from the dangers of SHS, and to change social norms around tobacco use, smoke-free policies that apply to all forms of combusted tobacco products, including water-pipe, are needed.

PD-889-20 Smoke-free play parks and beaches: changing the cultural norm

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Children learn from the environment through the process of observational learning. Research and evidence show that parental and peer smoking are significant contributors to children initiating smoking. Studies show children are twice as likely to start smoking before the age of thirteen if one of their parents smokes. Smoke-free Play Parks and designated children's areas on beaches offer an opportunity to introducing outdoor Smoke-free environments where families can enjoy fresh air and reduce the exposure of negative role models to their children. Smoke-free South West is working with partners to introduce voluntary smoking bans in play parks.

Baseline research:

1. Explored broader attitudes towards smoking, particularly around children
2. Gauged reactions to introducing a voluntary smoking ban in play parks
3. Tested the best way to communicate such a ban Undertaken in four different localities in the South West in areas of social deprivation this used both quick 'intercept' and in-depth interviews to gain both a broad perspective from a wider audience and a deeper understanding. The target audience was parents or carers of young children who regularly attended the parks and beaches.

Results showed most parents were concerned about the health of their children in terms of second-hand smoke and 'copycat' behaviour. On the question of voluntary versus regulatory it was strongly felt that the voluntary ban would be favourable particularly among smokers. Overall, most seemed willing to refrain from smoking in play parks, and a positive and courteous approach was considered most effective. One year after implementation, there has been a significant shift in behaviour with less people smoking in the play park and as a result, people feel that it is a better place for their children to play.

PD-890-20 Smoking family, paternal smoking at home and saliva cotinine levels of young children in Hong Kong

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Background: Prevalence of smoking in Hong Kong (all 10.7%, male 19.1%, female 3.1%) is among the lowest in the world. Home is a main source of children's second-hand smoke (SHS) exposure in densely populated Hong Kong. We investigated paternal smoking places at home and distance from children with children's cotinine levels.

Design/Methods: 773 children (response rate 66.0%, mean age 6.2±5.6, 51.6% boys) were recruited in 4 Maternal and Children Health Centers in Hong Kong. Information on SHS exposure at and outside home, paternal smoking behaviours, socio-demographic characteristics was reported by mothers. Saliva from 445 children (57.6%) were collected using 2 units of Sorbette® which were placed under the tongue or the cavity next to the gum for at least 30 seconds. Cotinine levels was analysed using enzyme linked immunosorbent assay (ELISA) by the National University of Singapore. Family smoking was categorised as 3 types: non-smoking families (n=247), smoking families without reported SHS exposure at home (n=114), smoking families with SHS exposure at home (n=84). Paternal smoking places at home (bedroom/living room, wash room, kitchen) and distance from children (within or away from 10 meters) were also reported. Geometric mean of cotinine by types of family smoking and paternal smoking behaviours were compared using ANOVA and αcoefficient derived from generalized linear model adjusting for outside home SHS exposure.

Results: Compared with non-smoking families (0.98 ng/ml), cotinine levels were significantly higher in smoking families without SHS exposure (1.08ng/ml) and with SHS exposure (1.25ng/ml) (ANOVA <0.001). The corresponding αcoefficients (95% CI) were 0.13 (0.02-0.66) and 0.34 (0.19-0.61). Among smoking families with SHS exposure at home, 26.8% fathers smoked within 10 meters from children and the cotinine level (1.43 ng/ml) was significantly higher than parental smoking beyond 10 meters (1.16ng/ml) with αcoefficient of 0.48 (0.27-0.84). Similar cotinine levels were observed for paternal smoking in different places at home: bedroom/living room (1.61 ng/ml), wash room (1.39 ng/ml) and kitchen (1.25 ng/ml) (all p >0.05).

Conclusion: Children living in smoking families with or without reported SHS exposure at home had significantly higher levels of cotinine. Smoking in wash room or kitchen was not effective in reducing cotinine levels of children. Smoking parents should quit smoking to protect their children.