Uptake of influenza vaccine among Aboriginal and Torres Strait Island adults in north Queensland, 2003

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Abstract

The uptake of the vaccine in at-risk Aboriginal and Torres Strait Island adults in north Queensland in 2003 was determined using the state-wide computerised immunisation register. The uptake in Aboriginal and Torres Strait Island adults ≥50 years was 63 per cent, and assuming that a third of Aboriginal and Torres Strait Island adults 15–49 years of age had a medical risk factor, 85 per cent of those at-risk were vaccinated in 2003. There were considerable improvements in vaccine uptake in both age groups in the Cairns, Charters Towers, Mackay and the Tablelands Health Service Districts (HSDs) in 2003, but there were been considerable declines in both age groups in the Innisfail and Mt Isa HSDs in 2003 compared to 2002. There was also a decline in uptake in adults 15–49 years of age in the Townsville HSD. *Commun Dis Intell* 2004;28:80–82.

Keywords: influenza, surveillance, vaccine

Introduction

Since 1999 the Australian Government has provided funding so that free influenza vaccine can be provided to all Aboriginal and Torres Strait Island adults aged ≥50 years and to those aged 15-49 years with a medical risk factor. The annual uptake of the vaccine in Aboriginal and Torres Strait Island adults in north Queensland can be assessed using the state-wide immunisation database, Vaccination Information and Vaccination Administration System (VIVAS). In 2002 the uptake was 59 per cent in those ≥50 years of age, and assuming that a third of those aged 15-49 years had a risk factor, the uptake in those at-risk in this age group was 85 per cent.2 This report details the uptake of the influenza vaccine in Aboriginal and Torres Strait Island adults in north Queensland in 2003.

Methods

The vaccine uptake figures were derived as described previously, using the population estimates obtained from the 2001 national census.² Because the prevalence of medical risk factors in Aboriginal and Torres Strait Island adults 15–49 years of age is not known with any precision in north Queensland, the uptake in this age group was calculated assuming that one third of this age group has a risk factor.²

Results

The number of doses given to, and the uptake of influenza vaccine in, Aboriginal and Torres Strait Island adults ≥50 years of age in north Queensland in 2003 are shown in Table 1. The uptake in this population in each of the Health Service Districts (HSDs) in north Queensland in 2002 and 2003 are compared in Table 2.

The number of doses given to, and the uptake of influenza vaccine (assuming a risk factor prevalence of 33%) in, Aboriginal and Torres Strait Island adults 15–49 years of age in north Queensland in 2003 are given in Table 3. The uptake in this population in each of the HSDs in north Queensland in 2002 and 2003 are compared in Table 4.

Discussion

There was an overall increase of 190 doses of influenza vaccine used in north Queensland in 2003 compared to 2002. The increase was only in Aboriginal and Torres Strait Island adults ≥50 years, with no increase in the overall uptake in adults 15–49 years of age.

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Table 1. Influenza vaccine doses given to Aboriginal and Torres Strait Island adults ≥50 years of age in 2003, north Queensland

Health Service District	Number vaccinated	Uptake*
Bowen	51	28
Cairns	595	49
Cape York	402	87
Charters Towers	56	51
Innisfail	125	48
Mackay	155	52
Moranbah	8	22
Mt Isa	490	51
Tablelands	294	75
Torres Strait and Northern Peninsula Area	818	94
Townsville	539	64
Total north Queensland	3,533	63

^{*} Based upon Census 2001 population estimates.

Table 2. The uptake of influenza vaccine in Aboriginal and Torres Strait Island adults ≥50 years of age in 2002 and 2003

Health Service District	2002 %	2003 %	Difference %
Bowen	28	28	0
Cairns	40	49	+9
Cape York	88	87	-1
Charters Towers	26	51	+25
Innisfail	62	48	-14
Mackay	44	52	+8
Moranbah	11	22	+11
Mt Isa	58	51	– 7
Tablelands	60	75	+15
Torres Strait and Northern Peninsula Area	87	94	+7
Townsville	63	64	+1
Total north Queensland	59	63	+4

Table 3. Influenza vaccine doses given to Aboriginal and Torres Strait Island adults 15–49 years of age in 2003, north Queensland

Health Service District	Number vaccinated	Uptake*
Bowen	46	19
Cairns	1,133	55
Cape York	946	142
Charters Towers	124	79
Innisfail	267	67
Mackay	333	58
Moranbah	27	42
Mt Isa	831	59
Tablelands	783	120
Torres Strait and Northern Peninsula Area	1,750	156
Townsville	1,431	83
Total north Queensland	7,671	85

Based upon the assumption that 33 per cent of the Census 2001 population estimate had a risk factor.

Table 4. The uptake of influenza vaccine in Aboriginal and Torres Strait Island adults 15–49 years of age in 2002 and 2003

Health Service District	2002 %	2003 %	Difference %
Bowen	23	19	-4
Cairns	49	55	+6
Cape York	147	142	– 5
Charters Towers	31	79	+48
Innisfail	84	67	-17
Mackay	35	58	+23
Moranbah	11	42	+31
Mt Isa	77	59	-18
Tablelands	105	120	+15
Torres Strait and	159	156	-3
Northern Peninsula Area			
Townsville	88	83	– 5
Total north Queensland	85	85	0

^{*} The uptake is based upon the assumption that 33 per cent of the Census 2001 population estimate had a risk factor.

Based upon a review of a substantial body of scientific literature,³ authorities in the United States of America have made a number of recommendations that have been shown to improve vaccine uptake. For example, they strongly recommend that regular reminders of due (and overdue) immunisations be provided to vaccine providers and that regular assessment and feedback of vaccination coverage be provided to these providers.⁴ These recommendations (and several others) are now incorporated into standards for adult immunisation practice.⁵

Early each year, a listing of all Aboriginal and Torres Strait Island adults who have previously received a dose of influenza vaccine, is provided to the vaccine service providers in Queensland and recorded as having administered the most recent doses. It is assumed that this listing serves as a reminder so that the providers can recall these individuals for their annual influenza vaccination. Similarly, towards the end of each year, a influenza vaccination uptake report for the current year is provided to all HSD managers in north Queensland. Again, it is assumed that this report serves as feedback for the services in each District, and that further strategies for subsequent years are developed where necessary.

It can be seen that, compared to 2002, there have been considerable improvements in influenza vaccine coverages in both age groups in the Cairns, Charters Towers, Mackay and the Tablelands HSDs in 2003, suggesting that the 2002 feedback may have served a useful purpose in these Districts.

However, there have been considerable declines in coverage in both age groups in the Innisfail and Mt Isa HSDs in 2003 compared to 2002. There was also a decline in uptake in adults aged 15–49 years in the Townsville HSD. These Districts will need to review their vaccine delivery strategies in preparation for the 2004 Aboriginal and Torres Strait Island adult influenza vaccination program. High annual uptake of influenza vaccine is crucial, particularly for those at high-risk, not only for the prevention of influenza, but also for influenza pandemic preparedness.

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