different EU countries provided information on SAFE practices in their countries. Ten out of 38 practices informed by experts (26%) were formally evaluated in 9 different European countries. Five practices were externally assessed and the other five internally. (Table 9). Two of these practices apply to health care facilities (Slovenia and France) and other two practices apply to homes (Scottland and England). The remaining 6 practices are related to: comprehensive tobacco control in the country (Hungary), in the city (Finland), smoke and aerosol free at work places public and private (Denmark), smoke-free cars (Slovenia), smoke-free sport areas and smoke-free settings of young people (children and adolescents) (The Netherlands and Austria). All the practices informed are still ongoing.
Integrate the evidence	Conclusions	Although there are 38 practices informed by experts from 20 EU countries surveyed, 74% of these practices did not run into the process of evaluation, either internally or externally.

Table 9: SAFE practices formally evaluated according to the consultation to experts on tobacco control in the EU

Type of practice	Country	N ordinal	Title of practice
SFGRAL	Hungary	4,5,6	Tobacco control in practice- Article 8: Protection from exposure to tobacco smoke - the story of Hungary.
SFCITY	Finland	10	Tobacco-free municipality concept.
SFHC	France	11	Lieux De Santé Sans Tabac (Smoke-free healthcare Facilities).
SFHC	Ireland	12	Health Service 'National Policy on Tobacco Free Health Services'. This is required to be adopted by all publicly funded health services in Ireland and supported by national tool kits, incentivized quality improvement bursaries and local Health Promotion staff with a brief for tobacco free policy support.
SFWORK	Denmark	15	Workplaces as settings for implementation of smoke- and aerosol free environments.
SFCARS	Slovenia	16	Tobacco smoke and aerosol free vehicles with minors present.
SFH	England (UK)	19	Take it right outside.
SFH	Scotland (UK)	20	Smoke-Free Homes.
SFSPORT	The Netherlands	25	Smoke-free sports grounds (Rookvrije Sport).
SFYOUNG	Austria	39	Supporting und consulting initiatives addressing the prevention in settings of young people (children and adolescents).

In italics: practices externally evaluated; In white: practices internally evaluated within country

Conclusions

Regardless important advances in the last decade in relation to the expansion of smoke-free environments, there are importants gaps in both the current smoke-free legislation and its implementation across EU countries.

The current smoke-free legislation does not cover new tobacco products such as electronic cigarettes and heated tobacco products in most EU countries, and compliance in countries with such legislation is far from satisfactory.

Some EU members have started the extension of smoke-free environments to several outdoor places and private indoor places (such as vehicles) but both enforcement and compliance are poor.

Second-hand smoke exposure continues to be present at several places across EU countries, including some public and private, indoor and outdoor settings and even at indoor locations adjacent to outdoor smoking areas.

There are social inequalities in second-hand smoke exposure across the EU, both between and within countries, with an inverse association between level of exposure to second-hand smoke and socio-economic status (people and areas with higher deprivation levels present a higher exposure).

The strong support of EU citizens in regards to smoke-free settings, including areas that are already smoke-free according to national laws, indicates the feasibility and opportunity of extending smoking bans to outdoor settings.

The main barriers against the expansion of SAFE legislation are the industry lobby and the reluctance of governments and some specific actors (e.g. hospitality sector).

The main barriers against enforcement of current legislation are the lack of human and financial capacity, reluctance of governments, lack of training for authorities and/or public sector, as well as the lack of dedicated funding for tobacco control research and interventions.

There are several opportunities for the expansion of SAFE policies across the EU, including outdoor places such as beaches, parks, crowded places, places where children are present, terraces or patios of hospitality venues, balconies of private homes, and private vehicles.

Glossary of terms

Best practice: is a relevant policy or intervention implemented in a real life setting and which has been favourably assessed in terms of adequacy (ethics and evidence) and equity as well as effectiveness and efficiency related to process and outcomes.

Consistency: confidence in the argument for or against a candidate cause is increased when many types of evidence consistently support or weaken it.

Indoor: any space covered by a roof or enclosed by one or more walls or sides, regardless of the type of material used for the roof, wall or sides, and regardless of whether the structure is permanent or temporary.

Outdoor: any open space where there are no walls, but there may be a roof to protect from rain.

Relevance: is the contribution a piece or line of evidence would make to answer a specified weight of evidence question, if the information comprising the evidence were fully reliable.

Reliability: is the extent to which the information comprising a piece or line of evidence is correct. It may be assessed by considering the uncertainty of the evidence, i.e. how different it might be if the information comprising it was correct.

List of abbreviations

CO	Carbon Monoxide
CO2	Carbon Dioxide
COP	Conference of Parties
DG Santé	Direction General de la Santé
EEA	European Economic Area
EU	European Union
FCTC	Framework Convention on Tobacco Control
HTP	Heated Tobacco Products
JATC2	Second Joint Action on Tobacco Control
LoE	Line of Evidence
NNK	4-methylnitrosamino)-1-(3-pyridyl)-1-butanone
PC	Plasma cotinine
PM	Particulare matter
PM2.5	Particulate matter ≤2.5 µm in diameter
PPAHs	Particulate polycyclic aromatic hydrocarbons
SAFE	Smoke and Aerosol Free Environments
SC	Salivary cotinine
SFCARS	Smoke Free Cars
SFCITY	Smoke Free Cities
SFGRAL	Smoke Free General
SFH	Smoke Free Homes
SFHC	Smoke Free Health Care
SFSPORT	Smoke Free Sports
SFWORK	Smoke Free Work
SFYOUNG	Smoke Free Young
SHA	Second Hand Aerosols
SHS	Second Hand Smoke
TCS	Tobacco Control Scale
THS	Third Hand Smoke
UC	Urinary cotinine
WHO	World Health Organization
WoE	Weight of Evidence
WP	Work Package

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Annex 1: SECTION 1: Barriers and opportunities to the expansion or enforcement of smoke and aerosol free environments

Now we ask you to provide information only on the status of national smoke and aerosol-free environment policies in your country. We ask you separately for conventional tobacco products, heated tobacco products, and electronic cigarettes.

* A1. How comprehensive are the existing national **smoke-free legal policies on conventional tobacco products** and what is, in your opinion, the level of compliance of the existing legal policies in your country regarding these products?
Please note that we ask separately for policies and compliance for different types of venues indoor and outdoor.

Possible answers for the policy status are:
0=Non existent; 1=Limited; 2=Comprehensive but not complete; 3=Complete; 9=Don't know

Possible answers for the compliance are:
0=N/A; 1=Low; 2=Moderate; 3=High; 9=Don't know

	POLICY STATUS Indoor or enclosed	**POLICY STATUS** Outdoor or semi-enclosed	**COMPLIANCE LEVEL** Indoor or enclosed	**COMPLIANCE LEVEL** Outdoor or semi-enclosed
Health-care facilities				
Primary and secondary educational facilities (except universities)				
Universities and similar higher education institutions				
Workplaces not considered above				
Hospitality venues				
Other public places including malls, stores, factories, banks and post offices				
Public transports, by air, water or surface including their boarding platforms				
Private homes				

* A1 bis. How comprehensive are the existing national **smoke-free legal policies on conventional tobacco products** and what is, in your opinion, the level of compliance of the existing legal policies in your country regarding these products?

Possible answers for the policy status are:
0=Non existent; 1=Limited; 2=Comprehensive but not complete; 3=Complete; 9=Don't know

Possible answers for the compliance are:
0=N/A; 1=Low; 2=Moderate; 3=High; 9=Don't know

	POLICY STATUS Outdoor or semi-enclosed	**COMPLIANCE LEVEL** Outdoor or semi-enclosed
Outdoor public places, such as stadia, parks or beaches		

* A1 tris. How comprehensive are the existing national **smoke-free legal policies on conventional tobacco products** and what is, in your opinion, the level of compliance of the existing legal policies in your country regarding these products?

Possible answers for the policy status are:
0=Non existent; 1=Existent; 9=Don't know

Possible answers for the compliance are:
0=N/A; 1=High; 9=Don't know

	POLICY STATUS	**COMPLIANCE LEVEL**
Private cars		

* A2. How comprehensive are the existing national **vaping bans for electronic cigarettes** and what is the level of compliance with the existing legal policies in your country?
Please note that we ask separately for policies and compliance for different types of venues indoor and outdoor.

Possible answers for the policy status are:
0=Non existent; 1=Limited; 2=Comprehensive but not complete; 3=Complete; 9=Don't know

Possible answers for the compliance are:
0=N/A; 1=Low; 2=Moderate; 3=High; 9=Don't know

	POLICY STATUS Indoor or enclosed	**POLICY STATUS** Outdoor or semi-enclosed	**LEVEL OF COMPLIANCE** Indoor or enclosed	**LEVEL OF COMPLIANCE** Outdoor or semi-enclosed
Health-care facilities				
Primary and secondary educational facilities (except universities)				
Universities and similar higher education institutions				
Workplaces not considered above				
Hospitality venues				
Other public places including malls, stores, factories, banks and post offices				
Public transports, by air, water or surface including their boarding platforms				
Private homes				

* A2 bis. How comprehensive are the existing national **vaping bans for electronic cigarettes** and what is the level of compliance with the existing legal policies in your country?

Possible answers for the policy status are:
0=Non existent; 1=Limited; 2=Comprehensive but not complete; 3=Complete; 9=Don't know

Possible answers for the compliance are:
0=N/A; 1=Low; 2=Moderate; 3=High; 9=Don't know

	POLICY STATUS Outdoor or semi-enclosed	LEVEL OF COMPLIANCE Outdoor or semi-enclosed
Outdoor public places, such as stadia, parks or beaches		

* A2 tris. How comprehensive are the existing national **vaping bans for electronic cigarettes** and what is the level of compliance with the existing legal policies in your country?

Possible answers for the policy status are:
0=Non existent; 1=Existent; 9=Don't know

Possible answers for the compliance are:
0=N/A; 1=High; 9=Don't know

	POLICY STATUS	LEVEL OF COMPLIANCE
Private cars		

* A3. In your country, how is the indoor and outdoor use of heated tobacco products regulated with reference to smoke and aerosol-free environments?

- ◯ The product is not on the national market
- ◯ Not regulated
- ◯ Approximately as electronic cigarettes
- ◯ Approximately as conventional tobacco products
- ◯ The three products are regulated in the same way

* A3 bis. Please provide information on the regulation of heated tobacco products.

* A4. In your country, can you identify any BARRIERS for the EXPANSION of smoke and aerosol-free environment policies?

- ◯ None
- ◯ Yes

* A4 bis. Please briefly describe these barriers and how are they preventing the expansion of smoke and aerosol-free environments.

* A5. In your country, can you identify any BARRIERS to the improvement of COMPLIANCE with (or enforcement of) smoke and aerosol-free environment policies?

- ◯ None
- ◯ Yes

* A5 bis. Please briefly describe these barriers and how are they preventing the improvement of compliance/enforcement of smoke and aerosol-free environments.

* A6. In your country, to what extent do you think the tobacco or nicotine industries (and thei allies) are interfering with the EXPANSION of smoke and aerosol-free environments?

- ◯ No interference
- ◯ Small
- ◯ Moderate
- ◯ Large
- ◯ Very large interference

* A7. In your country, to what extent do you think the tobacco or nicotine industries (and thei allies) are interfering with the ENFORCEMENT of smoke and aerosol-free environments?

- ◯ No interference
- ◯ Small
- ◯ Moderate
- ◯ Large
- ◯ Very large interference

* A8. In your country, can you identify any OPPORTUNITIES for the EXPANSION of smoke and aerosol-free environment policies?

- ◯ None
- ◯ Yes

* A8 bis. Please briefly describe these opportunities and how could they facilitate the expansion of smoke and aerosol-free environments.

* A9. In your country, can you identify any OPPORTUNITIES for the improvement of COMPLIANCE with (or enforcement of) smoke and aerosol-free environment policies?

- ◯ None
- ◯ Yes

* A9 bis. Please briefly describe these opportunities and how could they facilitate the improvement of compliance/enforcement of smoke and aerosol-free environments.

Annex 2: Main characteristics of reviewed studies from post to January 2010 and prior to August 2022 that reported results of quantitative measures (biological or environmental markers) or self-reported data of assessing SHS and/or SHA exposure from e-cigarettes and HTPs in public, private, indoor or outdoor settings.

Reference/ location	Study design	Venue type	Self-reported data	Biological markers	Environmental markers	Observational data	Type of exposure (SHS & or SHA from e-cigarettes & HTPs)
St Claire, Friedrichsen, Boyle et al., (2020)/US	Cross-sectional study	Different outdoor and indoor locations	√	×	×	×	SHS
Jankowski, Rees, Zgliczyński et al., (2020)/Poland	Repeated cross-sectional (pre and post bans or implementation of policies)	Different outdoor and indoor locations	√	×	×	×	SHS
López, Arechavala, Continente et al., (2018)/Spain	Cross-sectional study	Different outdoor and indoor locations	√	×	×	×	SHS
Filippidis, Agaku, Girvalaki et al., (2016)/27 European countries	Cross- sectional study	Different outdoor and indoor locations	√	×	×	×	SHS
Aurrekoetxea, Murcia, Rebagliato et al., (2016)/Spain	Cross-sectional study	Different outdoor and indoor locations	√	√ UC	×	×	SHS
Sureda, Martínez-Sánchez, Fu, et al., (2014)/Spain	Cross-sectional study	Different outdoor and indoor locations	√	√ SC	×	×	SHS
Schoretsaniti, Filippidis, Vardavas et al., (2014)/Greece	Cross- sectional study	Different outdoor and indoor locations	√	×	×	×	SHS
Bommelé, Walters, van Dorsselaer et al., (2022)/the Netherlands	Cross- sectional study	Different outdoor locations	√	×	×	×	SHS
Henderson, Lugo, Liu, et al., (2021)/22 European countries	Cross -sectional study	Different outdoor locations	√	×	×	×	SHS
Amalia, Rodríguez, Henderson, et al., (2021)/11 European countries	Cross- sectional study	Different outdoor locations	√	×	×	×	SHA from e-cigarettes
Breunis, Bebek, Dereci et al., (2021)/ the Netherlands	Uncontrolled pre and post bans or implementation of policies	Different outdoor locations	×	×	×	√ number of smokers	SHS
Kaplan, Grau-Perez, Çarkoglu et al., (2019)/Turkey	Cross-sectional study	Different outdoor locations	×	×	×	√ (presence of smokers, ashtrays &cigarette butts)	SHS
Sureda Fernández, Martínez-Sánchez, et al. (2015)/Spain	Cross-sectional study	Different outdoor locations	√	×	×	×	SHS
Henderson, Continente, Fernandez et al., (2021a)/11 European countries	Cross-sectional study	Hospitality venues	×	×	√ airborne nicotine	√ evidence of tobacco use (smell of smoke, presence of smokers, cigarette butts, ashtrays)	SHS
Feliu, Fu, Russo et al., (2020) /Spain	Cross- sectional study	Hospitality venues (waterpipe cafés)	×	×	√ airborne nicotine & PM2.5	×	SHS
Kaplan, Carkoglu, Ergor, et al., (2019)/ Turkey	Cross- sectional study	Hospitality venues	×	×	√ PM2.5	×	SHS

Sureda, Bilal, Fernadez et al. (2018)/Spain	Cross- sectional study	Hospitality venues	×	×	√ airborne nicotine, PM2.5	√ signs of tobacco consumption (tobacco smell, cigarette butts)	SHS
Fu, Fernández, Martínez-Sánchez et al., (2016)/Spain	Cross-sectional study	Hospitality venues	×	×	√ airborne nicotine	×	SHS
Babb, McNeil, Kruger et al., (2015)/US	Literature review	Hospitality venues (casinos)	√	√	√	×	SHS
Moon, Magid, Torrey et al., (2015)/Istanbul, Moscow, and Cairo	Cross-sectional study	Hospitality venues (waterpipe cafés)	√	×	√ PM2.5, CO, PPAHs, NNK and airborne nicotine	×	SHS
Sureda, Fernández, López et al., (2013)/18 articles: Australia (n=3), Canada (n=2), New Zealand (n=4), US (n=6), Denmark (n=1), Spain (n=1), & a multicenter study conducted in 8 European countries (n=1)	Systematic Literature review	Hospitality venues	×	√	√	×	SHS
López, Fernández, Pérez-Rios et al., (2013)/Spain	Uncontrolled pre and post bans or implementation of policies	Hospitality venues	×	×	√ airborne nicotine, PM2.5	√ signs of tobacco consumption (presence of butts, ashtrays, presence of smokers)	SHS
Licht, Hyland, Travers, & Chapman, (2013)/16 articles: US (n=5), Australia (n=3), New Zealand (n=3), Canada (n=2), Spain (n=2) and Denmark (n=1).	Literature review	Hospitality venues	×	√	√	×	SHS
Kennedy, Behm, Craig et al., (2012)/France	Prospective panel study Uncontrolled pre and post bans or implementation of policies	Hospitality venues	√	×	×	×	SHS
López, Fernández, Gorini, et al., (2012)/8 European countries	Cross- sectional study	Hospitality venues	×	×	√ airborne nicotine & PM2.5	×	SHS
Klepeis, Omoto, Ong et al., (2012)/US	Cross -sectional study	Hospitality venues (casinos)	×	×	√ PM2.5	√ active-smoker & total-patron counts	SHS
Edwards and Wilson (2011)/New Zealand	Cross -sectional study	Hospitality venues	×	×	√ PM2.5	×	SHS
Repace, Jiang, Acevedo-Bolton et al, (2011)/US	Cross- sectional study	Hospitality venues (casinos)	×	×	√ PM2.5, PPAHs & CO2	×	SHS
Brennan, Cameron, Warne et al., (2010)/ Australia	Uncontrolled pre and post bans or implementation of policies	Hospitality venues	×	×	√ PM2.5	√ number of patrons and lit cigarettes	SHS
Henderson, Continente, Fernández et al., 2021b)/11 European countries	Cross- sectional study	Children Playgrounds	×	×	√ airborne nicotine	√ number of people smoking, & cigarette butts	SHS
Henderson, Continente, Fernández et al., (2020)/11 European countries	Cross- sectional study	School Outdoor Entrances	×	×	√ airborne nicotine	√ number of people smoking, cigarette butts, smell of smoke & asthrays	SHS

Pederson, Okoli, Hemsing et al., (2016)/Canada	Mixed method - critical multiplism study including uncontrolled pre and post bans or implementation of policies	Parks and Beaches	√	×	×	√ number of smokers, number of lighters, cigarette butts/ filters, cigar tips &/or packaging	SHS
Okoli, Johnson, Pederson, et al. (2013)/Canada	Repeated cross sectional (uncontrolled pre and post bans or implementation of policies)	Parks and Beaches	×	×	×	√frequency and location of smoking during a 30 min time period	SHS
Sureda, Ballbè, Martínez, et al., (2014)/Spain	Repeated cross sectional (uncontrolled pre and post bans or implementation of policies)	Smoke-Free Hospital Campuses	×	×	√ PM2.5	√smoke-free zone signage & indications of tobacco consumption (people smoking, the presence of ashtrays, the presence of cigarette butts, and tobacco odor	SHS
Sureda, Martínez-Sánchez, López et al., 2012/Spain	Cross- sectional study	Public and Office Main Entrances	×	×	√ airborne nicotine & PM2.5	×	SHS
Kaufman, Zhang, Bondy et al, (2011)/ Canada	Cross- sectional study	Public and Office Main Entrances	×	×	√ PM2.5	√ number of lit cigarettes	SHS
Zhang, Garcia, Zamora, et al., (2019)/USA	Cross- sectional study	Airport Setting	×	×	√ PM2.5	×	SHS
Stillman, Soong, Pang et al., (2017)/ Europe & US	Cross- sectional study	Airport Setting	×	×	×	√smoke-free zone signage, ashtrays, designated smoking rooms DSRs & indications of tobacco consumption (smoking, cigarette butts, smoke smell)	SHS
CDC (2012)/US	Cross- sectional study	Airport Setting	×	×	√ RSPs	×	SHS
Lee, Hahn, Robertson et al., (2010)/US	Cross- sectional study	Airport Setting	×	×	√ PM2.5	×	SHS
Nogueira, Fernández, Driezen et al., (2022)/6 European countries	Cross- sectional study	Different indoor locations	√	×	×	×	SHS
Amalia, Liu, Lugo et al., (2021)/12 European countries	Cross- sectional study	Different indoor locations	√	×	×	×	SHA from e-cigarettes
Tigova, Amalia, Castellano et al., (2019)/6 European countries	Cross- sectional study	Different indoor locations	√	×	×	×	SHA from e-cigarettes
Martínez-Sánchez, Gallus, Zuccaro et al. (2012)/Italy	Cross- sectional study	Different indoor locations	√	×	×	×	SHS
Olivieri, Murgia, Carsin et al., (2019)/13 European countries	Prospective panel Study	Workplace & Home	√	×	×	×	SHS
Takenobu, Yoshida, Katanoda et al., (2022)/Japan	Cross- sectional study	Workplace	√	×	×	×	SHS & secondhand HTP aerosol

Siripongvutikorn, Tabuchi & Okawa (2021)/Japan	Cross- sectional study	Workplace	√	×	×	×	SHS, SHA from e-cigarettes & secondhand HTP aerosol
Lin, Li, Chen et al., (2021)/China	Cross- sectional study	Workplace	√	×	×	×	SHS
Rashiden, Ahmad Tajuddi, Yee et al., (2020)/14 articles: US (n=3), Sweden (n=1), Israel (n=1), Spain (n=2), Germany (n=1), Italy (n=1), Finland (n=1), China (n=2), Egypt (n=1), Australia (n=1)	Systematic literature Review & Meta-analysis	Workplace	√	√	√	×	SHS
Dunbar, Shiffman & Chandra (2018)/US	Cross- sectional study	Workplace	√	×	×	×	SHS
Tattan-Birch & Jarvis (2022)/UK	Repeated cross sectional (uncontrolled pre and post bans or implementation of policies)	Home	√	√ SC	×	×	SHS & SHA from e-cigarettes
Jankowski, Pinkas, Zgliczyński et al., (2020)/Poland	Cross- sectional study	Home	√	×	×	×	SHS
Arechavala, Continente, Perez-Ríos et al., (2018)/ Spain	Cross- sectional study	Home	√		√ airborne nicotine	×	SHS
Nanninga, Lhachimi & Bolte, (2018)/15 articles: US (n=2), UK(n=6), Spain (n=1), Taiwan (n=1), China (n=2), Germany (n=2), India (n=1)	Systematic Literature Review & Meta-analysis	Home	√	√ SC	×	×	SHS
Monson & Arsenault (2017)/16 articles	Literature Review	Home	√	×	×	×	SHS
Fernández, Artacho-Cordón, Freire et al., (2015)/Spain	Prospective Cohort Study	Home	√	√ UC	×	×	SHS
Kaleta, Fronczak, Usidame et al., (2016)/Poland	Cross- sectional study	Home	√	×	×	×	SHS
Vitória, Machado, Araújo et al., (2015)/ Portugal	Cross- sectional study	Home	√	×	×	×	SHS
Martínez-Sánchez, Sureda, Fu et al., (2014)/Spain	Cross- sectional study	Home	√	√ SC & UC	√ airborne nicotine & airborne benzene	×	SHS
Mons, Nagelhout, Allwright et al., (2013)/4 European countries	Prospective panel study	Home	√	×	×	×	SHS
Sims, Mindell, Jarvis et al., (2012)/UK	Repeated cross sectional (uncontrolled pre and post bans or implementation of policies)	Home	√	√ SC	×	×	SHS
Laverty, Filippidis, Been et al., (2021)/3 European countries	Letter to the editor	Vehicles	√	×	×	×	SHS
Mlinarić, Schreuders, Mons et al, (2019)/7 European countries	Cross- sectional study	Vehicles	√	×	×	×	SHS
Raoof, Agaku, Vardavas, (2015)/ 12 articles: US (n=7), UK (n=1), South Korea (n=1), Canada (n=1), Greece (n=1), New Zealand (n=1)	Systematic Literature review	Vehicles	×	√ PC, UC, 3HC, and NNAL	√ airborne nicotine, CO & PM2.5	×	SHS

Vitória, Machado, Ravara et al, (2015)/ Portugal	Cross- sectional study	Vehicles	√	×	×	×	SHS
Semple, Apsley, Galea et al., (2012)/UK	Quasi-experimental study	Vehicles	×	×	√ PM2.5	×	SHS
Nabi-Burza, Regan, Drehmer et al., (2012)/US	Randomized controlled trial	Vehicles	√	×	×	×	SHS
Curto, Martínez-Sánchez & Fernández, (2011)/Spain	Cross- sectional study	Vehicles	×	×	×	√ occupants of private cars, commercial vehicles and taxis	SHS
Precioso, Frias, Silva, (2019)/Portugal	Cross- sectional study	Vehicles & Home	√	×	×	×	SHS
Fu, Castellano & Tigova, (2019)/6 European countries	Cross- sectional study	Vehicles & Home	√	×	×	×	SHS
Díez-Izquierdo, Lidón-Moyano, Martín-Sánchez et al., (2017)/Spain	Cross- sectional study	Vehicles & Home	√	×	×	×	SHS
Moore, Moore, Littlecott et al., (2015)/UK	Repeated cross sectional (uncontrolled pre and post bans or implementation of policies)	Vehicles & Home	√	×	×	×	SHS
Moore, Holliday & Moore, (2011)/UK	Repeated cross sectional (uncontrolled pre and post bans or implementation of policies)	Vehicles & Home	√	√ SC	×	×	SHS
Farley, Jasek, Debchoudhury et al., (2022)/US	Cross- sectional study	MUH	√	√ serum cotinine levels	×	×	SHS
Driezen, Fong, Hyland et al., (2020)/ US, Canada & UK	Prospective cohort survey	MUH	√	×	×	×	SHS
Matt, Quintana, Hoh et al., (2020)/US	Cross- sectional study	MUH	√	×	√ Surface wipe samples analyzed for nicotine, a THS marker	×	SHS
Plunk, Rees, Jeng et al., (2020)/US	Prospective panel study	MUH	×	×	√ airborne nicotine & PM2.5	×	SHS
Gentzke, Hyland, Kiviniemi et al., (2018)/US	Cross- sectional study	MUH	√	×	×	×	SHS
Snyder, Vick, King et al, (2016)/US	Literature review	MUH	√	√ UC, SC, PC	√ airborne nicotine & PM2.5	×	SHS
Nguyen, Gomez, Homa et al., (2016)/ US	Cross- sectional study	MUH	√	×	×	×	SHS, SHA from e-cigarettes & secondhand HTP aerosol
Chambers, Sung & Max, (2015)/US	Cross- sectional study	MUH	√	×	×	×	SHS
Arku Adamkiewicz, Vallarino et al., (2015)/US	Cross- sectional study	MUH	×	×	√ airborne nicotine & PM2.5	×	SHS
Wilson, Torok, McMillen et al., (2014)/US	Cross- sectional study	MUH	√	×	×	×	SHS

Annex 3: SECTION 2: Identification of best practices with reference to smoke and aerosol-free environments

As a reminder, a best practice is a relevant policy or intervention implemented in a real life setting and which has been favourably assessed in terms of adequacy (ethics and evidence) and equity as well as effectiveness and efficiency related to process and outcomes.

For each best practice you are required to provide information on its adoption (description of the intervention/policy and formulation), implementation (enforcement and promotion) and its evaluation. We are interested in best practices that have at least already been implemented.

To better clarify, attached to the invitation e-mail you can find an example of a best practice already implemented in some European countries, that should be consulted in order to facilitate the filling of the questionnaire.

* In your country, can you identify a best practice in relation to the expansion or enforcement of smoke and aerosol-free environments?

- ◯ None
- ◯ Yes

WP-8 QUESTIONNAIRE: Section 2. FIRST BEST PRACTICE

GENERAL INFORMATION OF THE PRACTICE

* B1. Title/Name of the practice.
Please indicate the title/name of the practice (in original language and English translation, if the original language is not English). Please do not use acronyms.

* B2. Type of practice.

Please select all that apply for this practice.

- [ ] Information/Awareness raising programme
- [ ] Policy
- [ ] Action plan
- [ ] Regulation/Ban
- [ ] Monitoring/Surveillance
- [ ] Service delivery approach/Method
- [ ] Tool/instrument
- [ ] Guideline
- [ ] Training
- [ ] E-health, mHealth
- [ ] Health in All Policies
- [ ] Don't know
- [ ] Other, please specify:

* B3. Which is the current phase of the best practice?

- ( ) The practice is at the first stage of implementation but not yet totally developed
- ( ) The practice has been developed/adopted but not yet enforced
- ( ) The practice has been implemented (enforced/promoted)
- ( ) The practice has been evaluated
- ( ) The practice has been registered in a best practice registering portal
- ( ) Don’t know

* B4. Who has the responsibility of the practice?

Please indicate which is/are the entity responsible/promoter entity(ies) of this initiative.
Please select all that apply.

- [ ] Municipality/City
- [ ] Province/Region
- [ ] Nation
- [ ] Public agency
- [ ] University
- [ ] Government
- [ ] NGOs
- [ ] Private institution
- [ ] Don’t know

B5. Name of the entity(ies) in national language and English and acronym.
Please describe/name the responsible/ promoters of this best practice.

B6. Please specify also the responsibility of the entity(ies):

WP-8 QUESTIONNAIRE: Section 2. FIRST BEST PRACTICE

Summary of the best practice

* C1. Please summarize this best practice.
Please briefly describe the best practice and its main characteristics. For example, was it an intervention on general population or a specific population group? Or was it a policy or about a novel change on organisational/managerial models?

C2. Possible source of information where the practice is described:
Please provide more information on the practice such as link to a website, link to any available documents (reports, articles).

C2 bis. If relevant please upload possible documentation (if not available on the internet but of public domain).

Choose File | Choose File | No file chosen

* D1. Duration of the practice

- ◯ The practice is ongoing
- ◯ The practice has ended
- ◯ Don't know

D1 bis. Please provide start date.
If you don't know the exact date please refer to the closest month and year and choose 15 as day.

Start date

Date
MM/DD/YYYY

D1 tris. Please provide start and end date.
If you don't know the exact dates please refer to the closest months and years and choose 15 as days.

Start date

Date
MM/DD/YYYY

End date

Date
MM/DD/YYYY

* E1. What is the geographical scope of the practice?

International (specify the names of the participating countries)

National (specify the Nation)

Regional (specify the regions)

Local (specify the cities/municipalities or other local units)

E1 bis. Please add possible notes.

* E2. How was the practice funded?

- [ ] Own resources
- [ ] External resources – public
- [ ] External resources – private excluding the tobacco or nicotine industry
- [ ] External resources – private including the tobacco or nicotine industry
- [ ] No funds required
- [ ] Don't know
- [ ] Other (please specify)

E2 bis. Please specify who funded the practice.

* F1. What is the justification (need or problem) and context (existing evidence and theory) for developing this practice?

* F2. What is the overall goal of the practice?

The overall goal is the general indication of the practice's contribution to society in terms of its longer-term benefits.

* F3. Does the best practice focus on public or private settings?

- ◯ Public only
- ◯ Private only
- ◯ Both public and private
- ◯ Don't know

* F4. What are the objectives of the practice?

Please select all that apply.

- ☐ Smoke-free indoor settings (conventional tobacco products)
- ☐ Smoke-free outdoor settings (conventional tobacco products)
- ☐ Voluntary home smoking ban (conventional tobacco products)
- ☐ Car smoking ban with minors or pregnant women (conventional tobacco products)
- ☐ Car smoking ban also without minors or pregnant women (conventional tobacco products)
- ☐ Smoking ban as an anti-Covid-19 measure
- ☐ Indoor aerosol-free regulation for e-cigarettes
- ☐ Outdoor aerosol-free regulation for e-cigarettes
- ☐ Voluntary home aerosol ban regulation for e-cigarettes
- ☐ Car vaping ban with minors or pregnant women
- ☐ Car vaping ban also without minors or pregnant women
- ☐ Vaping ban as an anti-Covid-19 measure
- ☐ Indoor aerosol-free regulation for heated tobacco products
- ☐ Outdoor aerosol-free regulation for heated tobacco products
- ☐ Voluntary vaping ban regulation for heated tobacco products
- ☐ Car heated tobacco product ban with minors or pregnant women
- ☐ Car heated tobacco product ban also without minors or pregnant women
- ☐ Ban of heated tobacco products use as an anti-Covid-19 measure
- ☐ Other (Specify)

* G1. Target settings.

Please select all that apply.

- [ ] Restaurants and bars (indoor)
- [ ] Hotels (indoor)
- [ ] Train stations and public transports (indoor)
- [ ] Airports (indoor)
- [ ] Workplace (indoor)
- [ ] Schools/ public-education institutions/ educational venues except universities (indoor)
- [ ] Universities (indoor)
- [ ] Cinemas/theatres (indoor)
- [ ] Hospitals including outpatient clinics (indoor)
- [ ] Primary health care institutions (indoor)
- [ ] Institutions from social sector (indoor)
- [ ] Prisons (indoor)
- [ ] Cars
- [ ] Home
- [ ] Restaurants' patios/terraces (outdoor)
- [ ] Bus, tramway, trolley-bus stop waiting areas (outdoor)
- [ ] Parks (outdoor)
- [ ] Underpass (outdoor)
- [ ] Stadiums and outdoor arenas (outdoor)
- [ ] Beaches (outdoor)
- [ ] Outdoor areas of hospitals and healthcare institutions (outdoor)
- [ ] Outdoor areas of school (outdoor)
- [ ] Children's playgrounds (outdoor)
- [ ] Others (please specify)

* G2. If any, which is the specific target population?
The target population are persons or entities who are expected to be/were positively affected by the action. Please mark all that apply. If there is no specific target population, tick "general population".

- [ ] General population
- [ ] Gender specific groups
- [ ] Age specific groups
- [ ] Socioeconomic position (including educational level)
- [ ] Certain levels in education system
- [ ] Cultural/ethnic background
- [ ] Vulnerable groups (Disability)
- [ ] Vulnerable groups (Diseases)
- [ ] Vulnerable groups (Prisoners)
- [ ] Vulnerable groups (Sexual diversity, e.g., LGBTQ)
- [ ] Vulnerable groups (Pregnant women)
- [ ] Vulnerable groups (Immigrants/Refugees)
- [ ] Urban setting
- [ ] Rural settings
- [ ] Don't know
- [ ] Other (specify)

G2 bis. Please add notes if relevant

H1. Have the target population and other stakeholders been involved in the adoption/development, implementation or evaluation of the practice?
Please, specify in which phase (development, implementation or evaluation) they have been involved in.

	Development	Implementation	Evaluation
Groups of the target population	☐	☐	☐
International/European public health authorities	☐	☐	☐
National public health authorities	☐	☐	☐

Regional public health authorities	☐	☐	☐
Local public health authorities	☐	☐	☐
Hospital staff	☐	☐	☐
Primary care centre staff	☐	☐	☐
Specialized physicians, please indicate which: (You may write a short text in the following note)	☐	☐	☐
General practitioners	☐	☐	☐
Pharmacists	☐	☐	☐
Nurses	☐	☐	☐
Other health care professionals, please indicate which: (You may write a short text in the following note)	☐	☐	☐
Informal caregivers	☐	☐	☐
Researchers /academics	☐	☐	☐
Schools/Kindergarten – teachers	☐	☐	☐
Employers/employees	☐	☐	☐
Civil society organisations, please specify: (You may write a short text in the following note)	☐	☐	☐
Stakeholders from other than the health sector, please specify: (You may write a short text in the following note) Other, please specify (You may write a short text in the following note)	☐	☐	☐

H1 bis. Please add possible notes here.

* J1. What methods are/were used in the practice?

Methods should be explicitly linked to the objectives. They should describe how the (specific) objectives were reached, what were the essential tasks performed, e.g. intervention protocol, survey methods, panel of experts, training development, etc.

Please provide sources of information (online references)

J1 bis. If relevant, please upload possible documentation.

Choose File | Choose File | No file chosen

* K1. Enforcement of the practice.

Please describe if the practice has been enforced. Please provide information on how the enforcement was set and who/which entity was in charge of the supervision and controlling of its compliance.

* L1. What are the main outcomes of the practice?

Please describe the most important quantitative and/or qualitative obtained results and main lessons learned. Please clearly and precisely summarize the main outcomes regarding achieved improvements, impact and/or eventual negative effects, and whether or not the desired outputs and outcomes of the practice changed during the implementation of the practice. The outcomes are the changes that have occurred because of the practice i.e. when the specific objectives/overall goal are reached.

L1 bis. If relevant, please upload possible documentation.

Choose File | Choose File | No file chosen

M1. What indicators are used in the monitoring of the process and outcome of the practice?
Indicators are variables measuring the performance of an action and the level to which the set objectives are reached. Process, output and outcome/impact should be reported.

M1 bis. If relevant, please upload possible documentation.

Choose File Choose File No file chosen

* N1. Has the practice been formally evaluated?

- ◯ Yes, by an external partner
- ◯ Yes, the evaluation was carried out internally
- ◯ Not yet, the intervention is still ongoing but the evaluation is foreseen
- ◯ No
- ◯ Don't know

N1 bis. If you answered "Yes" or "Not yet":
Please specify the organizations that conducted the evaluation.
Please explain how the evaluation was carried out (both process and outcome). Please also describe the planned evaluation methods if the evaluation is agreed and foreseen. Please also describe if any economic evaluation took/will take place.

N1 tris. It is strongly recommended to link or attach to this form a document describing the evaluation process and results in more detail.

Choose File Choose File No file chosen

N1 quater. If possible, please provide reference of the results of the evaluation.

* P1. Sustainability.

Please select all that apply.

- [ ] The practice has institutional support and stable human resources.
- [ ] The practice provides training of staff in order to sustain it
- [ ] A sustainability strategy has been developed
- [ ] None of the above options

P1 bis. Please describe how sustainability was achieved in economic terms, in capacity building and leadership.

* O1. Level of transferability and/or scalability.

Please select the most suitable option from the following.

- [ ] Transferability has not been considered. The practice has been implemented on local/regional/national level and transferability has not been considered in a systematic way.
- [ ] Ready for transfer, but the practice has not been transferred yet. The practice has been developed on local/regional/national level and transferability has been considered and structural, political and systematic recommendations have been presented. However, the practice has not been transferred yet.
- [ ] The practice has been transferred (i.e. scaled-up) within the same country/region. The practice has been scaled-up to other locations or regions or at national scale in the same country.

O2. Have any barriers or challenges been identified in the transfer or scaling up?

* Q1. What are the equity and ethical principles underpinning the practice?
Please provide information about e.g. ethical review and oversight, ethical training for staff and stakeholders and of the strategy for managing adverse events. When individual data is collected, please also indicate if individual's rights have been protected (according to national and European legislation). Please describe how absence of conflicts of interest is taken into account regarding the activities.

* Q2. What were the barriers or what are perceived barriers for the implementation of this practice?

- [ ] Lobbying of the tobacco or nicotine industry
- [ ] Political barriers
- [ ] Cultural barriers
- [ ] Other (Specify)
- [ ] None

* Q3. What were the facilitators or what are perceived facilitators for the implementation of this practice?

- [ ] Environmental movement
- [ ] Cultural
- [ ] Communication/Social media
- [ ] Not relevant
- [ ] Other (Specify)

Q3 bis. If you answered "Communication/Social media", please specify

Annex 4: Tobacco Control Scale 2021: Scoring allocated to each type of Bans/ restrictions on smoking in public and workplaces

Methods TCS

The TCS allocates points to each policy, with a maximum score of 100: price (30 points), smoke free public places (22 points), spending on public information campaigns (10 points), comprehensive advertising bans (13 points), large health warnings (10 points), cessation support (treatment) (10 points), combatting illicit trade (3 points) and tobacco industry interference (2 points). Countries which have not ratified the WHO Framework Convention on Tobacco Control will lose one point.

Policy domain	Max. score
Smoke free public and work places	22
Workplaces excluding cafes and restaurants – one only of	10
Complete ban without exemptions (no smoking rooms); enforced	10
Complete ban, but with closed, ventilated, designated smoking rooms under very strict rules; enforced	8
Complete ban, but with closed, ventilated, designated smoking rooms (not areas or places); enforced (at least 75% of the workplaces are smoke free)	6
Meaningful restrictions; enforced (more than 50% of the workplaces are smoke free)	4
Legislative restrictions, but not enforced (less than 50% of the workplaces are smoke free)	2
Cafes and restaurants – one only of	8
Complete ban; enforced	8
Complete ban, but with closed, ventilated, designated smoking rooms (not areas or places); enforced	6
Meaningful restrictions; enforced (50% of bars and restaurants are smoke free)	4
Legislative restrictions, but not enforced (less than 50% of the bars and restaurants are smoke free)	2
Public transport and other public places and private cars	4
Complete ban in trains without exceptions	1
Complete ban in other public transport without exceptions	1
Ban in private cars when minors or children are present	1
Complete ban in educational, health, government and cultural places	1

Source: TCS 2021