

Influenza vaccination coverage for residents of residential care facilities British Columbia, 2012/13

Background

Immunization coverage assessment is an important part of a quality immunization program. Immunization coverage assessment serves three main functions:

- i) Identifying populations with low levels of immunization coverage
- ii) Evaluating the delivery of immunization programs
- iii) Informing program planning

The 2007 Immunize BC Strategic Framework for Immunization target for influenza vaccination for residents of residential care facilities is 90% coverage. Influenza vaccination coverage for residents of residential care facilities in BC has ranged from 89% to 93% from the 2003/04 to 2011/12 influenza seasons.

Objective

- i) To quantify the proportion of residents of residential care facilities in British Columbia who were vaccinated against influenza during the 2012/13 influenza season.

Methods

Residential care facilities were defined as facilities with 50% or more residents aged 65 years and older that are either:

- licensed under the Hospital Act; or
- licensed under the Community Care and Assisted Living Act and provide some health care services.

A list of the residential care facilities included in the 2011/12 influenza season's vaccination coverage statistics was sent to each health authority. Residential care facilities that closed during the previous year were removed and new facilities were added to the list. For each residential care facility, data were collected on the number of residents who were vaccinated against influenza and the total number of residents.

Vaccination coverage data were collected by health authority staff and either entered into an online data collection form or entered into a Microsoft Excel file and emailed to the BC Centre for Disease Control.

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Results

Reporting of facilities (table 1)

- 348/357 (97%) residential care facilities in British Columbia are included in this report

2012/13 influenza vaccination coverage (tables 2 and 3; figures 1 to 5)

- 89% (26,784/30,109) of residents of residential care facilities in BC were vaccinated against influenza, which was the same as the coverage in 2011/12
- 84% to 92% was the range across the six health authorities
- 72% to 94% was the range across the sixteen health service delivery areas
- 21% to 100% was the range across all residential care facilities in BC
- 193/348 (55%) facilities met the 90% immunization coverage target, which is similar to the 180/332 (54%) facilities in 2011/12

Results excluding privately funded facilities (Appendix tables 5A and 6A)

- 97% (290/299) publicly funded or contracted residential facilities were included
- 90% (23,610/26,264) of residents were vaccinated against influenza

Summary

Influenza immunization data were available for the majority of residential care facilities in all health authorities. The overall influenza vaccination coverage for residents of residential care facilities in BC was 89%, slightly below the Immunization BC target of at least 90% coverage; 193/348 (55%) facilities met the 90% coverage target. Influenza immunization coverage was similar when privately funded facilities were excluded from the analysis.

Within each health authority, there was a wide range of influenza vaccination coverage for residential care facilities. The reasons behind the variation in vaccination coverage between facilities are not known.

While the 89% influenza vaccination coverage for residents of residential care facilities achieved for the 2012/13 season is very close to the target of 90%, substantial room for improvement remains for some facilities.

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Tables and Figures

Table 1: Residential care facilities included by health authority and for BC, 2012/13

Health region	Residential care facilities		
	Reported	Total	% reported
Interior	79	87	91
Fraser	104	104	100
Vancouver Coastal	61	62	98
Vancouver Island	79	79	100
Northern	25	25	100
British Columbia	348	357	97

Table 2: Influenza vaccination coverage for residents of residential care facilities by health authority, health service delivery area and for BC, 2012/13

Health region	Residential care facility residents		
	Immunized	Total	(%)
Interior	4883	5843	(84)
East Kootenay	570	650	(88)
Kootenay Boundary	581	809	(72)
Okanagan	2773	3315	(84)
Thompson/Cariboo/Shuswap	959	1069	(90)
Fraser	8812	9679	(91)
Fraser East	1559	1768	(88)
Fraser North	3052	3334	(92)
Fraser South	4201	4577	(92)
Vancouver Coastal	6387	6960	(92)
Richmond	664	705	(94)
Vancouver	4013	4345	(92)
N Shore/Coast Garibaldi	1710	1910	(90)
Vancouver Island	5579	6370	(88)
South Vancouver Island	2974	3424	(87)
Central Vancouver Island	1993	2262	(88)
North Vancouver Island	612	684	(89)
Northern	1123	1257	(89)
Northwest	233	283	(82)
Northern Interior	556	597	(93)
Northeast	334	377	(89)
BC	26784	30109	(89)

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Table 3: Residential care facility residents' influenza vaccination coverage by health authority and for BC, 2003/04 to 2012/13 influenza seasons

Health region	Influenza immunization coverage (%) for residents of residential care facilities by influenza season									
	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Interior	87	90	91	90	89	89	88	85	85	84
Fraser	94	91	93	93	93	91	90	90	90	91
Vancouver Coastal	88	94	93	94	93	93	91	92	92	92
Vancouver Island	91	91	90	93	91	91	89	90	88	88
Northern	89	93	95	95	93	92	89	90	87	89
British Columbia	90	92	92	93	92	91	90	90	89	89

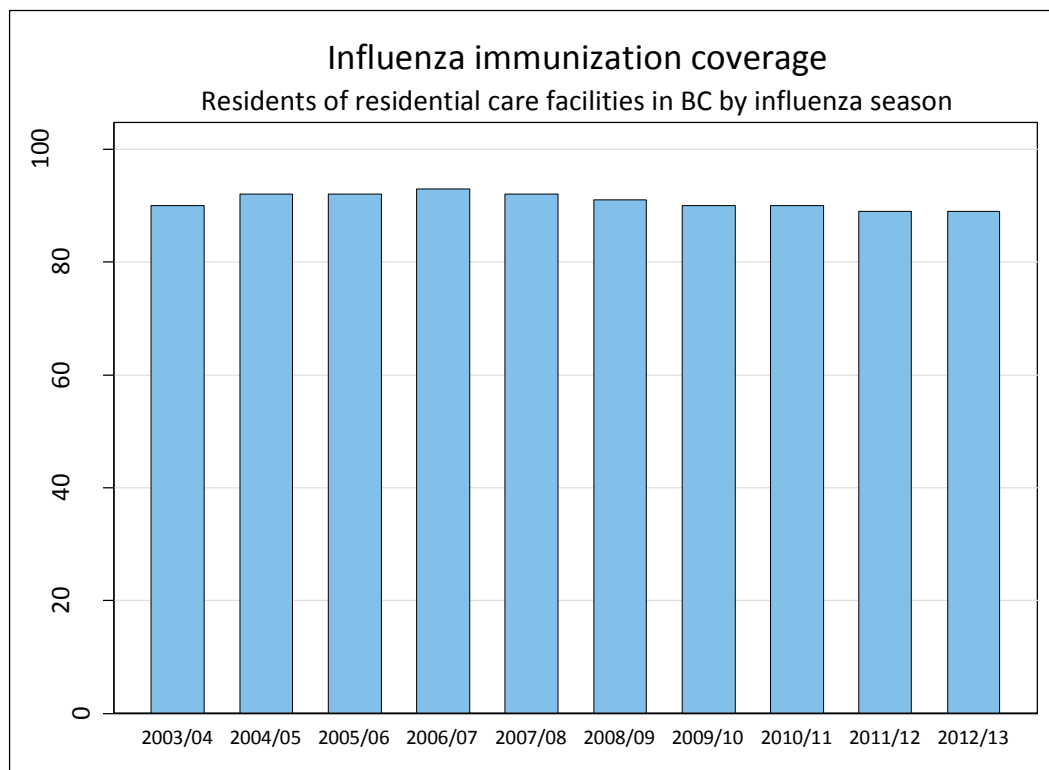


Figure 1: Influenza immunization coverage for residents of residential care facilities, British Columbia from 2003/04 to 2012/13

**Influenza vaccination coverage for residents of residential care facilities
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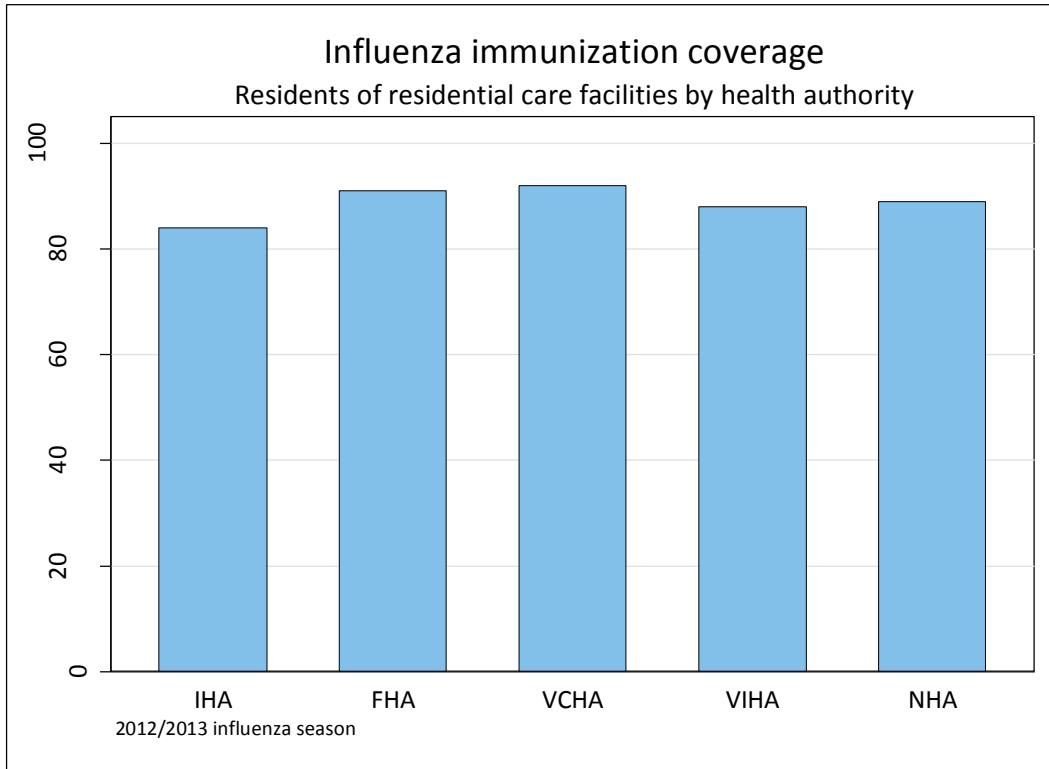


Figure 2: Influenza immunization coverage for residents of residential care facilities by health authority, 2012/13

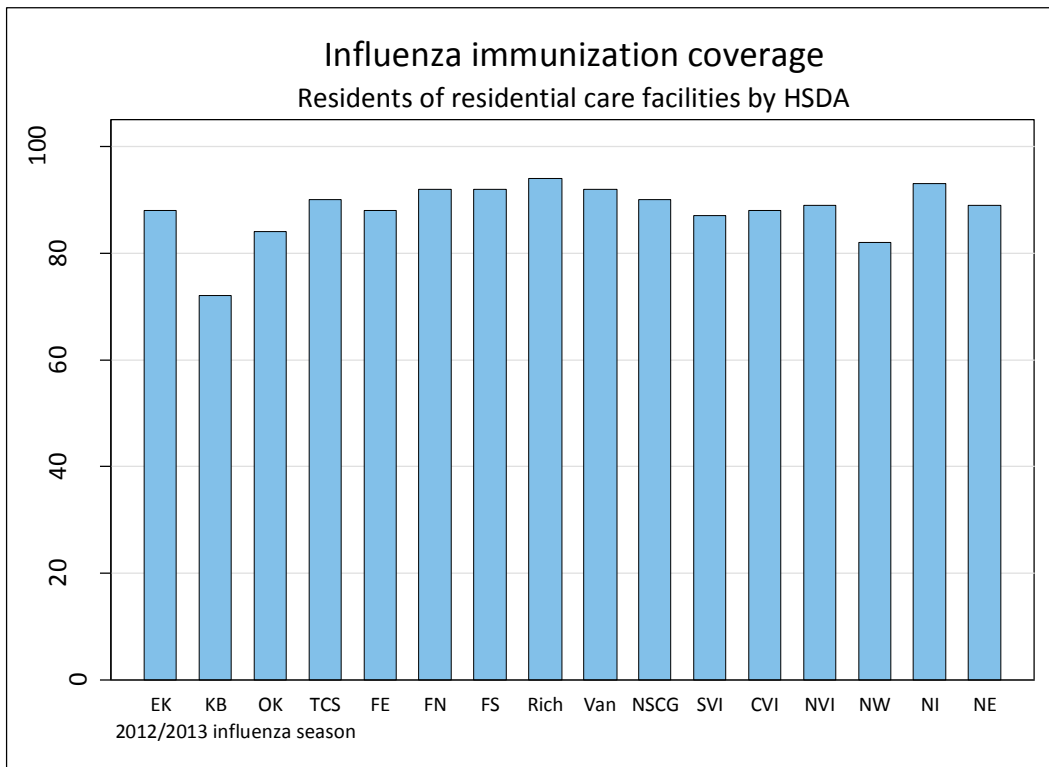


Figure 3: Influenza immunization coverage for residents of residential care facilities by health service delivery area, 2012/13

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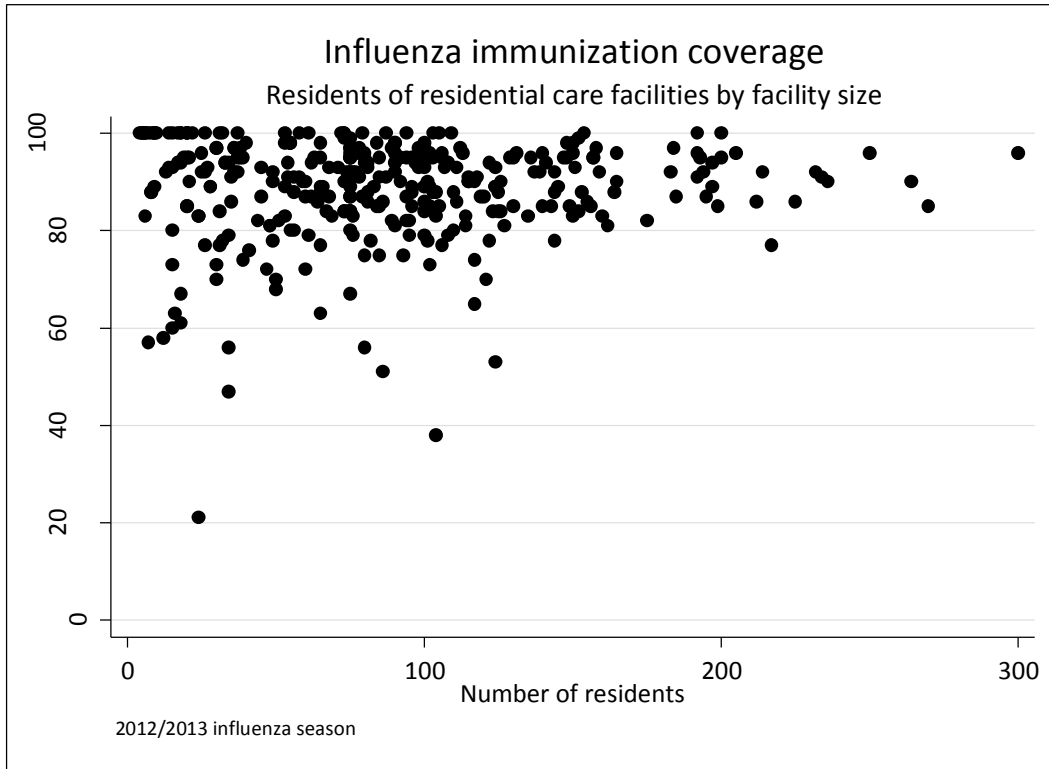


Figure 4: Influenza immunization coverage for residents of residential care facilities by facility size, British Columbia 2012/13

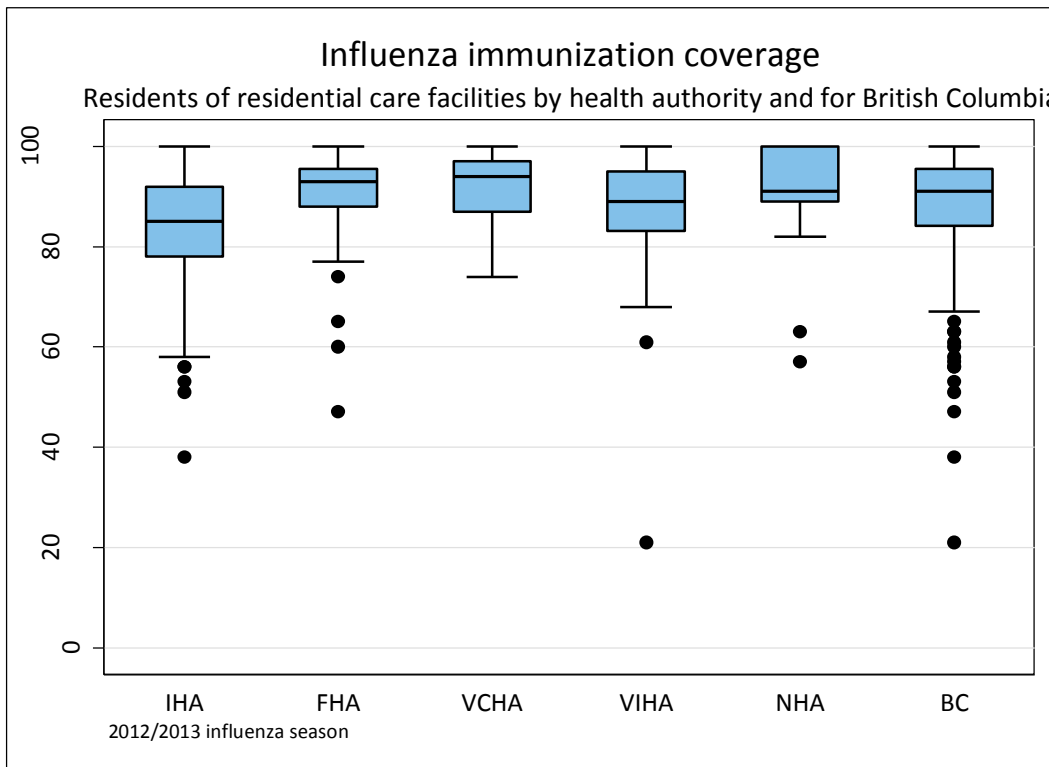


Figure 5: Variation in influenza immunization coverage for residents of residential care facilities by health authority and for British Columbia, 2012/13

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Figure 5 illustrates the range of influenza immunization coverage for residential care facilities in each health authority and for BC for the 2012/13 influenza season. The horizontal line below each box represents the lowest observed coverage value (within the expected range); the lower edge of each box represents the 25th percentile; the solid horizontal line within each box represent the median coverage value; the upper edge of each box represents the 75th percentile; the horizontal line above each box represents the highest observed coverage value (within the expected range); and the dots represent facilities with unusually high or low coverage values which may be outliers.

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Appendix

Table 4A: Immunization coverage for residents of residential care facilities by health authority, health service delivery area, and British Columbia, 2004/05 to 2012/13

		Influenza season									
		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2009/10 H1N1	2010/11	2011/12	2012/13
Health region											
INTERIOR	immunized	3,431	4,214	4,341	4,970	4,846	4,968	-	5,081	5,343	4883
	total residents	3,799	4,623	4,797	5,575	5,443	5,648	-	5,985	6,322	5843
	(% immunized)	(90)	(91)	(90)	(89)	(89)	(88)	-	(85)	(85)	(84)
East Kootenay	immunized	316	463	444	444	343	490	-	544	479	570
	total residents	343	515	467	551	371	572	-	711	573	650
	(% immunized)	(92)	(90)	(95)	(81)	(92)	(86)	-	(77)	(84)	(88)
Kootenay Boundary	immunized	382	547	552	457	545	391	-	547	650	581
	total residents	450	602	648	589	641	466	-	682	812	809
	(% immunized)	(85)	(91)	(85)	(78)	(85)	(84)	-	(80)	(80)	(72)
Okanagan	immunized	2,280	2,338	2,317	2,770	2,587	2,724	-	2,666	3,203	2773
	total residents	2,512	2,585	2,553	3,026	2,916	3,159	-	3,124	3,755	3315
	(% immunized)	(91)	(90)	(91)	(92)	(89)	(86)	-	(85)	(85)	(84)
Thomps Carib Shuswap	immunized	453	866	1,028	1,299	1,371	1,363	-	1,324	1,011	959
	total residents	494	921	1,129	1,409	1,515	1,451	-	1,468	1,182	1069
	(% immunized)	(92)	(94)	(91)	(92)	(90)	(94)	-	(90)	(86)	(90)
FRASER											
	immunized	7,456	7,253	8,034	7,269	7,352	7,703	6,884	7,911	8,041	8812
	total residents	8,168	7,787	8,615	7,855	8,092	8,571	8,611	8,750	8,935	9679
	(% immunized)	(91)	(93)	(93)	(93)	(91)	(90)	(80)	(90)	(90)	(91)
Fraser East	immunized	1,527	1,520	1,587	1,548	1,471	1,425	1,192	1,478	1,447	1559
	total residents	1,685	1,705	1,706	1,733	1,629	1,630	1,631	1,640	1,635	1768
	(% immunized)	(91)	(89)	(93)	(89)	(90)	(87)	(73)	(90)	(89)	(88)
Fraser North	immunized	2,765	2,637	2,872	2,663	2,768	2,614	2,422	3,032	3,035	3052

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Fraser South	total residents	2,933	2,798	3,057	2,846	3,025	2,878	2,826	3,341	3,333	3334
	(% immunized)	(94)	(94)	(94)	(94)	(92)	(91)	(86)	(91)	(91)	(92)
	immunized	3,164	3,096	3,575	3,058	3,113	3,664	3,270	3,401	3,559	4201
	total residents	3,550	3,284	3,852	3,276	3,438	4,063	4,154	3,769	3,967	4577
	(% immunized)	(89)	(94)	(93)	(93)	(91)	(90)	(79)	(90)	(90)	(92)

Table 4A (continued): Immunization coverage for residents of residential care facilities by health authority, health service delivery area, and British Columbia, 2004/05 to 2012/13

Health region		Influenza season									
		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2009/10 H1N1	2010/11	2011/12	2012/13
VANCOUVER COASTAL	immunized	6,837	6,547	6,824	6,741	6,713	6,171	5,325	6,800	6,487	6387
	total residents	7,275	7,034	7,268	7,256	7,208	6,794	6,794	7,375	7,047	6960
	(% immunized)	(94)	(93)	(94)	(93)	(93)	(91)	(78)	(92)	(92)	(92)
Richmond	immunized	928	810	856	830	729	832	601	798	789	664
	total residents	966	844	888	861	752	882	882	841	834	705
	(% immunized)	(96)	(96)	(96)	(96)	(97)	(94)	(68)	(95)	(95)	(94)
Vancouver	immunized	4,335	4,293	4,320	4,202	4,240	3,968	3,566	4,224	4,073	4013
	total residents	4,647	4,669	4,627	4,559	4,580	4,372	4,372	4,592	4,418	4345
	(% immunized)	(93)	(92)	(93)	(92)	(93)	(91)	(82)	(92)	(92)	(92)
N Shore/Coast Garibaldi	immunized	1,574	1,444	1,648	1,709	1,744	1,371	1,158	1,778	1,625	1710
	total residents	1,662	1,521	1,753	1,836	1,876	1,540	1,540	1,942	1,795	1910
	(% immunized)	(95)	(95)	(94)	(93)	(93)	(89)	(75)	(92)	(91)	(90)
VANCOUVER ISLAND	immunized	4,793	5,224	4,963	5,107	5,384	5,606	-	5,617	5,605	5579
	total residents	5,286	5,783	5,361	5,614	5,896	6,291	-	6,264	6,404	6370
	(% immunized)	(91)	(90)	(93)	(91)	(91)	(89)	-	(90)	(88)	(88)
South Van Island	immunized	2,683	2,979	2,836	2,931	2,850	2,996	-	2,988	2,928	2974
	total residents	2,973	3,283	3,065	3,215	3,107	3,355	-	3,301	3,415	3424
	(% immunized)	(90)	(91)	(93)	(91)	(92)	(89)	-	(91)	(86)	(87)
Central Van Island	immunized	1,729	1,783	1,649	1,707	2,030	2,020	-	2,034	2,066	1993
	total residents	1,918	2,005	1,796	1,897	2,248	2,299	-	2,300	2,308	2262
	(% immunized)	(90)	(89)	(92)	(90)	(90)	(88)	-	(88)	(90)	(88)
North Van Island	immunized	381	462	478	469	504	590	-	595	611	612
	total residents	395	495	500	502	541	637	-	663	681	684
	(% immunized)	(96)	(93)	(96)	(93)	(93)	(93)	-	(90)	(90)	(89)

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Table 4A (continued): Immunization coverage for residents of residential care facilities by health authority, health service delivery area, and British Columbia, 2004/05 to 2012/13

Health region		Influenza season									
		2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2009/10 H1N1	2010/11	2011/12	2012/13
NORTHERN	immunized	744	997	934	936	931	950	694	971	956	1123
	total residents	804	1,051	986	1,005	1,009	1,072	1,075	1,079	1,103	1257
	(% immunized)	(93)	(95)	(95)	(93)	(92)	(89)	(65)	(90)	(87)	(89)
Northwest	immunized	216	325	250	239	242	216	146	243	241	233
	total residents	240	340	264	258	260	263	264	273	277	283
	(% immunized)	(90)	(96)	(95)	(93)	(93)	(82)	(55)	(89)	(87)	(82)
Northern Interior	immunized	317	479	487	498	475	520	378	506	503	556
	total residents	336	494	499	521	516	569	571	562	583	597
	(% immunized)	(94)	(97)	(98)	(96)	(92)	(91)	(66)	(90)	(86)	(93)
Northeast	immunized	211	193	197	199	214	214	170	222	212	334
	total residents	228	217	223	226	233	240	240	244	243	377
	(% immunized)	(93)	(89)	(88)	(88)	(92)	(89)	(71)	(91)	(87)	(89)
BC	immunized	23,261	24,235	25,096	25,023	25,226	25,398	-	26,380	26,432	26784
	total residents	25,332	26,278	27,027	27,305	27,648	28,376	-	29,453	29,811	30109
	(% immunized)	(92)	(92)	(93)	(92)	(91)	(90)	-	(90)	(89)	(89)

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Coverage statistics excluding privately funded residential care facilities

Table 5A: Residential care facilities included by health authority and for BC, 2012/13
(excluding privately funded residential care facilities)

Health region	Residential care facilities		
	Reported	Total	% reported
Interior	50	58	86
Fraser	95	95	100
Vancouver Coastal	61	62	98
Vancouver Island	61	61	100
Northern	23	23	100
British Columbia	290	299	97

Table 6A: Influenza vaccination coverage for residents of residential care facilities
by health authority, health service delivery area and for BC, 2012/13
(excluding privately funded residential care facilities)

Health region	Residential care facility staff		
	Immunized	Total	(%)
Interior	2937	3402	(86)
East Kootenay	312	359	(87)
Kootenay Boundary	315	406	(78)
Okanagan	1535	1787	(86)
Thompson/Cariboo/Shuswap	775	850	(91)
Fraser	8223	8997	(91)
Fraser East	1559	1768	(88)
Fraser North	2992	3262	(92)
Fraser South	3672	3967	(93)
Vancouver Coastal	6387	6960	(92)
Richmond	664	705	(94)
Vancouver	4013	4345	(92)
N Shore/Coast Garibaldi	1710	1910	(90)
Vancouver Island	5081	5796	(88)
South Vancouver Island	2666	3072	(87)
Central Vancouver Island	1803	2040	(88)
North Vancouver Island	612	684	(89)
Northern	982	1109	(89)
Northwest	233	283	(82)
Northern Interior	415	449	(92)
Northeast	334	377	(89)
BC	23610	26264	(90)