45.5 (range 18–88 years), 22% of whom reported continued smoking at least occasionally.

Results Overall, 76% of adults support a ban on smoking in cars carrying children, 55% support a ban on smoking in cars carrying any passenger. Regarding a total ban on smoking in cars, 44% support a complete ban, with 37% opposing a complete ban and 19% were undecided. The Abstract P185 Table 1 shows responses by smoking status for support for a ban in cars.

Abstract P185 Table 1

	Never or ex-smokers (n=10229)	Smokers (n=2846)	p-Value
That are carrying children <18 years of age	81%	58%	<0.001
That are carrying any passenger	64%	24%	<0.001
All cars	52%	15%	<0.001

Conclusions There remain differences in opinion between smokers and non-smokers but there appears widespread public support among both groups for a ban on smoking in cars, especially any carrying children.

P186 PUBLIC ATTITUDES TO THE UK SMOKING BAN

doi:10.1136/thx.2010.151043.37

[1]M Dockrell, [1]E DeLacy, [1]R Morrison, [1]T Buchanan, [2]K E Lewis. *[1]Action on Smoking in Health, UK; [2]School of Medicine, Swansea University, Swansea, UK*

Aim To record public attitudes to the 2006–2007 UK bans on smoking in enclosed public and workplaces.

Methods We commissioned a survey of the YouGov Plc British panel of 185 000+ people (aged 18+). An email was sent to panellists, selected at random using a sophisticated sampling matrix, to be representative of each country. Three surveys were conducted between 25 and 30 March 2009. We obtained answers from n=10 895 adults in England, n=1023 adults in Wales, and n=1157 adults in Scotland. The results for all three countries were merged at analysis stage and re-weighted to be representative of the overall GB population. We had data from 13 075 adults, 52% female, mean age 45.5 years (range 18–88 years), 22% of whom reported continued smoking at least occasionally.

Results Overall, 79.1% supported the ban, 14.6% opposed the ban and 6.2% were unsure. The Abstract P186 Table 1 describes responses by smoking status:

Table 1

	Non-smokers (n=10229)	Smokers (n=2847)	p-value
Support for the ban	88%	47%	<0.001
The ban is good for the health of most workers	93%	73%	<0.001
The ban is good for the health of the general public	88%	61%	<0.001
The ban is good for my own health	86%	52%	<0.001

Conclusions There remain differences in opinion between smokers and non-smokers but public support for the ban on smoking in public and workplaces remains high. Most people (including smokers) believe the ban has significant beneficial health effects at all levels.

P187 PARENTS SUPPORT BAN OF SMOKING IN CARS WHERE MINORS ARE PRESENT

doi:10.1136/thx.2010.151043.38

I Jarrold, K Huntly, T Turkel, N Eiser. *British Lung Foundation, London, UK*

Introduction Passive smoking is particularly dangerous for children; it increases their risk of developing asthma and triggers asthmatic attacks.

Methods This study sought information regarding parents' smoking habits and their attitude to smoking in front of their children from Mumsnet, an online social networking community for parents with over one million users.

Results 1020 people (97% female, 2% male, 1% not specified) were surveyed online. Of the respondents, 770 had children <5 years, 365 had children 6–10 years, 168 had children 11–15 years while 64 respondents had children ≥16 years. Twelve per cent respondents were current smokers, 42% ex-smokers, 45% never smokers and 1% did not specify. 939 respondents had partners, of whom 17% were current smokers, 37% ex-smokers and 46% never smokers. Of 553 respondents who were current or ex-smokers, 5% confessed to smoking with children present in the same room and 7% to smoking in a car containing children. 290 respondents had smoked in front of their children at some time. Of these, 4% thought that their children may develop a lung condition as a result while 5% thought that passive smoking would not affect their children's health. 17% thought that their children may take up smoking as a result. While only 45% of all respondents would support a smoking ban in all private cars (whether or not a child was present), 86% would support a smoking ban in cars when a minor is present. Among current smokers, 83% would support a smoking ban in private cars with a minor present.

Conclusions This survey shows overwhelming support for a ban on smoking in cars where minors are present, even amongst current smokers. However, sadly it also revealed that 5% parents who had smoked in front of their children believed that this has no impact on that child. Further publicity campaigns are needed to promote both awareness of the risks of passive smoking and the need of legislature to ban smoking in private cars.

Abstract P187 Table 1 Support for smoking ban in private cars—all respondents (1020)

Support for smoking ban in all private cars					
	Smoker	Ex-smoker	Never smoker	Smoking status not specified	Total
Support ban	37 (29%)	178 (42%)	239 (52%)	1 (10%)	455 (45%)
Oppose ban	71 (56%)	147 (34%)	123 (27%)	4 (36%)	345 (34%)
Don't know	19 (15%)	101 (24%)	94 (21%)	6 (54%)	220 (22%)
Support for smoking ban in private cars when a minor is present					
Support ban	106 (83%)	363 (85%)	398 (87%)	6 (55%)	867 (86%)
Oppose Ban	11 (9%)	26 (6%)	30 (7%)	0 (0%)	67 (7%)
Don't know	10 (8%)	37 (9%)	28 (6%)	5 (45%)	80 (8%)

P188 AN EVALUATION OF A NOVEL SEMI-QUANTITATIVE SALIVA TEST FOR COTININE AND OTHER NICOTINIC METABOLITES

doi:10.1136/thx.2010.151043.39

[1]G F Cope, [2]G V O'Donovan, [1]B Savage, [2]H J Milburn. *[1]GFC Diagnostics Ltd, Bicester, UK; [2]Guy's and St Thomas' NHS Foundation Trust, London, UK*

Background The accurate determination of smoking habit is important for the treatment of smoking-related disease. Cotinine, the major metabolite of nicotine is the analyte of choice to assess

smoking habit. A number of point-of-care urine cotinine tests are used to validate self-reported smoking and in some instances, provide feedback to improve smoking cessation. Urine testing is inappropriate in some instances, and while saliva testing is more acceptable, it is more difficult because cotinine is in lower concentrations compared to urine. A prototype saliva test was developed and evaluated, but the colorimetric assay was deemed inadequate. A new, more sensitive assay has been developed and evaluated in a group of healthy volunteers.

Method Volunteers (n=117), aged between 22 and 67 years (36% female), including 61 smokers with a cigarette consumption of five or more cigarettes/day, (mean 16.0), provided a saliva sample using a manufactured collecting device. One ml of saliva was eluted using the test's fixed-volume syringe. The sample was introduced onto freeze-dried reagents and quickly shaken. A sample positive for nicotine metabolites would be expected to turn pink within 1 min, but 4 min were allowed for full colour development. The resultant colour was compared with a four-point colour chart and the level of smoking recorded. Samples from non-smokers should remain unchanged.

Results A positive colour change wasobtained from 56 of the 61 smokers and a negative result from 54 of the 56 non-smokers, giving a sensitivity of 92% and specificity of 96%. The semi-quantitative results correlated with daily cigarette consumption; with light smokers (5–10 per day, n=15) mean 2.3, 11–15 per day (n=14) mean 2.8, 16–20 per day (n=19) 3.4 and more than 20 per day (n=8) mean 3.0 ($p<0.05$).

Discussion The new test was found to be superior to the prototype, being quicker and the final colour easier to read. The saliva collection device was also an improvement on previous methods. The sensitivity and specificity were comparable with the other commercial saliva cotinine test available. A dedicated colorimeter to quantify the result is under development. This test could be an important adjunct for treating smoking-related disease.

P189 SMOKING STATUS PREDICTS BENEFIT FROM BREATHING RETRAINING FOR HYPERVENTILATION

doi:10.1136/thx.2010.151043.40

C A Maguire, A G Robson, J Pentland, D McAllister, J A Innes. *Respiratory Function Service and Dept of Physiotherapy, Royal Infirmary and Western General Hospital, Edinburgh, UK*

Introduction Hyperventilation syndrome has a prevalence of 6–11% in primary care, and can be treated via breathing retraining. Breathing retraining reduces hyperventilation and improves symptoms. However, it is staffing intensive. Therefore, we examined which patient characteristics are associated with benefit from breathing retraining.

Method Retrospectively, we identified 201 consecutive patients referred to the breathing retraining service (February 2003 to June 2009) at a single site. Treatment efficacy was assessed by the treating physiotherapist according to resolution of symptoms. Success was defined as complete or near complete resolution of symptoms at the end of the breathing retraining period. Height, age, sex, smoking status, ethnicity, hyperventilation type (acute or chronic), restrictive/obstructive spirometry and known cardio/respiratory disease were also recorded. Patient characteristics were compared by treatment efficacy using χ^2 tests and *t*-tests, and logistic regression was used to identify which characteristics were independently associated with treatment efficacy.

Results The mean (SD) age was 50.9 (15.5) years. 38.3% were male and 31% had acute hyperventilation. 15.9% had obstructive and 10.5% had restrictive spirometry. 46.3% had known cardiovascular or respiratory disease. 61 patients overall benefited from breathing retraining. Current smokers were much less likely to benefit from breathing retraining compared to non-smokers (1 in 16.5 vs 1 in 2.4, $p=<0.01$). This association persisted after adjusting for the above patient characteristics. Ex-smokers had a similar probability of benefiting to that of non-smokers (1 in 3). Known cardio-respiratory disease was also independently associated with a lower odds of benefiting. The ORs for successful breathing retraining are shown for each predictor in the Abstract P189 Table 1. None of the remaining characteristics were associated with treatment efficacy.

Abstract P189 Table 1

Characteristic	OROR (Odds of benefit from breathing retraining)	95% CI of OR	p Value
Age (per 10 years)	1.12	0.87 to 1.45	0.39
Men	0.37	0.13 to 0.99	0.05
Nijmegen score	0.97	0.94 to 1.01	0.11
Cardio/respiratory disease	0.49	0.24 to 0.98	0.05
Spirometry			0.22
Obstructive	2.41	0.88 to 6.63	
Restrictive	1.07	0.33 to 3.16	
Smoking status			<0.001
Ex-smoker	0.60	0.27 to 1.33	
Current smoker	0.08	0.01 to 0.33	

Conclusion Our sample size was comparatively small as reflected in the wide CI, and the outcome measure was subjective. Nevertheless, smoking status is strongly associated with physiotherapist-assessed treatment efficacy following breathing retraining. Smokers, but not-ex-smokers are much less likely to benefit from breathing retraining. Therefore referral for smoking cessation rather than breathing retraining may be more appropriate in this patient group. It was not possible to assess long term benefit from this retrospective study.

P190 ATTITUDES OF HEALTH CARE PROFESSIONALS TOWARDS SMOKING CESSATION

doi:10.1136/thx.2010.151043.41

S Pearce, J Maycock, C McCauley, D Nazareth, P Stockton. *St Helen's and Knowsley Teaching Hospitals NHS Trust, Prescot, UK*

Background NICE (UK) recommends that all healthcare professionals (HCPs) refer patients who would like to stop smoking to an NHS Stop Smoking Service (SSS).[1] This study explores attitudes of HCPs and factors that may contribute to a low referral rate to SSS.

Methods 164 HCPs (83 doctors, 72 nurses, 9 pharmacists) completed a structured questionnaire exploring reasons as to why they would not refer to smoking cessation services.

Results Smoking cessation was considered to be an important health issue for 95% of respondents, however only 51% routinely asked smokers if they wanted to quit. 37% were not familiar with smoking cessation guidelines (local or national). 40% supported a formal referral system involving a GP and 55% would like more training. The main reasons for NOT referring to SSS are outlined below.

Conclusions The vast majority of HCPs considered smoking cessation to be an important issue. However, a significant proportion of HCPs were unaware of local/national guidelines. This appears tobe a significant barrier to the referral of patients to SSS. Most HCPs would like further targeted training and information. Since this survey the Trust has modified the generic Trust Admission Proforma to prompt HCPs to consider referring to SSS. Teaching sessions have been introduced for HCPs to enable them to deliver accurate stop smoking information to smokers.