

Influenza vaccination coverage for staff of long term care facilities British Columbia, 2018/19 – Summary Report

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

Targets for coverage among staff of long term care facilities at the provincial and national levels are 80%, and 95% at the national level for staff with extensive resident contact.^{1,2}

Objectives

To quantify the proportion of staff in BC long term care facilities who:

- i) Were vaccinated against influenza in the 2018/19 season
- ii) Self-reported their vaccination or vaccine declination including by job type
- iii) Were vaccinated by different provider types

Methods

Please refer to the separate Methods document for a full description of methods including definitions, data sources, and analyses as well as changes to methodology that should be used to interpret coverage trends over time.

Results

Reporting of facilities (**Table 1 & 2**)

- Out of 367 long term care facilities in BC, 352 are included in this analysis, and 330 (94%) reported influenza immunization coverage for long term care staff
- 95/330 (29%) facilities used data from the WHITE database; 235/330 (71%) facilities used data entered by health authority staff into the BCCDC web application because WHITE data were not available.

2018/19 influenza vaccination coverage (**Figures 1-3, Table 3**)

- 74% (29,581/39,850) of staff of long term care facilities in BC reported influenza vaccine receipt, a decrease from last year (76%)
- 66% to 79% coverage was the range across the five regional health authorities
- 54% to 81% coverage was the range across the sixteen health service delivery areas
- 11% to 100% coverage was the range across all residential care facilities in BC
- 160/330 (48%) facilities met the provincial and national target of 80% coverage, a decrease from the previous three flu seasons (50% for each).

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>

2. Public Health Agency of Canada. Vaccination Coverage Goals and Vaccine Preventable Disease Reduction Targets by 2025. Available at: <https://www.canada.ca/en/public-health/services/immunization-vaccine-priorities/national-immunization-strategy/vaccination-coverage-goals-vaccine-preventable-diseases-reduction-targets-2025.html>

Results excluding privately funded facilities

- 238/264 (90%) owned and operated, or contracted long term care facilities that report coverage for residential care staff were included
- 67% to 79% coverage was the range across the five regional health authorities
- 74% (22,292/30,217) of staff were vaccinated against influenza

Table 1: Long term care facilities included by health authority, 2018/19

| Health authority | Reported facilities | Facilities included in analysis | % reported | Excluded from analysis* | Total LTC Facilities |
|-------------------------|---------------------|---------------------------------|------------|-------------------------|----------------------|
| Interior | 89 | 91 | 98 | - | 91 |
| Fraser | 99 | 107 | 93 | - | 107 |
| Vancouver Coastal | 49 | 56 | 88 | 5 | 61 |
| Vancouver Island | 77 | 81 | 95 | 3 | 84 |
| Northern | 16 | 17 | 94 | 7 | 24 |
| British Columbia | 330 | 352 | 94 | 15 | 367 |

* Facilities were excluded from analysis if they were based in an acute site, and, therefore, staff coverage could not be disaggregated from the acute site in the WHITE data.

Table 2: Data source used to calculate influenza vaccination coverage, 2018/19

| Health authority | Long term care facilities | | |
|-------------------------|---------------------------|------------|------------|
| | WHITE* | Aggregate* | Total |
| Interior | 33 | 56 | 89 |
| Fraser | 17 | 82 | 99 |
| Vancouver Coastal | 15 | 34 | 49 |
| Vancouver Island | 16 | 61 | 77 |
| Northern | 14 | 2 | 16 |
| British Columbia | 95 | 235 | 330 |

Note: WHITE data were preferentially used when available.

* WHITE: facility influenza immunization coverage statistics were calculated from the Workplace Health Indicator Tracking and Evaluation database.

Aggregate: facility influenza immunization coverage statistics were reported in aggregate format by health authority staff.

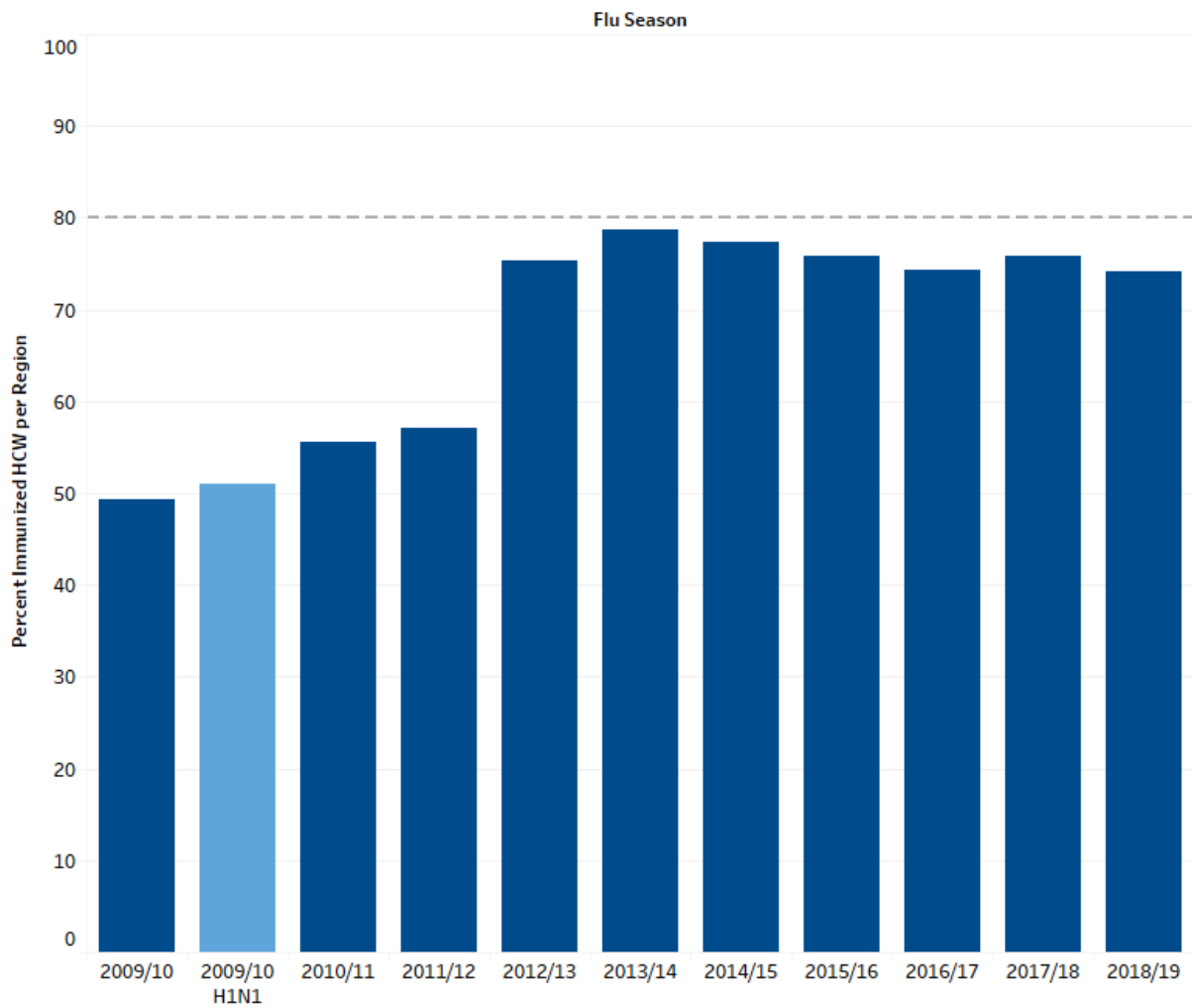


Figure 1: Influenza immunization coverage for staff of long term care facilities by flu season, British Columbia 2009/10 - 2018/19

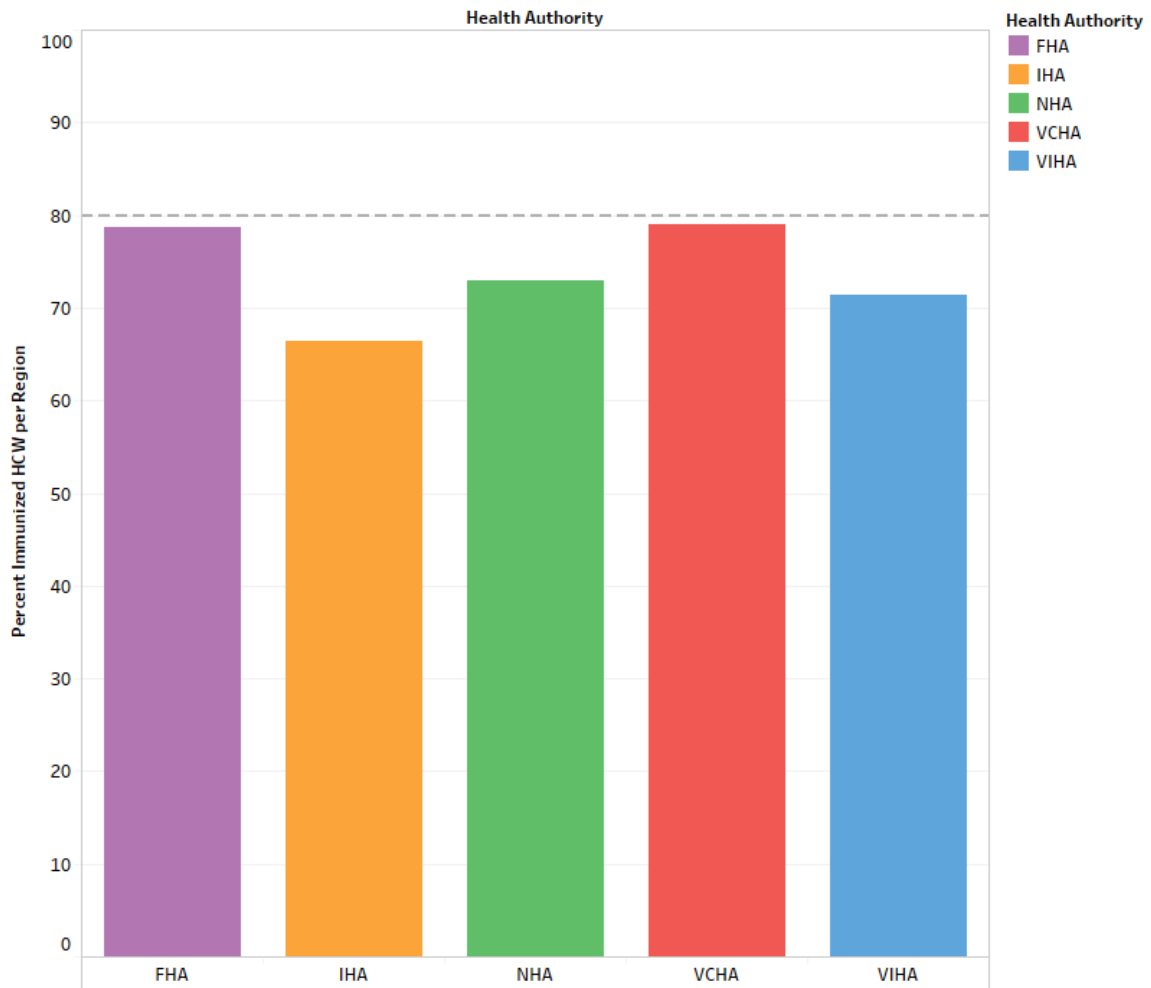


Figure 2: Influenza immunization coverage for staff of long term care facilities by health authority, British Columbia 2018/19

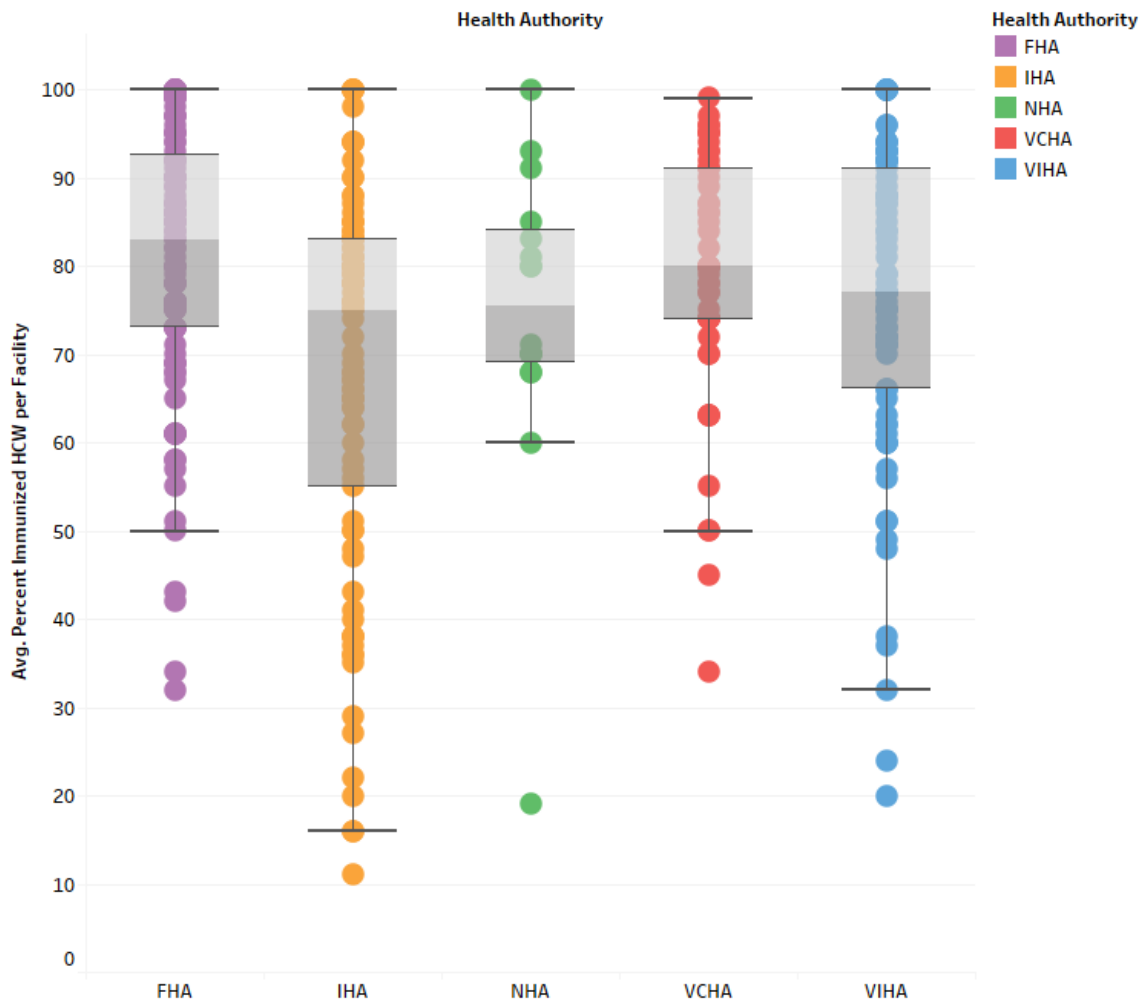


Figure 3: Influenza immunization coverage for staff of long term care facilities per facility and by health authority, British Columbia 2018/19

Table 3: Immunization coverage for staff of long term care facilities by health authority and health service delivery area, 2009/10 to 2018/19

| Health authority | | Influenza season | | | | | | | | | | |
|----------------------|-------------|------------------|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | | 2009/10 | 2009/10 H1N1 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 |
| INTERIOR | immunized | 3,300 | - | 3,606 | 4,359 | 5,386 | 4,801 | 5,819 | 5,627 | 6,366 | 6,258 | 5,735 |
| | total staff | 7,913 | - | 7,576 | 8,807 | 7,815 | 6,547 | 7,878 | 7,803 | 8,906 | 8,703 | 8,627 |
| | % immunized | 42 | - | 48 | 49 | 69 | 73 | 74 | 72 | 71 | 72 | 66 |
| East Kootenay | immunized | 303 | - | 235 | 277 | 655 | 626 | 594 | 650 | 703 | 626 | 576 |
| | total staff | 786 | - | 633 | 690 | 946 | 935 | 802 | 1,054 | 1,029 | 986 | 755 |
| | % immunized | 39 | - | 37 | 40 | 69 | 67 | 74 | 62 | 68 | 63 | 76 |
| Kootenay Boundary | immunized | 260 | - | 307 | 324 | 538 | 583 | 522 | 546 | 633 | 670 | 500 |
| | total staff | 824 | - | 878 | 777 | 881 | 836 | 809 | 779 | 915 | 978 | 924 |
| | % immunized | 32 | - | 35 | 42 | 61 | 70 | 65 | 70 | 69 | 69 | 54 |
| Okanagan | immunized | 1,809 | - | 2,075 | 3,051 | 3,181 | 2,272 | 3,286 | 3,117 | 3,622 | 3,490 | 3,398 |
| | total staff | 4,572 | - | 4,332 | 5,943 | 4,640 | 3,105 | 4,515 | 4,208 | 5,049 | 4,839 | 5,274 |
| | % immunized | 40 | - | 48 | 51 | 69 | 73 | 73 | 74 | 72 | 72 | 64 |
| Thomps Carib Shuswap | immunized | 928 | - | 989 | 707 | 1,012 | 1,320 | 1,417 | 1,314 | 1,408 | 1,472 | 1,261 |
| | total staff | 1,731 | - | 1,733 | 1,397 | 1,348 | 1,671 | 1,752 | 1,762 | 1,913 | 1,900 | 1,674 |
| | % immunized | 54 | - | 57 | 51 | 75 | 79 | 81 | 75 | 74 | 79 | 75 |
| FRASER | immunized | 5,790 | 5,661 | 6,262 | 6,903 | 8,756 | 6,059 | 8,247 | 7,494 | 9,653 | 11,281 | 10,322 |
| | total staff | 10,890 | 10,795 | 10,746 | 11,041 | 10,955 | 6,937 | 10,084 | 9,457 | 12,708 | 14,259 | 13,110 |
| | % immunized | 53 | 52 | 58 | 63 | 80 | 87 | 82 | 79 | 76 | 79 | 79 |
| Fraser East | immunized | 1,118 | 1,010 | 1,303 | 1,370 | 1,409 | 875 | 1,434 | 1,533 | 1,752 | 2,278 | 1,625 |
| | total staff | 2,185 | 2,179 | 2,109 | 2,093 | 1,839 | 999 | 1,755 | 1,907 | 2,293 | 2,895 | 2,072 |
| | % immunized | 51 | 46 | 62 | 65 | 77 | 88 | 82 | 80 | 76 | 79 | 78 |
| Fraser North | immunized | 2,187 | 2,155 | 2,294 | 2,616 | 3,362 | 2,589 | 3,577 | 2,801 | 3,495 | 4,220 | 3,827 |
| | total staff | 3,818 | 3,806 | 3,982 | 3,955 | 4,213 | 3,025 | 4,562 | 3,470 | 4,528 | 5,214 | 4,742 |
| | % immunized | 57 | 57 | 58 | 66 | 80 | 86 | 78 | 81 | 77 | 81 | 81 |
| Fraser South | immunized | 2,485 | 2,496 | 2,665 | 2,917 | 3,985 | 2,595 | 3,236 | 3,160 | 4,406 | 4,783 | 4,870 |
| | total staff | 4,887 | 4,810 | 4,655 | 4,993 | 4,903 | 2,913 | 3,767 | 4,080 | 5,887 | 6,150 | 6,296 |
| | % immunized | 51 | 52 | 57 | 58 | 81 | 89 | 86 | 77 | 75 | 78 | 77 |

Table 3 (cont'd): Immunization coverage for staff of long term care facilities by health authority and health service delivery area, 2009/10 to 2018/19

| Health authority | | Influenza season | | | | | | | | | | |
|--------------------------|-------------|------------------|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | | 2009/10 | 2009/10 H1N1 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 |
| VANCOUVER COASTAL | immunized | 5,239 | 4,645 | 5,604 | 5,272 | 6,350 | 7,077 | 5,652 | 7,028 | 6,789 | 6,312 | 5,877 |
| | total staff | 8,564 | 8,564 | 8,073 | 7,816 | 7,652 | 8,491 | 6,672 | 8,215 | 8,233 | 7,750 | 7,432 |
| | % immunized | 61 | 54 | 69 | 67 | 83 | 83 | 85 | 86 | 82 | 81 | 79 |
| Richmond | immunized | 669 | 443 | 586 | 625 | 701 | 805 | 644 | 789 | 725 | 337 | 590 |
| | total staff | 930 | 930 | 820 | 903 | 803 | 918 | 706 | 894 | 847 | 447 | 736 |
| | % immunized | 72 | 48 | 71 | 69 | 87 | 88 | 91 | 88 | 86 | 84 | 80 |
| Vancouver | immunized | 3,342 | 3,138 | 3,734 | 3,445 | 4,196 | 4,827 | 3,881 | 4,493 | 4,612 | 4,396 | 4,556 |
| | total staff | 5,421 | 5,421 | 5,257 | 4,922 | 5,020 | 5,662 | 4,514 | 5,267 | 5,507 | 5,339 | 5,691 |
| | % immunized | 62 | 58 | 71 | 70 | 84 | 85 | 86 | 85 | 84 | 82 | 80 |
| N Shore/Coast Garibaldi | immunized | 1,228 | 1,064 | 1,284 | 1,202 | 1,453 | 1,445 | 1,127 | 1,746 | 1,452 | 1,539 | 731 |
| | total staff | 2,213 | 2,213 | 1,996 | 1,991 | 1,829 | 1,911 | 1,452 | 2,054 | 1,879 | 1,964 | 1,005 |
| | % immunized | 55 | 48 | 64 | 60 | 79 | 76 | 78 | 85 | 77 | 78 | 73 |
| VANCOUVER ISLAND | immunized | 3,596 | - | 4,101 | 4,166 | 5,852 | 6,068 | 6,350 | 6,240 | 6,005 | 6,660 | 6,614 |
| | total staff | 8,382 | - | 8,681 | 8,244 | 8,370 | 8,429 | 8,941 | 9,049 | 8,834 | 9,446 | 9,265 |
| | % immunized | 43 | - | 47 | 51 | 70 | 72 | 71 | 69 | 68 | 71 | 71 |
| South Van Island | immunized | 2,069 | - | 2,255 | 2,170 | 3,263 | 3,273 | 3,487 | 3,316 | 3,229 | 3,682 | 3,513 |
| | total staff | 4,364 | - | 4,322 | 4,016 | 4,563 | 4,475 | 4,992 | 4,936 | 4,748 | 5,200 | 4,928 |
| | % immunized | 47 | - | 52 | 54 | 72 | 73 | 70 | 67 | 68 | 71 | 71 |
| Central Van Island | immunized | 1,132 | - | 1,398 | 1,441 | 1,894 | 2,107 | 2,163 | 2,194 | 2,020 | 2,221 | 2,384 |
| | total staff | 3,043 | - | 3,283 | 3,218 | 2,828 | 3,106 | 3,117 | 3,212 | 3,120 | 3,273 | 3,429 |
| | % immunized | 37 | - | 43 | 45 | 67 | 68 | 69 | 68 | 65 | 68 | 70 |
| North Van Island | immunized | 395 | - | 448 | 555 | 695 | 688 | 700 | 730 | 756 | 757 | 717 |
| | total staff | 975 | - | 1,076 | 1,010 | 979 | 848 | 832 | 901 | 966 | 973 | 908 |
| | % immunized | 41 | - | 42 | 55 | 71 | 81 | 84 | 81 | 78 | 78 | 79 |

Table 3 (cont'd): Immunization coverage for staff of long term care facilities by health authority and health service delivery area, 2009/10 to 2018/19

| Health authority | | 2009/10 | 2009/10 H1N1 | 2010/11 | 2011/12 | Influenza season | | | | | | |
|-------------------|-------------|---------|-----------------|---------|---------|------------------|---------|---------|---------|---------|---------|---------|
| | | | | | | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 |
| NORTHERN | immunized | 529 | 424 | 777 | 835 | 1,273 | 1,035 | 1,099 | 974 | 1,078 | 1,156 | 1,033 |
| | total staff | 1,651 | 1,647 | 1,584 | 1,792 | 1,828 | 1,432 | 1,558 | 1,544 | 1,562 | 1,596 | 1,416 |
| | % immunized | 32 | 26 | 49 | 47 | 70 | 72 | 71 | 63 | 69 | 72 | 73 |
| Northwest | immunized | 177 | 132 | 284 | 296 | 394 | 287 | 327 | 271 | 292 | 333 | 276 |
| | total staff | 434 | 457 | 458 | 511 | 495 | 368 | 401 | 382 | 416 | 439 | 352 |
| | % immunized | 41 | 29 | 62 | 58 | 80 | 78 | 82 | 71 | 70 | 76 | 78 |
| Northern Interior | immunized | 270 | 225 | 369 | 423 | 616 | 574 | 594 | 542 | 597 | 612 | 584 |
| | total staff | 828 | 801 | 842 | 875 | 866 | 769 | 857 | 843 | 833 | 838 | 795 |
| | % immunized | 33 | 28 | 44 | 48 | 71 | 75 | 69 | 64 | 72 | 73 | 73 |
| Northeast | immunized | 82 | 67 | 124 | 116 | 263 | 174 | 178 | 161 | 189 | 211 | 173 |
| | total staff | 389 | 389 | 284 | 406 | 467 | 295 | 300 | 319 | 313 | 320 | 269 |
| | % immunized | 21 | 17 | 44 | 29 | 56 | 59 | 59 | 50 | 60 | 66 | 64 |
| BC | immunized | 18,454 | - | 20,350 | 21,535 | 27,617 | 25,040 | 27,167 | 27,363 | 29,891 | 31,667 | 29,581 |
| | total staff | 37,400 | - | 36,660 | 37,700 | 36,620 | 31,836 | 35,133 | 36,068 | 40,243 | 41,755 | 39,850 |
| | % immunized | 49 | - | 56 | 57 | 75 | 79 | 77 | 76 | 74 | 76 | 74 |

2018/19 policy compliance results (**Figure 4, Table 4**)

- Policy compliance status was available for 38% (11,492/30,217) of staff at long term care facilities that are included in WHITE data (n=95)
- Allied health staff reported the highest coverage
- 79% of staff in long term care facilities in BC reported being vaccinated, 11% reported declining vaccination, and 10% did not report vaccination status and were considered to be unvaccinated

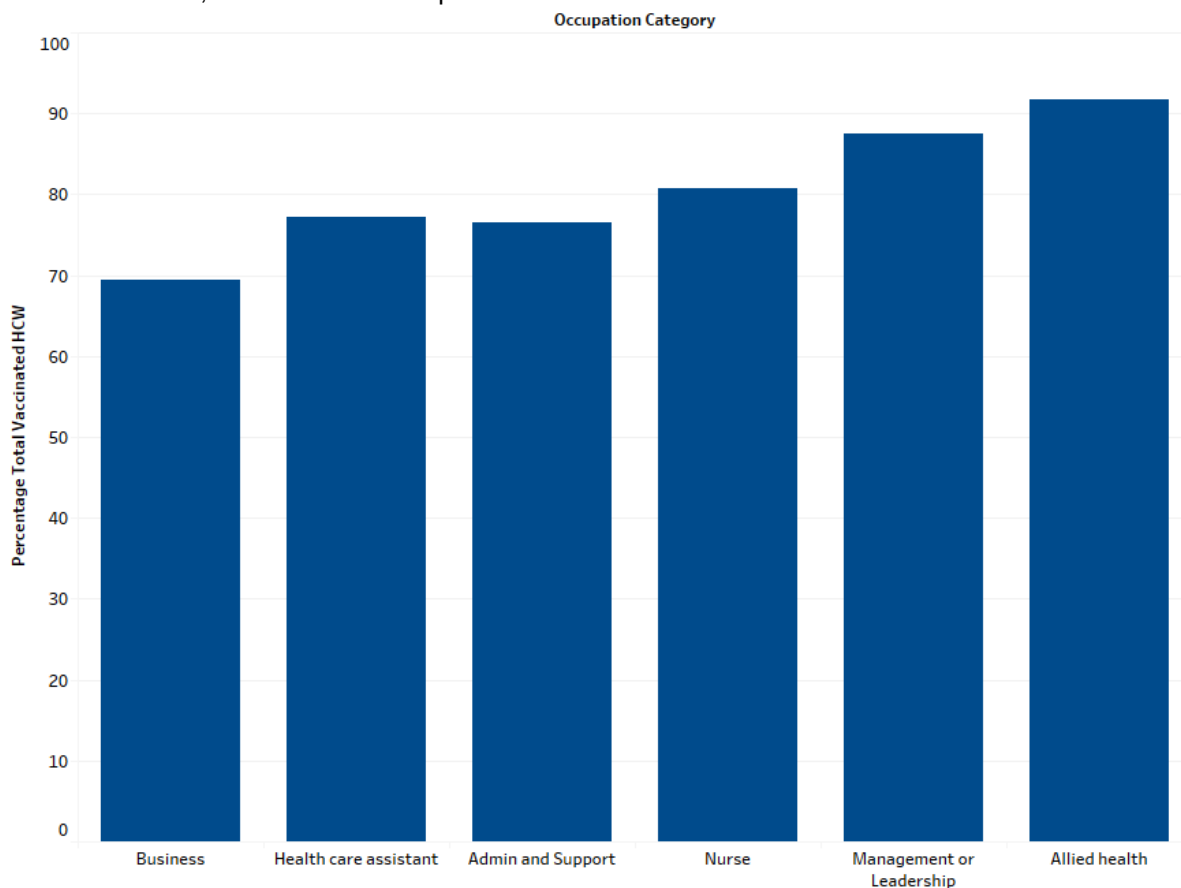


Figure 4: Influenza immunization coverage for staff of long term care facilities by occupation group, British Columbia 2018/19

Table 4: Influenza Prevention Policy compliance for staff of long term care facilities who are included in WHITE by health authority, 2018/19

| Health Authority | Compliance Status | | | | | | Total No. | Total % |
|------------------|-------------------|-----------|-------------|-----------|--------------|-----------|--------------|------------|
| | Vaccinated | | Declined | | Not reported | | | |
| | No. | % | No. | % | No. | % | | |
| IHA | 2561 | 80 | 355 | 11 | 296 | 9 | 3212 | 100 |
| FHA | 2141 | 81 | 276 | 10 | 241 | 9 | 2658 | 100 |
| VCHA | 1613 | 79 | 171 | 8 | 262 | 13 | 2046 | 100 |
| VIHA | 1820 | 78 | 290 | 12 | 226 | 10 | 2336 | 100 |
| NHA | 920 | 74 | 203 | 16 | 117 | 9 | 1240 | 100 |
| Total | 9055 | 79 | 1295 | 11 | 1142 | 10 | 11492 | 100 |