

Influenza vaccination coverage for residents of residential care facilities British Columbia, 2017/18

Background

Immunization coverage assessment is an important part of a quality immunization program and 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.¹ Annual influenza vaccination coverage for residents of residential care facilities in British Columbia (BC) ranged from 86% to 91% from the 2008/09 to 2017/18 influenza seasons.

Objective

To quantify the percentage of residents of residential care facilities in British Columbia who were vaccinated against influenza during the 2017/18 influenza season.

Methods

Influenza immunization coverage for residents of residential care facilities was calculated at the facility level, health service delivery area level, health authority level, and for BC. There are five regional health authorities in BC, which are comprised of 16 health service delivery areas.

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.

In BC, licensing of residential care facilities is conducted by regional Health Authority Community Care Facility Licensing programs. A list of the residential care facilities included in the 2016/17 influenza season's vaccination coverage statistics was sent to each health authority for review and updating. 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 obtained from facilities entered into an online data collection form by health authority staff.

The results were also calculated excluding privately funded facilities. The remaining subsets of facilities are health authority owned and operated, and contracted.

1. Immunize BC: a strategic framework for immunization in B.C. 2007. Victoria, BC: British Columbia Ministry of Health. Available at: <http://www.health.gov.bc.ca/library/publications/year/2007/immunizebc.pdf>

Results

Reporting of facilities (Table 1 and 5)

- 346/365 (95%) residential care facilities in BC are included in this report, including 254/265 (96%) publicly funded or contracted residential care facilities, and 92/100 (92%) privately funded residential care facilities

2017/18 influenza vaccination coverage (Tables 2 and 3; Figures 1 to 5)

- 86% (25,749/29,838) of residents of residential care facilities in BC were vaccinated against influenza, 2% lower than in 2016/17 (88%)
- 80% to 91% coverage was the range across the five health authorities
- 77% to 92% coverage was the range across the sixteen health service delivery areas
- 26% to 100% coverage was the range across all residential care facilities in BC
- 173/346 (50%) facilities met the 90% immunization coverage target, as in 2016/17

Results excluding privately funded facilities (Table 6)

- 86% (19,166/22,262) of residents were vaccinated against influenza, the same percent as in owned and operated and contracted facilities

Summary

Influenza immunization data were available for the majority of residential care facilities. Influenza vaccination coverage for residents of residential care facilities in BC was 86%, four percent below the Immunization BC coverage target and 2% lower than last season; only 50% of facilities met the 90% coverage target. Influenza immunization coverage was the same (86%) in publicly funded or contracted facilities as in privately funded facilities. Influenza vaccine coverage of residential care residents has declined by three percent for the past three seasons compared to 2014/15, driven by small declines in IHA, NHA and FHA, and a small increase in VIHA, with evidence of gradual declines in all regions in the past decade, except VCH.

There was a wide range of influenza vaccination coverage at the facility level. The reasons for this variation were not assessed.



Tables and Figures

Table 1: Number and percent of residential care facilities for which resident coverage rates were reported, by health authority, 2017/18

Health authority	Residential care facilities		
	Reported	Total	% reported
Interior	88	89	99
Fraser	96	104	92
Vancouver Coastal	52	62	84
Vancouver Island	86	86	100
Northern	24	24	100
British Columbia	346	365	95

Table 2: Influenza vaccination coverage for residents of residential care facilities by health authority and health service delivery area, 2017/18

Health authority	Residential care residents		
	Immunized	Total	%
Interior	5,315	6,671	80
East Kootenay	398	505	79
Kootenay Boundary	682	888	77
Okanagan	3,072	3,767	82
Thompson/Cariboo/Shuswap	1,163	1,511	77
Fraser	8,593	9,861	87
Fraser East	1,530	1,736	88
Fraser North	2,928	3,287	89
Fraser South	4,135	4,838	85
Vancouver Coastal	5,149	5,655	91
Richmond	419	458	91
Vancouver	3,350	3,657	92
N Shore/Coast Garibaldi	1,380	1,540	90
Vancouver Island	5,721	6,486	88
South Vancouver Island	3,092	3,657	87
Central Vancouver Island	1,989	2,214	90
North Vancouver Island	640	731	88
Northern	971	1,165	83
Northwest	246	282	87
Northern Interior	520	630	83
Northeast	205	250	81
BC	25,749	29,838	86

Table 3: Residential care facility resident influenza vaccination coverage by health authority, 2008/09 to 2017/18

Health authority	Influenza immunization coverage (%) for residents of residential care facilities by influenza season									
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Interior	89	88	85	85	84	84	86	84	82	80
Fraser	91	90	90	90	91	91	90	88	88	87
Vancouver Coastal	93	91	92	92	92	93	92	92	92	91
Vancouver Island	91	89	90	88	88	89	86	82	87	88
Northern	92	89	90	87	89	91	90	89	87	83
British Columbia	91	90	90	89	89	90	89	87	87	86

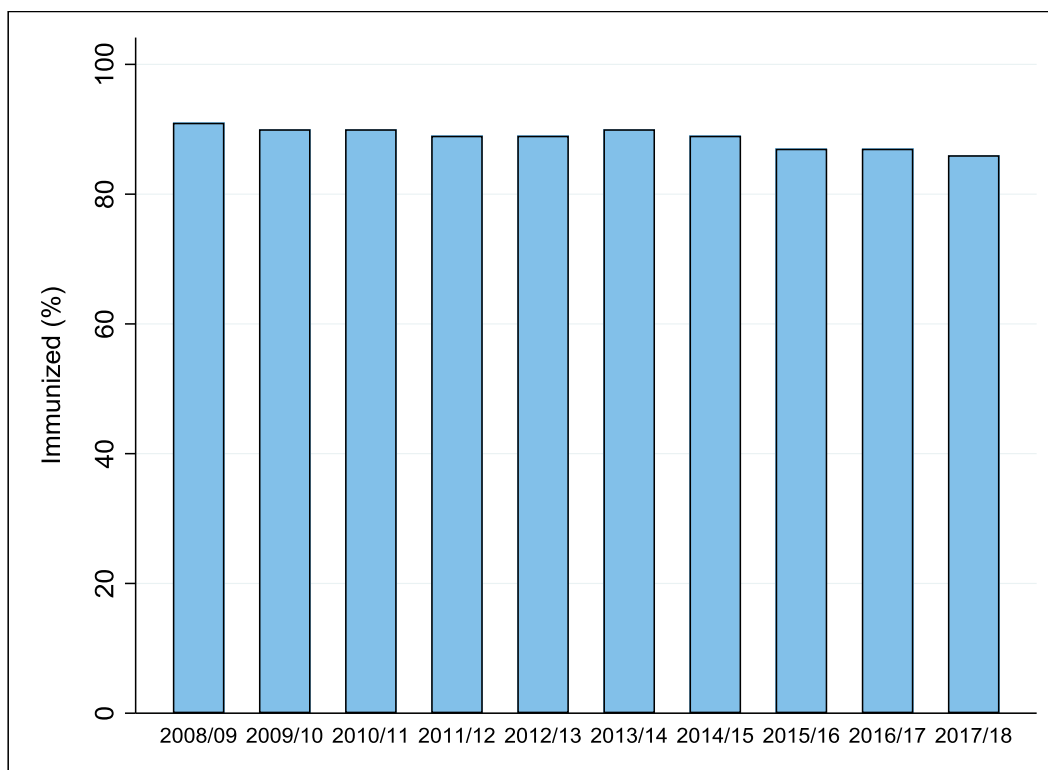


Figure 1: Influenza immunization coverage for residents of residential care facilities, 2008/09 to 2017/18

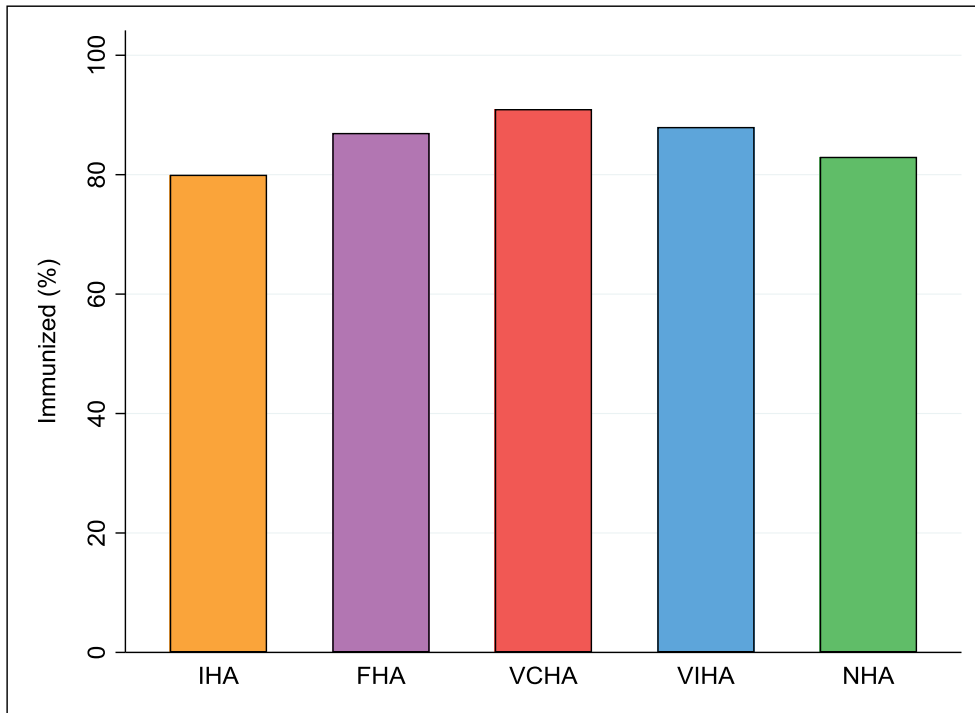


Figure 2: Influenza immunization coverage for residents of residential care facilities by health authority, 2017/18

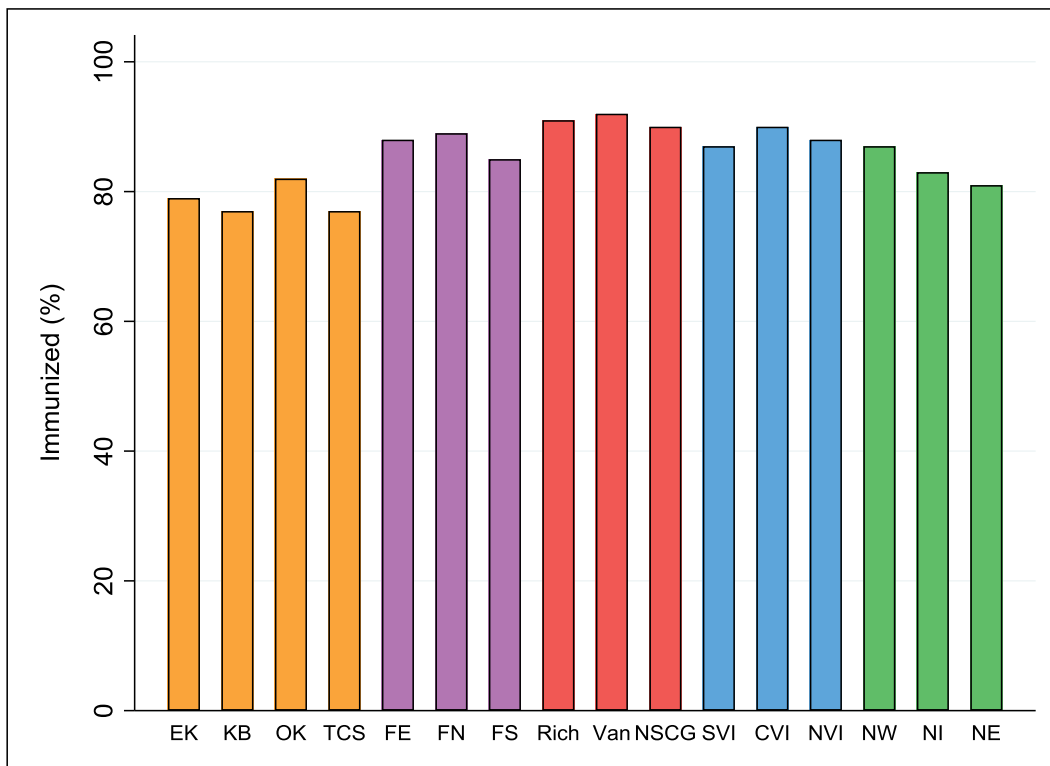


Figure 3: Influenza immunization coverage for residents of residential care facilities by health service delivery area, 2017/18

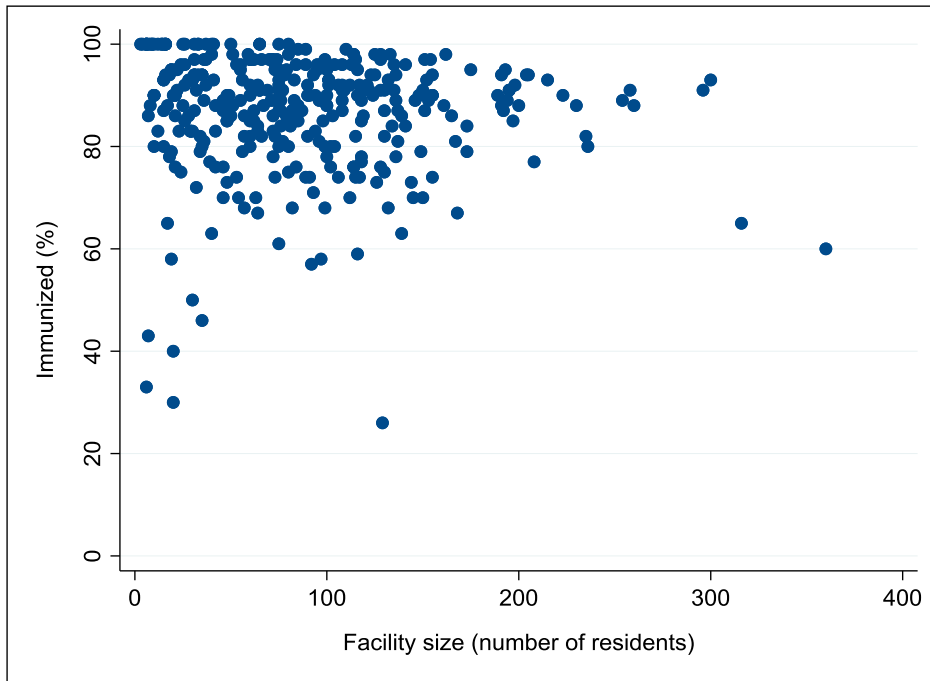


Figure 4: Influenza immunization coverage for residents of residential care facilities by facility size (number of residents), 2017/18

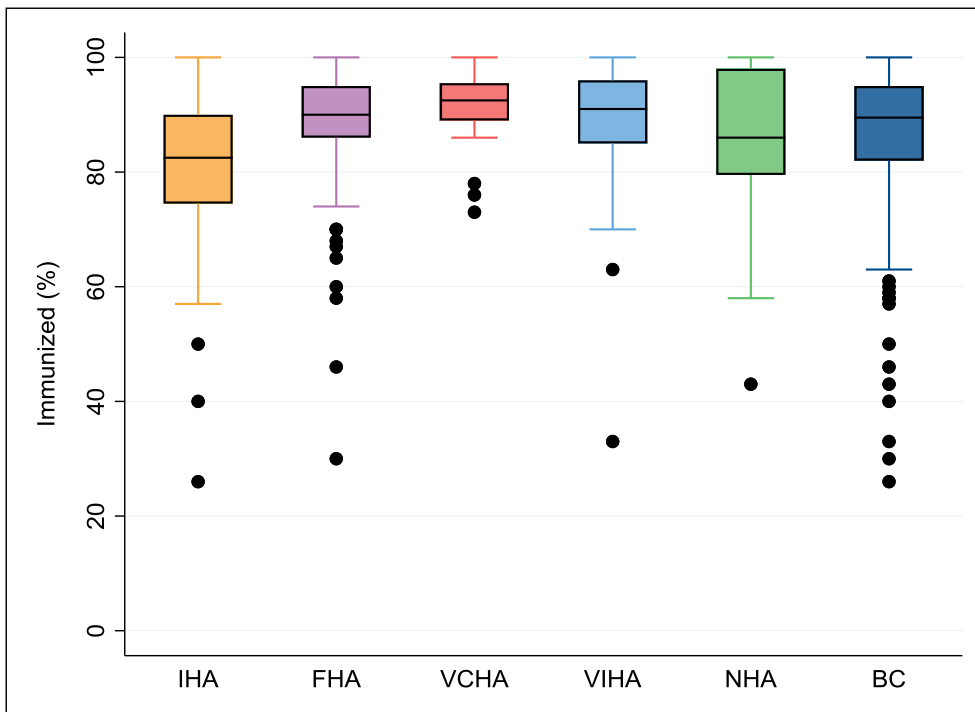


Figure 5: Influenza immunization coverage for residents of residential care facilities by facility within each health authority, 2017/18[†]

[†]The horizontal line below each box represents the lowest observed coverage value that is greater than or equal to the first quartile minus 1.5 times the interquartile 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 that is less than or equal to the third quartile plus 1.5 times the interquartile range; and the dots represent facilities with unusually high or low coverage values which are outliers.

Table 4: Immunization coverage for residents of residential care facilities by health authority and health service delivery area, 2009/10 to 2017/18

Health region		Influenza Season									
		2009/10	2009/10 H1N1	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
INTERIOR	immunized	4,968	-	5,081	5,343	4,883	3,717	5,437	5,151	5,491	5,315
	total residents	5,648	-	5,985	6,322	5,843	4,433	6,308	6,162	6,713	6,671
	% immunized	88	-	85	85	84	84	86	84	82	80
East Kootenay	immunized	490	-	544	479	570	416	451	383	453	398
	total residents	572	-	711	573	650	616	545	470	610	505
	% immunized	86	-	77	84	88	68	83	81	74	79
Kootenay Boundary	immunized	391	-	547	650	581	512	666	477	489	682
	total residents	466	-	682	812	809	620	805	582	663	888
	% immunized	84	-	80	80	72	83	83	82	74	77
Okanagan	immunized	2,724	-	2,666	3,203	2,773	1,630	3,055	3,060	3,230	3,072
	total residents	3,159	-	3,124	3,755	3,315	1,929	3,549	3,689	3,913	3,767
	% immunized	86	-	85	85	84	84	86	83	83	82
ThompsCarib Shuswap	immunized	1,363	-	1,324	1,011	959	1,159	1,265	1,231	1,319	1,163
	total residents	1,451	-	1,468	1,182	1,069	1,268	1,409	1,421	1,527	1,511
	% immunized	94	-	90	86	90	91	90	87	86	77
FRASER	immunized	7,703	6,884	7,911	8,041	8,812	8,608	7,727	8,539	8,651	8,593
	total residents	8,571	8,611	8,750	8,935	9,679	9,411	8,543	9,703	9,804	9,861
	% immunized	90	80	90	90	91	91	90	88	88	87
Fraser East	immunized	1,425	1,192	1,478	1,447	1,559	1,543	1,643	1,456	1,299	1,530
	total residents	1,630	1,631	1,640	1,635	1,768	1,721	1,849	1,631	1,506	1,736
	% immunized	87	73	90	89	88	90	89	89	86	88
Fraser North	immunized	2,614	2,422	3,032	3,035	3,052	3,121	2,942	2,969	2,985	2,928
	total residents	2,878	2,826	3,341	3,333	3,334	3,441	3,231	3,295	3,409	3,287
	% immunized	91	86	91	91	92	91	91	90	88	89
Fraser South	immunized	3,664	3,270	3,401	3,559	4,201	3,944	3,142	4,114	4,367	4,135
	total residents	4,063	4,154	3,769	3,967	4,577	4,249	3,463	4,777	4,889	4,838
	% immunized	90	79	90	90	92	93	91	86	89	85

Table 4 (cont'd): Immunization coverage for residents of residential care facilities by health authority and health service delivery area, 2009/10 to 2017/18

Health region		Influenza Season									
		2009/10	2009/10 H1N1	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
VANCOUVER COASTAL	immunized	6,171	5,325	6,800	6,487	6,387	6,178	4,316	6,258	5,926	5,149
	total residents	6,794	6,794	7,375	7,047	6,960	6,631	4,675	6,809	6,470	5,655
	% immunized	91	78	92	92	92	93	92	92	92	91
Richmond	immunized	832	601	798	789	664	774	252	809	692	419
	total residents	882	882	841	834	705	818	257	861	731	458
	% immunized	94	68	95	95	94	95	98	94	95	91
Vancouver	immunized	3,968	3,566	4,224	4,073	4,013	3,896	3,141	3,882	3,709	3,350
	total residents	4,372	4,372	4,592	4,418	4,345	4,178	3,362	4,225	4,031	3,657
	% immunized	91	82	92	92	92	93	93	92	92	92
N Shore/Coast Garibaldi	immunized	1,371	1,158	1,778	1,625	1,710	1,508	923	1,567	1,525	1,380
	total residents	1,540	1,540	1,942	1,795	1,910	1,635	1,056	1,723	1,708	1,540
	% immunized	89	75	92	91	90	92	87	91	89	90
VANCOUVER ISLAND	immunized	5,606	-	5,617	5,605	5,579	5,792	6,051	6,025	5,911	5,712
	total residents	6,291	-	6,264	6,404	6,370	6,502	7,063	7,332	6,814	6,486
	% immunized	89	-	90	88	88	89	86	82	87	88
South Van Island	immunized	2,996	-	2,988	2,928	2,974	3,109	3,462	3,512	3,364	3,092
	total residents	3,355	-	3,301	3,415	3,424	3,471	4,103	4,373	3,953	3,541
	% immunized	89	-	91	86	87	90	84	80	85	87
Central Van Island	immunized	2,020	-	2,034	2,066	1,993	2,058	1,978	1,938	1,958	1,989
	total residents	2,299	-	2,300	2,308	2,262	2,326	2,275	2,278	2,156	2,214
	% immunized	88	-	88	90	88	88	87	85	91	90
North Van Island	immunized	590	-	595	611	612	625	611	575	589	640
	total residents	637	-	663	681	684	705	685	681	705	731
	% immunized	93	-	90	90	89	89	89	84	84	88

Table 4 (cont'd): Immunization coverage for residents of residential care facilities by health authority and health service delivery area, 2009/10 to 2017/18

Health region		2009/10	2009/10 H1N1	2010/11	2011/12	Influenza season					2017/18
						2012/13	2013/14	2014/15	2015/16	2016/17	
NORTHERN	immunized	950	694	971	956	1,123	1,022	1,001	1,017	998	971
	total residents	1,072	1,075	1,079	1,103	1,257	1,128	1,118	1,139	1,150	1,165
	% immunized	89	65	90	87	89	91	90	89	87	83
Northwest	immunized	216	146	243	241	233	244	247	252	248	246
	total residents	263	264	273	277	283	284	270	279	273	282
	% immunized	82	55	89	87	82	86	91	90	91	87
Northern Interior	immunized	520	378	506	503	556	551	534	558	538	520
	total residents	569	571	562	583	597	594	602	610	628	630
	% immunized	91	66	90	86	93	93	89	91	86	83
Northeast	immunized	214	170	222	212	334	227	220	207	212	205
	total residents	240	240	244	243	377	250	246	250	249	253
	% immunized	89	71	91	87	89	91	89	83	85	81
BC	immunized	25,398	-	26,380	26,432	26,784	25,317	24,532	26,990	26,977	25,749
	total residents	28,376	-	29,453	29,811	30,109	28,105	27,707	31,145	30,951	29,838
	% immunized	90	-	90	89	89	90	89	87	87	86

Coverage excluding privately funded residential care facilities

Table 5: Number and percent of residential care facilities reporting resident coverage, by health authority, 2017/18 (excluding privately funded residential care facilities)

Health authority	Residential care facilities		
	Reported	Total	% reported
Interior	69	70	98
Fraser	85	92	92
Vancouver Coastal	18	21	86
Vancouver Island	60	60	100
Northern	22	22	100
British Columbia	254	265	96

Table 6: Influenza vaccination coverage for residents of residential care facilities by health authority and health service delivery area, 2017/18 (excluding privately funded residential care facilities)

Health authority	Residential care facility residents		
	Immunized	Total	%
Interior	4,139	5,179	80
East Kootenay	348	378	81
Kootenay Boundary	305	378	81
Okanagan	2,553	3,149	80
Thompson/Cariboo/Shuswap	953	1,213	79
Fraser	7,740	8,867	87
Fraser East	1,459	1,654	88
Fraser North	2,654	2,988	89
Fraser South	3,627	4,225	86
Vancouver Coastal	4,749	5,368	88
Richmond	321	351	91
Vancouver	776	886	93
N Shore/Coast Garibaldi	587	648	91
Vancouver Island	4,749	5,368	84
South Vancouver Island	2,343	2,669	88
Central Vancouver Island	1,766	1,968	90
North Vancouver Island	640	731	88
Northern	854	1,016	86
Northwest	246	282	87
Northern Interior	403	481	87
Northeast	205	253	81
BC	19,166	22,262	86