State of Alaska Epidemiology



Bulletin

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Persistently Low Childhood Vaccination Coverage Rates — Alaska, 2018–2022

Background

The childhood immunization schedule recommended by the Advisory Committee on Immunization Practices (ACIP) protects children against 14 infectious diseases in their first 2 years of life. The 4313314-vaccination series is commonly used for tracking childhood vaccination coverage. This 7-vaccine series consists of 4 DTaP/DT/Td, 3 HIB, 3 Polio, 3 Hep-B, 1 MMR, 1 Varicella, and 4 PCV doses. In 2021, national coverage for the 7-vaccine series was an estimated 70.1% by 24 months (Figure). All vaccines administered in Alaska are reported to VacTrAK, the Alaska Immunization Information System. This *Bulletin* provides an overview of the 4313314-series up-to-date status among Alaska children aged 19 through 35 months.

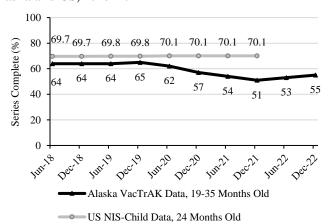
Methods

We examined the proportion of Alaska children aged 19 through 35 months whose 4313314-series was complete in June and December, as reported to VacTrAK during 2018–2022. Vaccine coverage was based on completion of the 7-vaccine series. Vaccine coverage by region and vaccine was extracted as of December 31, 2022.

Results

In December 2022, 55% of children aged 19 through 35 months were up to date with their 4313314-series (Figure). After the COVID-19 pandemic started in early 2020, vaccination coverage declined and reached a low point of 51% in December 2021 (Figure). Series completion rates started to increase during 2022 but were still 10% lower in December 2022 than in December 2019 (Figure).

Figure. Childhood 7-Vaccine Series Coverage Rate (%) — Alaska and US, 2018-2022



The highest percent coverage was with the hepatitis B vaccine and the lowest was with DTaP; series completion rates ranged regionally from 47% in Southwest to 62% in Southeast (Table).

Discussion

During the COVID-19 pandemic in 2020, many children nationwide fell behind in receiving their routine vaccines due to a range of factors, including fewer available appointments, vaccine hesitancy, and parents delaying well-child visits.⁴ Furthermore, vaccination coverage rates declined disproportionally among children living in rural areas or below the federal poverty level; considerable variation in coverage by sociodemographic characteristics persists.⁴ While childhood vaccination coverage rates improved quickly in the US overall, in Alaska, coverage rates have remained considerably lower than pre-pandemic levels.

Vaccine preventable diseases are a threat to the public's health, potentially causing serious illness, disability, or death. In order to ensure that Alaskans are up to date with the current ACIP-recommended vaccinations, the Docket "app" is now available for free to provide people with direct access to their (and their children's) vaccination records electronically (available here).

Access to routine vaccination can be challenging in some communities due to several barriers, including financial restraints, transportation difficulties, and a shortage of health care providers. Communities can help Alaskans overcome vaccination barriers by providing guidance to parents about the importance of well-child checkups and preventive health care; offering lists of local immunization providers; promoting free vaccination clinics at schools, clinics, and public health centers; offering incentives; promoting reminder/recall; and improving vaccine confidence.

Recommendations

- Assure that children are up to date on all ACIPrecommended vaccinations.
- Local communities should create health care/community partnerships aimed to improve childhood vaccination rates.

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Table. Vaccination Coverage Rate (%) among Children Aged 19–35 Months, by Region and Vaccine — Alaska, 2022*†

	4 DTaP/DT/Td	3 HIB	3 Polio	3 Hep B	1 MMR	1 Varicella	4 PCV	Series Complete
Alaska	59	73	75	80	73	69	71	55
Anchorage	62	75	77	81	75	70	73	59
Gulf Coast	56	69	74	78	69	67	66	52
Interior	52	63	68	72	64	63	62	49
Mat-Su	59	71	73	76	69	65	67	54
Northern	56	79	79	89	78	74	76	53
Southeast	66	78	82	86	80	77	76	62
Southwest	54	79	79	89	79	70	75	47

*VacTrAK Data as of December 31, 2022

†4313314: 4 DTaP/DT/Td, 3 HIB, 3 Polio, 3 Hep-B, 1 MMR, 1 Varicella, 4 PCV doses