



Public Health
England



**National Institute for
Health Research**

School for Public Health Research

The Public Health Practice Evaluation Scheme (PHPES)

Addressing the challenges faced by 'front line' practitioners

Smokefree Homes Intervention Evaluation Research Study



Environmental Tobacco Smoke (ETS) is harmful to those breathing it in, particularly young children. Parental smoking is a common source, and in Stoke-on-Trent, 46% of children under 5 are regularly exposed to ETS in the home.

Background

In 2010/11, 24% of Stoke-on-Trent households allowed smoking within the home and 9% of young people were exposed to ETS in their own bedroom [1]. Focus groups and interviews identified that in Stoke-on-Trent, knowledge of the detrimental effects of ETS to health, particularly on young children, is relatively low, but nonetheless, 59% of respondents said they wanted to make their home smokefree [1].

Our practitioner partners

The PHPES scheme enables people working in public health, who are introducing innovative initiatives aimed at improving health, to work in partnership with NIHR SPHR to conduct rigorous evaluations of their cost-effectiveness. NIHR SPHR researchers worked with:



Stoke-on-Trent City Council's Tobacco Control Alliance identified ETS as one of the four major problems related to smoking in Stoke-on-Trent.



Quit 51 is a commercial organisation that delivers stop smoking services across the UK. They are currently delivering services in 10 other local authority areas in England and won the tender to deliver 'Smokefree Homes Service' via an open procurement process.

These data from Stoke-on-Trent established the need for an intervention which would emphasise ETS harm, provide practical tools and solutions to families as well as increase motivation to adopt a smokefree home in this community. To meet this need Stoke-on-Trent City Council, in partnership with *Quit 51*, launched the 'Smokefree Homes Service' in January 2016 to the area of Stoke-on-Trent. The service consists of telephone behavioural support, self-help materials and Nicotine Replacement Therapy for 12 weeks. It aims to reduce children's exposure to ETS in the home by supporting individuals and families to make their home fully smokefree.

Within the PHPES scheme, University of Bristol researchers together with Stoke-on-Trent City Council are conducting an independent evaluation of the Smokefree Homes Service via quantitative data collection and process evaluation.

Key issues

- The adult smoking rate (28%) is significantly higher in Stoke-on-Trent than the national average (19.5%) [1].
- ETS has been linked to an increased risk of sudden infant death syndrome, asthma and increased mortality risk in asthmatic children and may be related to increased risk of cancer at a later age [2-3].

Key research questions

- Does participating in the intervention lead to reductions in indoor ETS?
- Is the Smokefree Homes Service intervention being delivered as intended and is it acceptable to participating families alongside frontline staff making referrals?
- What proportion of the target families participate in the intervention and why do they agree to participate or decline participation?
- How do those who commissioned the Smokefree Homes Service intervention view its delivery in Stoke-on-Trent and what are the views and experiences of the service provider?

Method

University of Bristol collaborate with *Quit 51* to recruit families for interviews. Spouses and children under 16 living in the household are also encouraged to participate, to gain a wider understanding about service acceptability. The quantitative evaluation aims to recruit 80 families in a stepped wedge cluster randomised trial. An economic analysis, using a cost consequence approach, aims to determine the use of the service from a societal perspective.

The quantitative data collection aims to assess whether engagement with the Smokefree Homes Service leads to a significant reduction in indoor smoking by self-reported behavioural change and indoor smoking-related particulate matter concentrations. In addition, it aims to assess if there has been a measurable improvement in carbon-monoxide in exhaled air in family members as a result of engagement.

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About PHPES

PHPES projects are:

- **generated by front line practitioners,**
- **designed to provide transferable, robust evidence on the impact of local practice for local practitioners,**
- **developed and delivered in collaboration with NIHR SPHR academics building evaluative capacity in public health practice.**

The process evaluation aims to determine if the service is beneficial to participating families. Also, particularly for the provider and commissioner and whether the service is being delivered as intended, focusing on the sustainability.

Public Involvement

Families that agreed to participate in the Smokefree Homes Service are contacted by *Quit 51* to ask if they wanted to participate in the data collection as well as in the process evaluation.

What Next?

Recruitment into the service to date has been disappointing. Currently, we are waiting on ethical approval for qualitative data collection. Recruitment for interviews is expected to start in February 2017. Stakeholders *Quit 51* and Stoke-on-Trent City Council will also to participate in interviews.

References/Resources

[1] Stoke-on-Trent City Council. (2013). Joint Strategic Needs Assessment: Smoking.

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[3] Brown, N., Luckett, T., Davidson, P.M., Di Giacomo, M. (2015). Interventions to reduce harm from smoking with families in infancy and early childhood: a systematic review. *International Journal of Environmental Research and Public Health*. **12**(3), pp. 3091-3119

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About NIHR SPHR

The NIHR SPHR aims to build a high quality evidence base for cost-effective public health practices. We work with local practitioners and members of the public, carrying out a wide range of research projects and programmes with a school wide focus on alcohol, ageing well and health inequalities

About PHE

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.