

# Influenza Vaccination Coverage for Health Care Workers in Colorado



2016-2017 Report



# Introduction

Influenza is a serious and highly contagious respiratory illness. Certain groups are especially vulnerable, including the elderly, pregnant women, young children and people with chronic medical conditions. It is estimated that every year approximately 3,000 Coloradans are hospitalized for influenza, and 600 die from complications related to flu. Because health care workers (HCWs) regularly come into contact with these vulnerable patients, a high level of HCW vaccination coverage is an essential part of infection prevention and disease control.

[Colorado Board of Health Rule 6 CCR 1011-1 Chap 02, Part 10](#) pertains to influenza vaccination of employees in licensed health care facilities. The intent of the rule is to promote patient safety by protecting vulnerable patients from influenza. The rule, which applies to all health care facilities licensed by the Colorado Department of Public Health and Environment (CDPHE), has two requirements:

1. Facilities must keep track of the number of employees who are vaccinated against influenza and annually report that number to CDPHE, either through the Health Facilities Division (HFD) Portal, OR the National Healthcare Safety Network (NHSN). Because of differences in federal and state reporting requirements, facilities reporting through HFD Portal are required to report by March 31, and facilities reporting through NHSN must report by May 15.
2. Facilities must ensure that 90 percent of their healthcare workers have received an annual influenza vaccine. If this threshold is not met, facilities must implement a policy based on its classification.
  - a. Facilities classified as general hospitals, hospital units, ambulatory surgical centers, and long-term care facilities must implement an influenza vaccination policy to ensure each of its health care workers has been vaccinated or has a documented medical exemption. Workers without proof of vaccination and those with medical exemptions to vaccination must wear surgical/procedure masks through the entire influenza season.
  - b. Facilities classified as assisted living residences, community clinics, community mental health centers, facilities for people with developmental disabilities, hospices, dialysis treatment centers, home care agencies, psychiatric hospitals, rehabilitation hospitals, convalescent centers, and acute treatment units must assess its workforce and residents/patients, then develop a policy regarding vaccination and masking of employees.

For general information about the Board of Health Healthcare Worker Influenza Vaccination Rule requirements, please call 303-692-2930 or 303-692-2789.

# 2016-2017 reporting results

Table 1 shows the total number of licensed health care facilities required to report influenza vaccination data, the number and percent that reported, the electronic system used to report, and the number and percent of facilities that achieved 90 percent and 100 percent compliance for the last three reporting years. The proportion of facilities that submitted data has risen over the last three years from 61 percent to 68 percent. When facilities opening after December 2016 were removed from analyses, the proportion that submitted data is 70 percent. The proportion of reporting facilities achieving the 90 percent threshold has remained steady at 63 percent for the last three years.

**Table 1: Number of facilities required to report, and number and percent reporting, by year**

	2014-2015	2015-2016	2016-2017
<b>Total licensed facilities</b>	2,255	2,333	2,464
<b>Total reporting facilities</b>	1,384 (61%)	1,531 (66%)	1,665 (68%)
<b>Through state portal</b>	1,256 (91%)	1,319 (86%)	1,437 (86%)
<b>Through NHSN</b>	128 (9%)	212 (14%)	228 (14%)
<b>Achieved ≥ 90% vaccinated</b>	874 (63%)	963 (63%)	1,050 (63%)
<b>Achieved ≥ 100% vaccinated</b>	372 (27%)	404 (26%)	439 (26%)

Table 2 demonstrates that 91 percent of the total staff at reporting health care facilities received an influenza vaccination. Hospitals had the highest proportion of staff vaccinated (96 percent) followed by ambulatory surgery centers, dialysis centers, and nursing homes, each having 94 percent vaccinated. Home health care agencies and residential care centers for the developmentally disabled had the lowest proportions (65 percent and 69 percent respectively) of staff immunized. Note that staff may be counted in more than one facility and that “other facilities” include acute treatment units (n=5), birth centers (n=5), comprehensive outpatient rehabilitation centers (n=1), convalescent centers (n=11) and rural health clinics (n=3). There are fewer than 12 each of these facility types.

**Table 2: Number and percent of staff immunized, by facility type, 2016-2017**

Facility type	Total number of facilities	Number (%) of facilities that reported	Number (%) of facilities achieving 90% compliance*	Total staff in reporting facilities	Number (%) of staff immunized in reporting facilities*
ASC	124	100 (81%)	82 (82%)	9,105	8,561 (94%)
Assisted living residence	663	455 (69%)	305 (67%)	13,119	11,351(86%)
Community clinic	83	48 (59%)	44 (92%)	10,903	10,561 (86%)
Community mental health center	22	11 (50%)	7 (64%)	3,340	2,858 (86%)
Dialysis center	80	60 (75%)	54 (90%)	1,959	1,843 (94%)
Home health care	870	485 (56%)	187 (39%)	31,328	20,503 (65%)
Hospice	90	60 (67%)	42 (70%)	3,027	2,799 (92%)
Hospital	112	101 (90%)	94 (93%)	145,168	140,086 (96%)
Intermediate care for ID	21	19 (90%)	14 (74%)	2,904	2,715 (93%)
Nursing home	233	192 (82%)	166 (86%)	28,745	27,110 (94%)
Residential care for DD	141	125 (89%)	46 (37%)	1,939	1,336 (69%)
Other facilities	25	9 (36%)	8 (89%)	237	227 (96%)
<b>Total</b>	<b>2,464</b>	<b>1,665 (68%)</b>	<b>1,049 (63%)</b>	<b>251,774</b>	<b>229,950 (91%)</b>

Note: ASC = ambulatory surgery center; ID = intellectually delayed; DD = developmentally delayed.

\*Out of 1,665 reporting facilities

Figure 1 shows that in 2016 - 2017, 68 percent of facilities submitted the required immunization data compared to 66 percent in 2015 - 2016 and 61 percent in 2014 - 2015. The number of licensed health care facilities required to report continues to grow each year, and the proportion of facilities that submitted reports improved over the last three reporting years.

**Figure 1: Number and percent of reporting facilities by year**

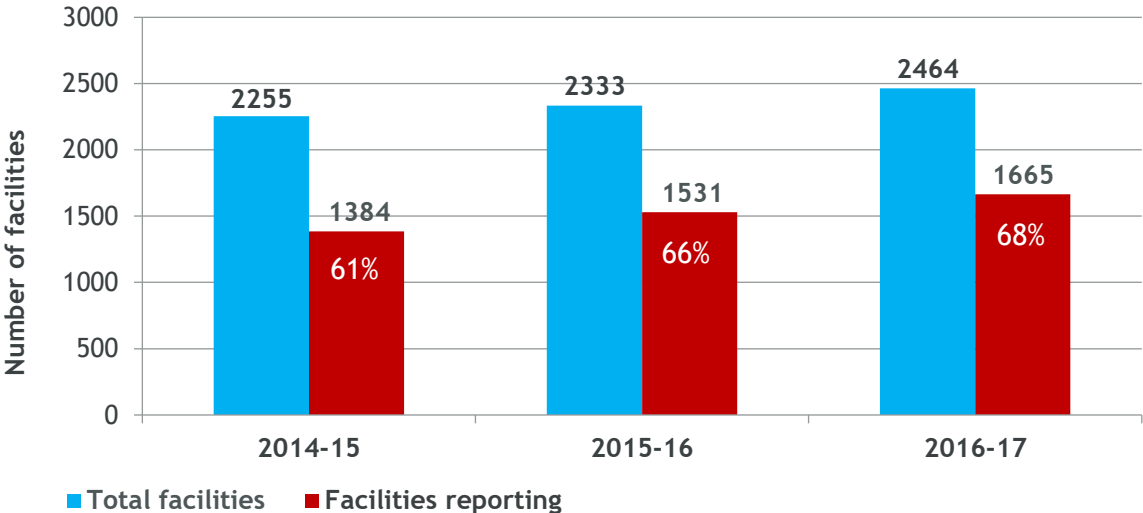
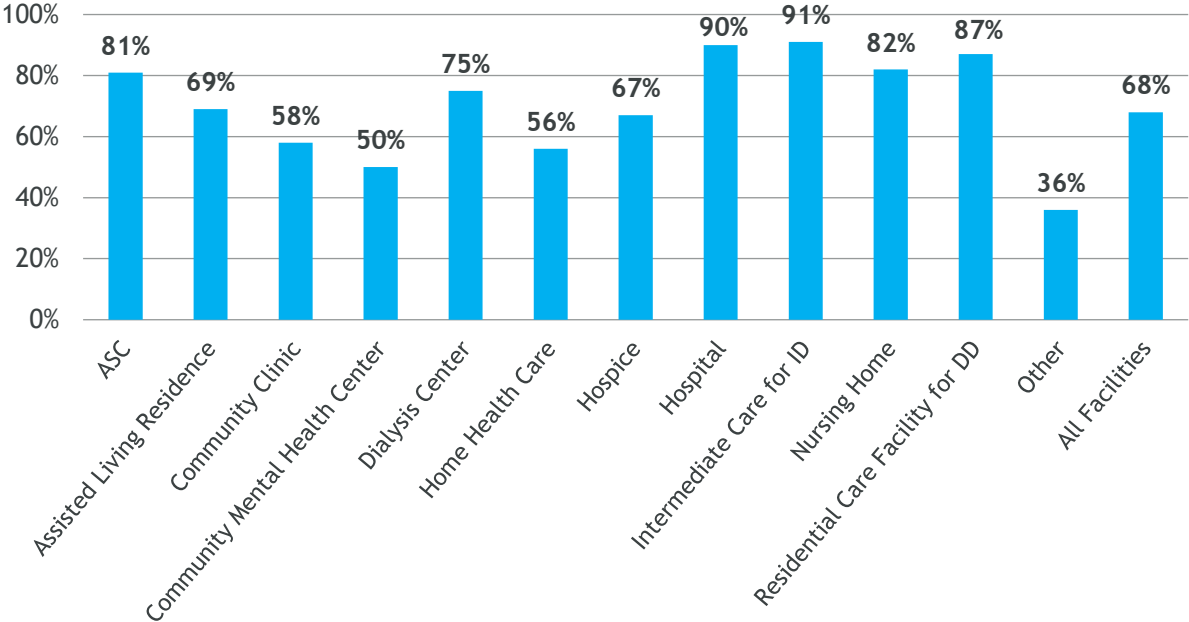


Figure 2 shows the proportion of all facilities that submitted the required immunization data, by facility type. Note that the hospital category includes psychiatric hospitals and hospital units. “Other” consists of all facility types with less than 12 facilities each and this includes acute treatment units (n=5), birth centers (n=5), comprehensive outpatient rehabilitation centers (n=1), convalescent centers (n=11) and rural health clinics (n=3).

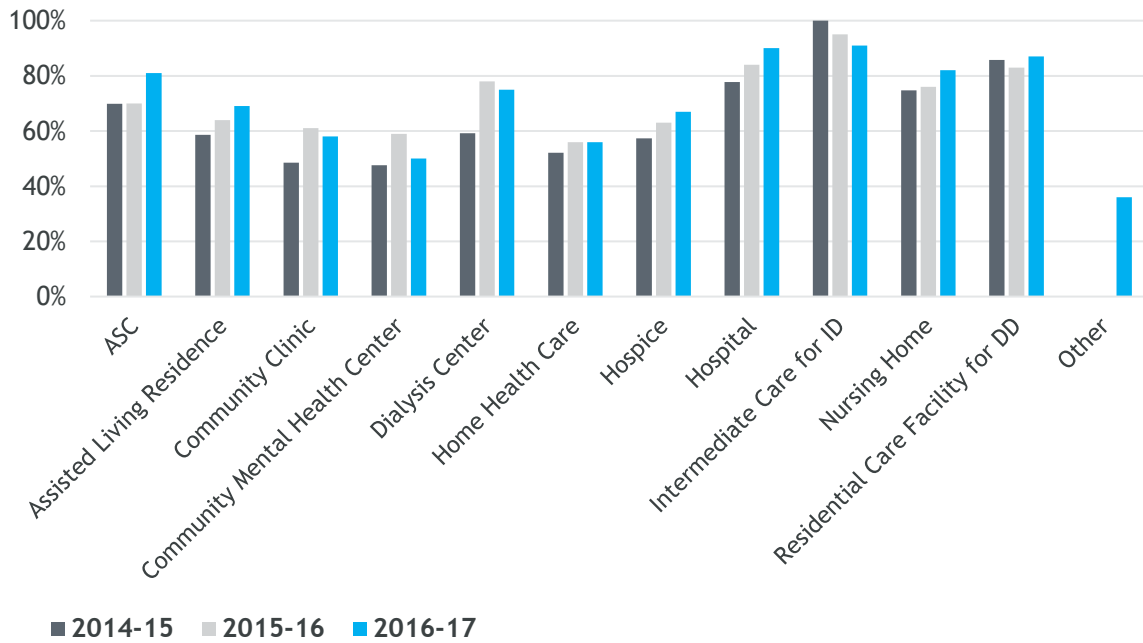
**Figure 2: Percent of all facilities reporting, by facility type, 2016-2017**



Note: ID = intellectually delayed; DD = developmentally delayed

Figure 3 shows the percent of facilities that submitted immunization data by facility type over the last three years.

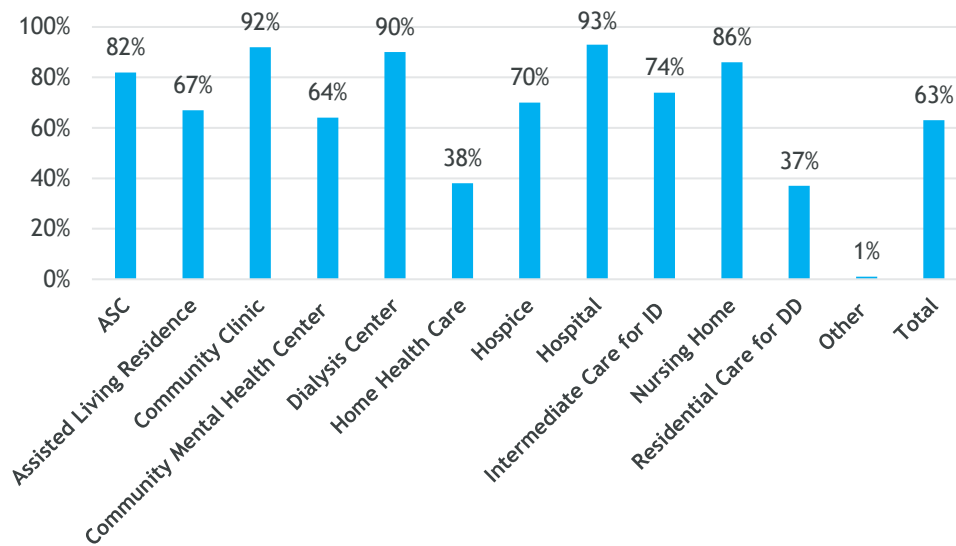
**Figure 3: Percent of all facilities reporting, by type and year**



Note: ID = intellectually delayed; DD=developmentally delayed

The Board of Health rule has specified for the last three flu seasons, facilities must have at least 90 percent of their HCW vaccinated. Figure 4 shows that 63 percent of the 1,665 reporting Colorado facilities achieved the 90 percent vaccination compliance threshold. Home health care agencies and residential care facilities for the developmentally disabled (DD) had the lowest proportions of facilities achieving the threshold.

**Figure 4: Percent of reporting facilities\* achieving 90% compliance, by type, 2016-2017**

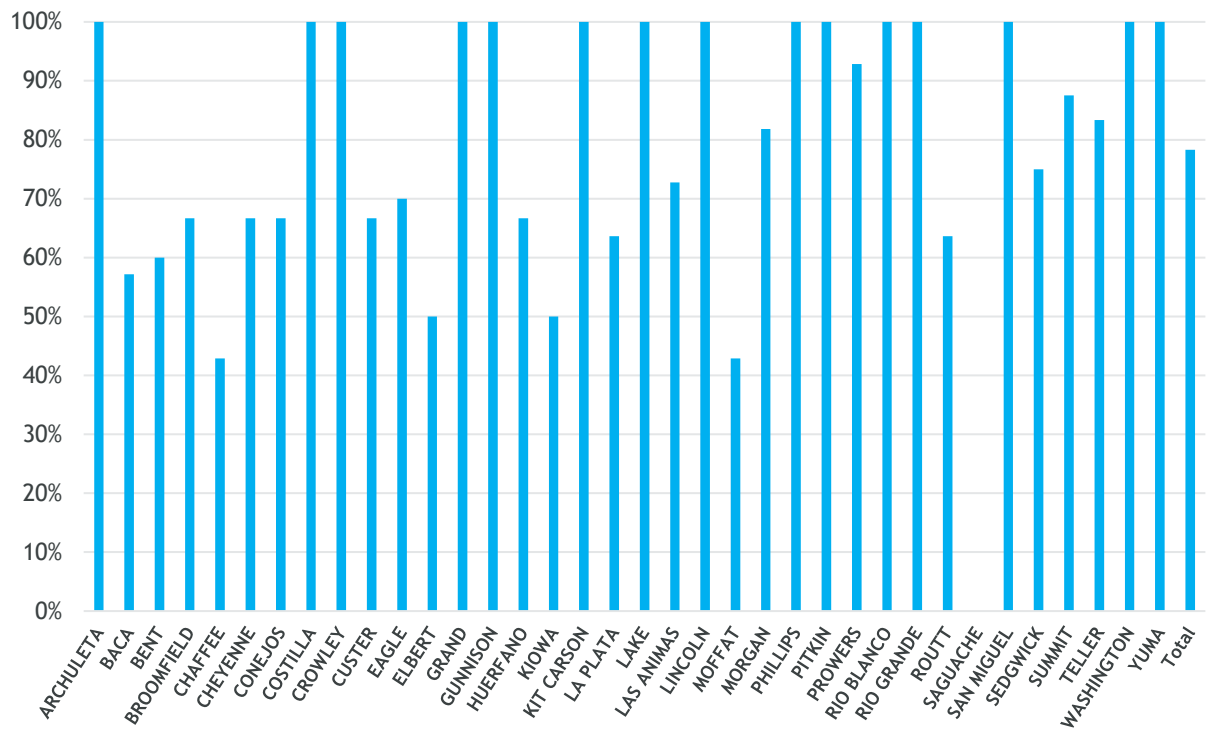


Note: ID = intellectually delayed; DD = developmentally delayed



Figures 5 and 6 show the percent of facilities in each county that vaccinated at least 90 percent of their HCW. Note there are nine counties that have zero licensed health care facilities required to report: Clear Creek, Dolores, Gilpin, Hinsdale, Jackson, Mineral, Ouray, Park and San Juan. Figure 7 shows that same information in map form.

**Figure 5: Percent of reporting facilities\* achieving 90% compliance threshold by county (counties with < 15 facilities)**



**Figure 6: Percent of reporting facilities\* achieving 90% compliance threshold by county (counties with ≥ 15 facilities)**

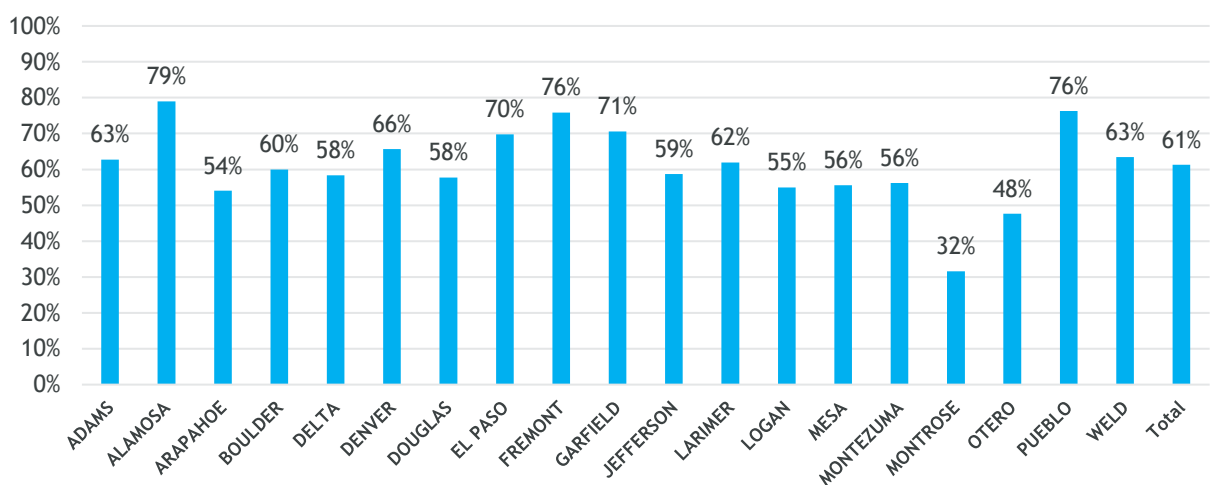


Figure 7: Reporting facilities with 90% immunization by county, 2016-2017

