

# PostScript

## LETTER

### New smoke-free environments legislation stimulates calls to a national Quitline

The call rate to New Zealand's national Quitline service<sup>1</sup> appears to be influenced by mass media campaigns,<sup>2</sup> media publicity on the risks of smoking,<sup>3</sup> and even international events.<sup>4</sup> We examined the usage of this Quitline before and after the time that new smoke-free environments legislation became operational in New Zealand on 10 December 2004. This legislation extended previous legislation so as to completely ban smoking in bars, restaurants, and nearly all indoor workplaces. It appears that this new law has been well accepted by smokers.<sup>5</sup>

We analysed routinely collected data on smokers who registered with the Quitline to undertake a quit attempt, comparing the period from 1 December 2004 to 31 January 2005 (the "intervention period") with the same period 12 months previously (the "pre-intervention period"). The same particular months were selected since caller registration rates vary widely throughout the year by season. The Factiva electronic database for newspaper articles was also searched for articles in the "New Zealand major papers" section of the database that mentioned "smoking" or "smokefree" (during the two periods).

In the "pre-intervention period" the caller registration rate was 272 per 100 000 smokers (aged 15+ years) per month, compared to 395 per 100 000 per month in the "intervention period" (rate ratio (RR) 1.44, 95% confidence interval (CI) 1.39 to 1.51). Similarly, the rate of distribution of first time voucher cards for subsidised nicotine replacement therapy via the Quitline also increased (RR 1.92, 95% CI 1.82 to 2.03). There was an increase in the proportion of registrations in the 35-44 year age group ( $p = 0.01$ ), but no other significant changes in the distribution of callers by sex or ethnic group (table 1).

Weekly caller registration rates also increased in the "intervention week" (that is, when the law became operational) relative to the average for the three weeks preceding this week (944 v 558 callers, respectively) (RR 1.69, 95% CI 1.52 to 1.88). This increase persisted into the following week, even though it was the week preceding Christmas day (RR 1.27, 95% CI 1.14 to 1.42).

In the "pre-intervention period" the Factiva database recorded 271 newspaper articles with the words "smoking" or "smoke-free", compared to 376 in the "intervention period". In contrast, television advertising expenditure promoting the Quitline number was lower in the intervention period but there was some paid advertising to inform the public of the new legislation. Indeed, the proportion of first time callers who reported television advertising as the source of information about the Quitline declined in the intervention period ( $p = 0.03$ ) (table 1). There was also a significant decline in the proportions of the "friends

and family" and "health worker" sources of information ( $p < 0.0001$  for both).

Given these patterns, it would seem that Quitline advertising patterns or changes in health worker support are unlikely to explain the increased caller registration rate in the intervention period. Instead, the increased use of the Quitline is probably attributable to the media publicity and discussions around the new smoke-free legislation, and the experience of the smoke-free workplaces. Therefore, in addition to smoke-free laws protecting non-smokers, this study supports the findings from elsewhere,<sup>6-9</sup> that such laws can promote quitting attempts by smokers.

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**Table 1** Characteristics of callers registering with the national Quitline in the period associated with the new smoke-free environments law and in a prior comparison period

	Pre-intervention period*		Intervention period*	
	Number	%	Number	%
New callers registered	2807	71.2%	3991	69.9%
Callers who re-registered with the Quitline after having previously used it and then relapsed	1138	28.8%	1722	30.1%
Total	3945	100.0%	5713	100.0%
Caller sex				
Female	2116	53.6%	3073	53.8%
Male	1804	45.7%	2602	45.5%
Missing data	25	0.6%	38	0.7%
Total	3945	100.0%	5713	100.0%
Caller ethnicity				
Māori	720	18.3%	1065	18.6%
Pacific peoples	120	3.0%	164	2.9%
NZ European/other	3023	76.6%	4365	76.4%
Refused	82	2.1%	119	2.1%
Total	3945	100.0%	5713	100.0%
Caller age group (years)				
15-24	748	19.0%	1016	17.8%
25-34	1019	25.8%	1446	25.3%
35-44	961	24.4%	1434	25.1%
45-54	619	15.7%	954	16.7%
55-64	350	8.9%	500	8.8%
>64	151	3.8%	243	4.3%
Not reported and under age 15	97	2.5%	120	2.1%
Total	3945	100.0%	5713	100.0%
Reported source of information about the Quitline (just new callers)				
Friends and family	829	29.5%	964	24.2%
Television advertising	781	27.8%	1016	25.5%
Health worker	542	19.3%	591	14.8%
Cigarette packet	232	8.3%	351	8.8%
Radio advertising	34	1.2%	31	0.8%
Newspaper	25	0.9%	71	1.8%
"Don't know"	37	1.3%	152	3.8%
Other	248	8.8%	462	11.6%
Missing/not answered	79	2.8%	353	8.8%
Total	2807	100.0%	3991	100.0%
NRT vouchers issued by the Quitline to smokers				
First voucher	1878	38.5%	3610	40.0%
Second voucher†	1333	27.3%	2519	27.9%
Third or other voucher‡	1670	34.2%	2887	32.0%
Total	4881	100.0%	9016	100.0%

\*The pre-intervention period was December 2003 and January 2004. The intervention period was December 2004 and January 2005.

†Some of these vouchers will be issued to people who had registered with the Quitline outside of the two study periods.

‡NRT, nicotine replacement therapy.

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