as an effective strategy. A ‘tobacco-free city’ advocated by this project is not only a city that protects exposure to tobacco smoke, but has reduced demand and availability of cigarettes as well. Aim was to evaluate the effectiveness and challenges of reducing availability of cigarettes in a semi-urban area in Sri Lanka by a community led process.

**Intervention or response:** A community group led the process. Collective actions such as discussions at different community settings, informal campaigns in public transport, poster campaigns and protests against industrial influence were implemented to improve awareness on effects on health and economy and change norms and attitudes. Evaluation was conducted using participatory mechanisms. Pre and post assessments and the comparison with a control area to assess long term outcomes used mixed methods.

**Results and lessons learnt:** In the pre-test, 91% of shops were selling cigarettes. In one year, daily cigarette sales reduced by 10,415 sticks (86%). Percentage of shops selling cigarettes reduced from 91% to 25% in one year. Among the community, a majority showed a good level of knowledge on health effects and legislations and negative attitudes related to smoking after a one year. Of the participants 63.0%; 95% CI (57.2, 68.8) stated they perceived smoking as a “stupid and a meaningless habit”. The prevalence of smoking (9.09% & 28.0%) and exposure to tobacco smoke (11.7% & 65.0%) was low compared to the control area in 18 months (p<0.001).

**Conclusions and key recommendations:** Community led initiatives based on Health Promotion approach are effective in establishing ‘Tobacco-free’ cities. The community empowerment processes linked with such approaches can reduce the exposure to passive smoking, generating “smoke free cities” as well. Continuous vigilance at ground level and supportive actions from the national level are needed to sustain the results and enhance long term outcomes.

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**18:15-19:15**

**LB-1307-3 Formative research to support the transition of multi-unit rental housing to smoke-free**

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**Background:** Rented homes house 37% of US households, and 65% of those are multi-unit, translating into >60 million Americans who rely on housing policies to protect their health from environmental exposures, including secondhand smoke (SHS) incursion from adjoining units. As tobacco addiction becomes concentrated among low income, ethnic and racial minority, chronically ill, and other vulnerable populations, who are more likely to reside in multi-unit housing (MUH), controlling MUH is a key tobacco control disparities priority. Although the US Department of Housing and Urban Development (HUD) and many municipalities promote policies to increase the proportion of MUH that is smoke-free, less is known about how to support landlords with smaller portfolios serving low-income tenants.

**Methods:** In Philadelphia, which has both the highest tobacco use and poverty rates of the 10 largest US cities, we conducted an online needs assessment survey in 2017 of members of the City’s largest landlord association. Survey items measured current smoke-free portfolio, attitudes and experiences with tenants’ tobacco use, and knowledge of Philadelphia’s 2016 mandatory smoking disclosure law for MUH leases. Respondents were also offered technical assistance on transitioning to, or maintaining smoke-free rentals.

**Results:** Of 226 respondents, 67% were unfamiliar with Philadelphia’s disclosure ordinance, 40% allowed smoking in all or some units, and only 3% believed it was illegal to prohibit smoking in leases, but 34% were unsure, and only 61% knew it was legal. Respondents reported large (41%) or some (40%) demand for smoke-free properties, and most recognized benefits, including lower costs, inter-resident tension, and health risks. Drawbacks included resources required to transition properties and for enforcement. Over half of landlords with and without current smoke-free portfolios requested technical assistance.

**Conclusions:** Results suggest that MUH initiatives such as disclosure ordinances could be enhanced by technical assistance to increase landlord adoption of smoke-free MUH.

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**18:15-19:15**

**LB-1310-3 Empowering decision makers in Latin America: potential impact of three interventions for tobacco control**

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**Background:** The burden of disease attributable to tobacco use in Latin America is very high. The objective of this study was to evaluate the potential impact of implementing cigarette plain packaging (PP), 100% smoke-free environments (SFE) and complete ban on advertising, promotion and sponsorship of tobacco (BAPS) in Argentina, Bolivia, Brazil, Chile, Colombia, Mexico and Peru.

**Methods:** A mathematical model was used to estimate the chances people have to get sick or die because of 17 smoking-related conditions. A systematic review was carried out to identify the epidemiological and cost data relevant to each country, as well as the effectiveness of the interventions. The model considered each country’s legislation and level of compliance for each intervention. Then, we modeled the expected impact on health and costs of different potential scenarios for these interventions.

**Results:** We estimated the following benefits for all seven countries: PP could avoid 204 073 deaths, 212 867 cardiovascular events, 26 456 cancer diagnoses, 99 784 COPD cases, and 23 739 USD on direct medical costs in the next ten years. 100% SFE could lead to avoid 150 361 deaths, 247 171 cardiovascular events, 77 400 cancers and 311 129 COPD cases, and 15 413 USD on direct medical costs in the next ten years. 100% BAPS could save 86 911 deaths, 327 390 cardiovascular events, 38 883 cancers, 142 104 COPD cases, and 10 505 USD on direct medical cost to the health system in the next ten years. Different scenarios were modeled for each country. An example-the case for Colombia- is shown in the table.
Conclusions: The potential impact of fully implementing PP, 100% SFE and BAPS could avoid a large burden of disease and costs for the health systems in Latin America. This information could be useful for decision makers to promote these policies.

| COLOMBIA          | Medium warnings | Strong warnings | Plain packaging | 100% SFE (LoC: 50%) | 100% SFE (LoC: 100%) | Complete BAPS (LoC: 75%) | Complete BAPS (LoC: 100%) |
|-------------------|-----------------|-----------------|-----------------|---------------------|----------------------|------------------------|------------------------|
| Avoided deaths    | 3465            | 7038            | 24 086          | 11035               | 18 151               | 7 797                  | 10584                  |
| Avoided events    | 22 775          | 46 256          | 158 300         | 72 524              | 119 293              | 60 961                 | 69 561                 |
| Avoided costs (USD millions) | 196              | 399             | 1 365           | 625                 | 1 029                | 442                    | 600                    |

USD, United States dollars. 1 USD = 2743.39 Colombian pesos (December, 2015). SFE, Smoke-Free Environment. BAPS, Ban on Advertising, Promotion and Sponsorship of tobacco. LoC, Level of Compliance.

18:15–19:15
LB-1311-3 The relationships between secondhand smoke exposure and blood cadmium, lead and mercury concentration in the Korean population: findings from the 2008–2012 KNHANES
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Background: We examined relationships between secondhand smoke exposure and blood cadmium, lead and mercury concentration among South Korean adults aged ≥19 years.

Methods: The analysis used data from the Korean National Health and Nutrition Examination Survey (KNHANES), a cross-sectional survey of Korean civilians, conducted from 2008 to 2012. In this study, a sample of 5,304 participants was analysed.

Results: As urinary cotinine levels increased, the adjusted mean level of blood mercury increased. The adjusted mean level of blood lead was higher in the people who were exposed to secondhand smoke (SHS) than in those who were not. The duration of SHS exposure at work and home, was related to blood cadmium concentration (p=0.05 for at work; p=0.05 for at home). Furthermore, as the duration of SHS exposure at work increased, the adjusted mean levels of blood lead and mercury increased.

Conclusions: This study showed that there were significant associations between SHS exposure and blood cadmium levels at work and home. Therefore, social efforts to reduce the SHS exposure at work and home are needed to promote a healthier environment.

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18:15–19:15
LB-1338-3 Leaders for little lungs - children as advocates for clean air in the Western Cape province in South Africa
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Background and challenges to implementation: Passive smoking affects fetal and childhood lung growth and development. It is also responsible for aggravation of symptoms in many childhood respiratory disorders. High levels of adult smoking and associated passive smoking among pregnant women, fetuses and children persist in the Western Cape province in South Africa. Efforts to reduce the prevalence of smoking have had limited effect.

Intervention or response: Empowering children to be advocates for their own lung health, especially in relation to reducing exposure to tobacco smoke was seen as a novel approach to altering society’s attitude to active and passive smoking. This led us to conceptualise the ‘Leaders for Little Lungs’ programme with the slogan ‘Look after Little Lungs’.

Results and lessons learnt: The programme is to have three elements: a booklet of facts for children on lungs and the deleterious effects of smoking; educational group work at community and health service levels for children to become knowledgeable advocates; and campaign materials such as T-shirts, pamphlets and stickers. The development of T-shirt for health workers and children has produced positive responses from health workers, students, parents and children. The booklet is in the development and testing phase. Roll out of the programme is due to occur in the first winter on 2018, coinciding with the annual surge in pneumonia in the Western Cape.

Conclusions and key recommendations: This novel programme has the potential to change attitudes to passive and active smoking in high-prevalence communities, and to reduce smoking-associated lung diseases among children and adults in the Western Cape province.

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3.3 Mind the gaps: loopholes in the Ban on Sponsorships, Advertising and Promotions

14:45–16:15
FO-373-3 (Mis)perceptions related to Electronic Nicotine Delivery Systems (ENDS) and hookah: making a case for policy strengthening through a multi-stakeholder qualitative study from New Delhi, India
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Background: Electronic Nicotine Delivery Systems (ENDS) - e-cigarettes and e-hookahs and traditional products like hookah, revamped in attractive forms, have garnered wide popularity in India, particularly among young people. Without a national