

## Appendix

**Table I**

Summary of work packages (objectives and tasks) within the TackSHS project  
(November 2015 – October 2019).

WP name (lead institution)  [No. registration at Clinicaltrials.gov]	Objectives	Tasks
WP1.  <i>Coordination and management</i>  (Catalan Institute of Oncology, Spain)	<p>To manage and coordinate all financial, administrative, scientific and communication activities of the project and timely achievements</p> <p>To set up and run the structure for communication</p> <p>To guarantee the successful achievement of the goals of the project</p> <p>To establish equal opportunities within the consortium and ensure a strong interaction among the project's elements and partners</p> <p>To monitor effective implementation of the work plan</p> <p>To control and report ensuring that the project deliverables are met in an integrated and timely manner within the agreed budget</p> <p>To manage the decision-making process</p> <p>To communicate with and report to designated EU project officer</p> <p>To resolve conflict situations and manage risks</p>	<p>Task 1.1 Management and internal communication</p> <p>Task 1.2 Scientific coordination and management</p> <p>Task 1.3 Activities integration and scientific organisation of meetings</p> <p>Task 1.4 Web-based management tool</p> <p>Task 1.5 Quality assurance</p> <p>Task 1.6 Risk management</p>
WP2.  <i>Environmental assessment of SHS exposure in private settings and outdoor settings in Europe</i>	<p>To develop a protocol explaining in detail the methodology of the environmental assessment of SHS</p> <p>To assess the levels of SHS in a range of private and outdoor settings in different European countries according to the type of setting, smoke-free legislation and socioeconomic characteristics</p> <p>To develop evidence-based policy recommendations for policy makers and health authorities</p>	<p>Task 2.1 Designing and writing of a detailed protocol</p> <p>Task 2.2 Assessment of the levels of SHS</p> <p>Task 2.3 Analysis of data</p> <p>Task 2.4 Dissemination of results</p>

<p>(Public Health Agency of Barcelona, Spain)</p> <p>[NCT03150186]</p>		
<p><i>WP3. Survey on secondhand smoke and electronic cigarettes in Europe</i></p> <p>(Istituto di Ricerche Farmacologiche Mario Negri IRCCS, Italy)</p> <p>[NCT02928536]</p>	<p>To estimate the prevalence of current smokers, electronic cigarette users and heated tobacco products users, and passive exposure to SHS and SHA from electronic cigarettes, using original data from a pan-European survey conducted in 12 strategically selected countries</p> <p>To investigate the determinants of SHS and SHA exposure in those countries</p> <p>To analyse the attitudes and perceptions of the adult European population towards tobacco control policies and to limit SHS exposure</p> <p>To study the knowledge and beliefs of the general adult population on the harmful effects of SHS and SHA</p> <p>To compare smoking patterns, electronic cigarette use, and, particularly, SHS and SHA exposure between four middle- and eight high-income countries in Europe</p> <p>To compare smoking patterns, voluntary home smoking ban, and perception on the efficacy of smoking ban as a tobacco control policy between the new data in the selected European countries and data from a companion pan-European survey conducted in 2010</p>	<p>Task 3.1 Conducting a European survey</p> <p>Task 3.2 Analysis of data</p> <p>Task 3.3 Dissemination of results</p>
<p><i>WP4. Measuring for change: air quality feedback to reduce SHS exposure in the home</i></p> <p>(University of Stirling, the UK)</p> <p>[NCT03151421]</p>	<p>To establish a methodology to measure air quality in homes of smokers using low-cost, simple particle monitoring devices</p> <p>To quantify SHS exposure levels in the home of smokers and provide feedback that compares the air quality with the median value from local smoke-free homes</p> <p>To evaluate the impact of the intervention in terms of behaviour change (household and car smoking rules) and attitudes towards SHS</p>	<p>Task 4.1 Development of methods to measure SHS</p> <p>Task 4.2 Recruitment of participants</p> <p>Task 4.3 Quantification of SHS in homes</p> <p>Task 4.4 Evaluation of the impact of the intervention and results dissemination</p>
<p><i>WP5. Exposure to secondhand smoke in outside areas exempted from</i></p>	<p>To measure SHS in areas exempted from smoke-free legislation in three European countries where comprehensive smoke-free legislation exists</p>	<p>Task 5.1 Patients' recruitment</p> <p>Task 5.2 Training in measurements</p>

<p><i>smoke-free legislation and acute health effects in patients with chronic lung disease</i></p> <p>(TobaccoFree Research Institute Ireland)</p> <p>[NCT03074734]</p>	<p>To recruit a panel of patients with COPD and asthma in the same three European countries</p> <p>To monitor personal exposure to SHS in areas exempted from legislation in pubs, bars and casinos using novel monitoring technologies</p> <p>To simultaneously monitor the respiratory effects, as indicated by changes in breath sounds, and peak flow rates in the same people supported by diary cards</p>	<p>Task 5.3 Monitoring of air pollution and breath sounds</p> <p>Task 5.4 Data collection, analysis and dissemination</p>
<p>WP6. Clinical impact of secondhand exposure to e-cigarette emissions on the respiratory system of healthy adults</p> <p>(Hellenic Cancer Society, Greece)</p> <p>[NCT03102684]</p>	<p>To assess the impact of passive exposure to e-cigarette aerosol on indexes of pulmonary resistance, reactance and impedance</p> <p>To evaluate the extent to which passive exposure to e-cigarette vapour impacts exhaled NO and exhaled breath condensate metabolites among healthy adults</p> <p>To assess the mediating effect of e-cigarette battery output on pulmonary outcomes and indexes</p>	<p>Task 6.1 Formulation of exposure protocols</p> <p>Task 6.2 Experimental laboratory trials</p> <p>Task 6.3 Data cleaning and analysis</p> <p>Task 6.4 Dissemination of results</p>
<p>WP7. <i>Secondhand tobacco smoke in experimental and real-life conditions: methods of measurement</i></p> <p>(IRCCS – National Institute of Oncology, Italy)</p>	<p>To compare different methods to measure SHS and SHA (real-time and time-integrated measurements of PM and gas-phase pollutants)</p> <p>To calibrate different real-time PM counting devices to be used in the TackSHS Project against certified gravimetric methods</p> <p>To evaluate the feasibility of the selected measurement methods of SHS and e-cigarette aerosols in experimental and real-life environments</p>	<p>Task 7.1 Comparison of methods</p> <p>Task 7.2 Calibration of devices</p> <p>Task 7.3 Trial of measurements in laboratory and real conditions</p> <p>Task 7.4 Dissemination of results</p>
<p>WP8. <i>Secondhand exposure to emissions from electronic cigarettes: personal and environmental assessment in confined spaces</i></p> <p>(Catalan Institute of Oncology, Spain)</p>	<p>To systematically review the published studies on passive exposure to e-cigarette aerosol, including controlled laboratory analysis of the aerosols produced by e-cigarettes, and studies assessing bystander's exposure with environmental markers and personal biomarkers</p> <p>To investigate environmental and bystanders' exposure to e-cigarette aerosol in controlled conditions in a car and a room</p>	<p>Task 8.1 Systematic review of existing evidence</p> <p>Task 8.2 Controlled experiments in a car and a room</p> <p>Task 8.3 Observational study in homes</p> <p>Task 8.4 Analysis of samples and data processing</p>

	To investigate environmental and bystanders' exposure to e-cigarettes aerosols in real-life conditions at homes of e-cigarettes users	Task 8.5 Dissemination of results
<p><i>WP9. Attributable mortality and morbidity to secondhand smoke in Europe</i></p> <p>(Institute for the Study and Prevention of Cancer, Italy)</p>	<p>To review the methods and data on attributable mortality and morbidity to SHS for European countries</p> <p>To develop algorithms of calculation of attributable mortality and morbidity to SHS</p> <p>To update data on attributable mortality and morbidity to SHS for EU countries</p>	<p>Task 9.1 Literature review on AMM and SHS</p> <p>Task 9.2 Development of algorithms to calculate AMM</p> <p>Task 9.3 Estimation of AMM in Europe</p> <p>Task 9.4 Dissemination of results</p>
<p><i>WP10. Economic impact of secondhand tobacco smoke on morbidity and mortality and Return on Investment of Interventions</i></p> <p>(Cartagena Technical University, Spain)</p>	<p>To develop a Return on Investment Model able to assess the cost-effectiveness, budget impact and a wider set of social return on investment metrics of policies aimed at reducing exposure to secondhand smoke</p> <p>To evaluate the Return on Investment of policies aimed at reducing exposure to secondhand smoke across European countries, with country-specific versions of the model, and to translate the results into policy proposals</p>	<p>Task 10.1 Design of cost-effectiveness and cost-utility models</p> <p>Task 10.2 Development of country-specific models</p> <p>Task 10.3 Assessment of impact and dissemination</p>
<p><i>WP11. Dissemination of project findings</i></p> <p>(European Network for Smoking and Tobacco Prevention, Belgium)</p>	<p>To develop and maintain a project webpage on the ENSP website</p> <p>To set up a network of interested policy makers, health professionals and other stakeholders, and to maintain communication and dissemination with this network</p> <p>To organise one interim workshop with experts and stakeholders, to evaluate the approaches and the first results of the project, and to make recommendations for further work</p> <p>To organise a final project conference</p> <p>To ensure varied forms of dissemination, including written and audiovisual materials</p>	<p>Task 11.1 Development and maintaining of the project website</p> <p>Task 11.2 Setting-up of a network</p> <p>Task 11.3 Interim workshop</p> <p>Task 11.4 Final conference</p> <p>Task 11.5 Other forms of results and project dissemination and communication</p>

COPD: chronic obstructive pulmonary disease; E-cigarette: electronic cigarette; ENSP: European Network for Smoking and Tobacco Prevention; EU: European Union; NO: nitrogen monoxide; PM: particulate matter; SHA: second-hand aerosol from electronic cigarettes; SHS: second-hand tobacco smoke; UK: United Kingdom; WP: work-package.

