Retiree Health Plan Advisory Board Meeting Agenda

Date: Thursday May 13, 2021

Time: 9:00am – 3:00pm <u>OnlinePublicNotices</u>

Location: Video Teleconference Only

Teleconference: (650) 479-3207 ID: 177 347 9910 Pswd: 4857 8778

Join meeting

Committee Members: Judy Salo (chair), Lorne Bretz, Joelle Hall, Dallas Hargrave, Paula Harrison,

Cammy Taylor, and G. Nanette Thompson

9:00 am Call to Order – Judy Salo, Board Chair

• Roll Call and Introductions

- Approval of Agenda
- Approve Previous Meeting Minutes
- Ethics Disclosure and Public Comment Script

9:15 am Public Comment

9:30 am Department & Division Update

- Retiree Plan Reporting
- COVID Update
- Long-Term Care Contract
- EGWP Projections

10:00 am Modernization Initiatives

Preventive Care

10:30 am Break

10:45 am Modernization Initiatives Continued

Preventive Care

12:00 pm Lunch

1:00 pm Public Comment

1:30 pm Modernization Initiatives Continued

Preventive Care

2:45 pm Final Thoughts

2021 Meeting Dates: August 5, November 4

3:00 pm Adjourn

Retiree Health Plan Advisory Board

Board Meeting Minutes

Date: Thursday, February 4, 2021 9:00 a.m. to 2:30 p.m.

Location: Virtual meeting via teleconference and WebEx only

Meeting Attendance

Name of Attendee	Title of Attendee				
Retiree Health Plan Advisory Bo	pard (RHPAB) Members				
Judy Salo	Chair Present				
Cammy Taylor	Vice Chair	Present			
Lorne Bretz	Member	Present			
Joelle Hall	Member	Absent			
Dallas Hargrave	Member	Present			
Paula Harrison	Member	Present			
Nan Thompson	Member Present				
State of Alaska, Department of	State of Alaska, Department of Administration Staff				
Ajay Desai	Director, Division of Retirement + Benefits				
Emily Ricci	Chief Health Policy Administrator, Retirement + Benefits				
Betsy Wood	Deputy Health Official, Retirement	+ Benefits			
Teri Rasmussen	Program Coordinator, Retirement -	- Benefits			
Andrea Mueca	Health Operations Manager, Retire	ment + Benefits			
Steve Ramos	Vendor Manager, Retirement + Benefits				
Erika Burkhouse	Assistant Vendor Manager, Retirement + Benefits				
Mike Gamble	Member Liaison, Retirement + Benefits				
Elizabeth Hawkins	Appeals Specialist, Retirement + Benefits				
Christina Vasquez	Appeals Specialist, Retirement + Benefits				

Others Present + Me	embers of the Public		
Hali Duran	Aetna (medical TPA)	Sara Whitley	WA Health Care Authority
Daniel Dudley	Aetna (medical TPA)	Molly Christie	WA Health Care Authority
David Broome	Aetna (medical TPA)	Ellen Wolfhagen	WA Health Care Authority
Blythe Keller	Aetna (medical TPA)	Jean Farone Jones	United Health Care
Stephanie Gaffney	OptumRx (pharmacy TPA)	Michelle Marto	United Health Care
Richard Ward	Segal Consulting	Michael Dorward	Public member
Noel Cruse	Segal Consulting	Shannon Haas	Public member
Eric Miller	Segal Consulting	Eunice Levis	Public member
Zach White	Segal Consulting	Pat Nault	Public member
Martin Fornataro	Segal Consulting	Malan Paquette	Public member
Quentin Gunn	Segal Consulting	Michelle Vollrath	Public member
Anna Brawley	Agnew::Beck Consulting		
Wendy Woolf	Retired Public Employees		
	of Alaska (RPEA)		

Common Acronyms

The following acronyms are commonly used during board meetings and when discussing the retiree health plan generally:

- ACA = Affordable Care Act (formal name: Patient Protection and Affordable Care Act)
- ARMB = Alaska Retirement Management Board
- CMO = Chief Medical Officer
- CMS = Center for Medicare and Medicaid Services
- COB = Coordination of Benefits
- COVID-19 = Novel Coronavirus Disease (identified 2019), also known as SARS-CoV-2
- DB = Defined Benefit plan (for Tier 1, 2, 3 PERS employees and Tier 1, 2 TRS employees)
- DCR = Defined Contribution Retirement plan (Tier 4 PERS employees, Tier 3 TRS employees)
- DOA = State of Alaska Department of Administration
- DRB = Division of Retirement and Benefits, within State of Alaska Department of Administration
- DVA = Dental, Vision, Audio plan available to retirees
- EGWP = Employer Group Waiver Program, a federal program through Medicare Part D that provides reimbursement for retiree pharmacy benefits
- EOB = Explanation of Benefits, provided by the plan administrator detailing claims coverage
- HIPAA = Health Insurance Portability and Accountability Act (1996)
- HRA = Health Reimbursement Arrangement account, a mechanism for the employer to reimburse high-income Medicare enrollees for any premium charge for their plan (IRMAA)
- IRMAA = Income Related Monthly Adjustment Amount, a surcharge from CMS for a Medicare plan for individuals or households earning above certain thresholds
- MA = Medicare Advantage, a type of Medicare plan available in many states
- MAGI = Modified Adjusted Gross Income, based on an individual or household's tax returns and used by CMS to determine what if any premium must be paid for a Medicare plan.
- OPEB = Other Post-Employment Benefits; an accounting term used to describe retirement benefits other than pension benefits, and the retiree health trust
- OTC = Over the counter medication, does not require a prescription to purchase
- PBM = Pharmacy Benefit Manager, a third-party vendor that performs claims adjudication and network management services
- PEC = proposal evaluation committee (part of the procurement process to review vendors' bids)
- PHI = protected health information, a term in HIPAA for any identifying health or personal information that would result in disclosure of an individual's medical situation.
- PMPM = Per member per month, a feature of capitated or managed-care plans
- PPO = Preferred Provider Organization, a type of provider network
- RDS = Retiree Drug Subsidy program (a federal pharmacy subsidy program)
- ROI = Return on Investment
- RFP = Request for Proposals (a term for a procurement solicitation)
- RHPAB = Retiree Health Plan Advisory Board
- TPA = Third Party Administrator
- USPSTF: U.S. Preventive Services Task Force

Meeting Minutes

Item 1. Call to Order + Introductory Business

Chair Judy Salo called the meeting to order at 9:01 a.m. A quorum was present.

Approval of Meeting Agenda

Materials: Agenda packet for 2/4/21 RHPAB Meeting

- Motion by Cammy Taylor to approve the agenda as presented. Second by Paula Harrison.
 - Discussion: None.
 - o **Result**: No objection to approval of agenda as presented. Agenda is approved.

Approval of Previous Meetings' Minutes

Materials: Draft minutes from the previous (11/5/20) RHPAB Meeting and Modernization Committee Meeting (1/20/21).

- Motion by Nan Thompson to approve November 5, 2020 minutes. Second by Dallas Hargrave.
 - Discussion: None.
 - o **Result**: No objection to approval of minutes. Minutes are approved.

Ethics Disclosure

Chair Salo requested that Board members state any ethics disclosures in the meeting and reminded members of the disclosure form available from staff, to keep any necessary disclosures on file.

No disclosures were stated by members.

Item 2. Public Comment

Before beginning public comment, the Board established who was present on the phone or online, and who intended to provide public comments. Individuals were asked to state their full name for the record, and that if there are several people wishing to provide comment, comments will be limited to 3 minutes per person, at the discretion of the chair. Chair Salo also reminded Board members and members of the public of the following:

- 1) A retiree health benefit member's retirement benefit information is confidential by state law;
- 2) A person's health information is protected by HIPAA;
- 3) Testimony will be posted on the Board's website and will be publicly available, including both written comments and statements made verbally in meetings and recorded in the minutes;
- 4) By giving public testimony on those subjects, the person will be treated as having waived their right to confidentiality regarding the subject of their testimony;
- 5) An individual cannot waive this right on behalf of another individual, including spouse or family member;
- 6) The chair would stop testimony if any individual shares protected health information.

Members of the public who provide comments are also encouraged to submit their comments in writing to the Retiree Health Plan Advisory Board: rhpab@alaska.gov.

Public Comments

Malan Paquette, Kenai Peninsula. She has attended a number of public meetings recently. She
thanked the Board and Division staff for their work, and consideration of changes to the health
plan. She stated she is an advocate with an interest in anti-fraud investigations. She is very
concerned about recent data breaches, and the impacts of personal data being released. She
also noted that student loan debt is a significant issue and has some concerns about the
operations of Alaska's student loan corporation.

Item 3. Department of Administration + Division of Retirement & Benefits Updates

Chair Salo asked Emily Ricci to share updates.

Andrea Mueca introduced two new staff: Elizabeth Hawkins, Lead Appeals Specialist; Christina Vasquez, Appeals Specialist. Emily shared they want plan members to know who their team members are, and not a faceless bureaucracy! The Appeals team as well as Member Liaison are available for members.

EGWP Projections Update

Materials: Presentation beginning page 27 in 2/4/21 meeting packet

Emily invited Richard Ward to present.

Richard summarized EGWP: The Employer Group Waiver Plan is a group Medicare Part D pharmacy plan, which includes wraparound benefits through AlaskaCare. The plan is administered by OptumRx. There are several subsidies to the State associated with this plan, which help make the plan more financially sustainable. Page 27 in the agenda packet includes a table illustrating 2019 and 2020 actual subsidies received, as well as projected 2021 subsidies. Each subsidy is calculated in its own way. Some are dependent on spending on claims, while others are based on the number of qualifying members; two subsidies provide funding for premiums and cost-sharing for low-income members. Because most members do not pay premiums, the subsidy's funding flows directly to the plan. In 2019, the total subsidies to the plan equaled \$49.50 million. In 2020, this increased to \$58.38 million, reflecting a higher number of claims. In 2021, this is projected to increase further to approximately \$62.25 million.

For 2021, the plan is projecting higher claim costs, which will also be offset to some extent by higher subsidies. Richard noted that this is partly because more people are enrolling in the program each year, as people age and become eligible for Medicare, increasing the number of people enrolled in the plan.

- Nan Thompson thanked Richard for the clear explanation.
- Judy Salo asked for an explanation of the prior subsidies the state received before implementing EGWP?
 - Richard explained there is also a Retiree Drug Subsidy (RDS) that also provides funding to the state, approximately \$20 million. He also noted that, because of this change and other work by the Division, there has been an approximately \$50 million reduction in liability to OPEB (the retiree health trust) which improves the plan's overall financial position and ability to sustain itself.
- Cammy Taylor commented that as more people become eligible for Medicare, the expectation
 was that Medicare would cover more of the cost. However, she noted that in recent
 performance reports of the AlaskaCare, this did reduce medical costs to the plan, but this was

offset by an increased spend on pharmacy benefits: plan members eligible for Medicare do have more claims and higher spending. How does this impact the plan financially?

spending as retirees age and have more medical needs. He agreed this is important context and should be shared with this subsidy information for a fuller picture.

Emily noted that in December 2020, a federal rule change was proposed by the Trump administration to change Medicare drug rebates and other subsidy structures, with the goal of managing pharmacy costs. She noted that the rule was intended to take effect sooner but is now proposed for January 2023. It is the subject of considerable debate, legal challenges, and there are many uncertainties about how this will work. The Division is tracking this issue and will continue to monitor to figure out how it will impact AlaskaCare. It would affect subsidies such as EGWP. The new federal administration is still determining its position and how this would be implemented, so the delay in rollout is helpful as plans and agencies figure out how this should work.

- Paula Harrison asked how subsidies work for higher-cost medications? For example, if a member has a prescription for an expensive brand-name medication, they will receive a "coupon" or rebate. The member would pay the usual co-pay, but any other subsidies or rebates would return to the plan. Has the Division considered this?
 - Emily shared this has already been implemented in the employee plan as of January 1, 2021, allowing for coupons to be applied to employee members' prescription costs. There are higher out-of-pocket costs for employees, so part of the coupon benefit goes back to the member. It has only been in effect for one month, so the Division intends to monitor its performance and determine if it could be used in the retiree plan. Because retirees pay less out of pocket and the co-pay structure is different, this would need to be done differently in the retiree plan.
 - Paula noted she is very interested in this topic (pharmacy discounts and rebates) and would like to see this available to retiree members if possible, as well as potential for significant savings to the plan.

COVID-19 Update

Emily shared that approximately 13% of Alaska's population have received the COVID-19 vaccination to date: this is encouraging! They are also tracking the number of AlaskaCare members (employees and retirees) who are vaccinated, it is still a small number but growing. About 600 retiree members have received the vaccine, and a smaller number of employees. The Division is monitoring how to ensure members have access to the vaccine and addressing any barriers or administrative issues.

She also shared that many of the plan coverage changes and other benefits related to COVID-19 are tied to the state's disaster declaration, which is set to end on February 14, 2021. Staff are monitoring the discussions at the state Legislature and will be ready to respond as needed.

- Cammy shared appreciation for the work to date to ensure AlaskaCare members are vaccinated, and that the issues she's aware of experienced by some members—having administrative issues signing up or being charged for a fee incorrectly—have been resolved.
 - Emily confirmed they are working to address any issues where a member is charged for the vaccine: federal guidelines require that members be not charged any fees, but the health plan may be charged a "reasonable cost" for members' vaccination.

Long-Term Care Vendor Procurement

Betsy Wood shared that the current long term care plan administrator contract will end mid-year (June 30), and the Division is preparing an RFP to procure third party administrator services for these benefits. Staff asked if one or more board members is interested and available to participate in the process, like prior procurement processes. The RFP will be released in the near future and initiate the process.

- Cammy Taylor commented that it feels very soon after the last time this contract was out for bid! She also shared that she's heard from several retirees that they have had a positive experience with the current vendor, particularly in the area of customer service, and wanted to share this comment.
 - Betsy shared that customer service is an important component of how they evaluate potential vendors, so they will look at this closely. She confirmed that staff have also received similar positive feedback.
- Judy asked for an estimate of how many members have utilized the long-term care benefits to date, and how many vendors provide long term care services?
 - o Emily noted there are two major vendors in this arena, it is a specialty field.
 - Betsy shared that there are about 22,000 members enrolled in one of the long-term care plans, with almost 500 actively using the policy (submitting claims)—about 496 in Q4 2020, and slightly fewer. There are multiple levels: Bronze, Silver, Gold and Platinum, corresponding with the level of benefits.
 - Steve Ramos confirmed that the plan is essentially the same at all levels but differs in the level of daily benefit paid. The Gold and Platinum plans have compound interest as well, increasing the total maximum benefit paid. He noted that in 2014, there were about 200 people utilizing the policy. This reflects growth in the number of people using the plan, but also offset by members who pass away, and a smaller number of people who utilize the benefits for a short period and then do not need them.
 - o Emily added that the Bronze plan is the oldest initial plan offered, and enrollment was closed in the early 2000s, so it is the lowest benefit and a "legacy" plan.
- Judy Salo asked whether staff anticipate any major changes or issues to address in the new RFP, that have been a challenge in the current contract?
 - Steve responded that staff are continually learning about best practices and any problematic or weak portions of the plan and have incorporated these into the new RFP where appropriate.

Other Updates

Andrea Mueca shared that as of this year, the health plan is not required to print and mail a 1095-B (tax form confirming that a person has had health insurance for the prior year). Members who are not Medicare eligible will still receive a mailed form. Members who are Medicare eligible will not receive one by default but can be requested on the Division website or by calling the Contact Center. It is not required for filing taxes but will be available by March.

The Board took a 15-minute break at 10:00 a.m., and returned to the meeting at 10:15 a.m.

Item 4. Medicare Advantage

Materials: Presentation beginning page 28 in 2/4/21 meeting packet

Overview

Emily provided overall context for this discussion: The intent of the Division is to consider whether a Medicare Advantage plan is feasible as an additional option for retiree members, to provide benefits that are not available now in the current plan, while preserving the existing plan. The Medicare Advantage plan would be optional, not mandatory; the plan would supplement existing AlaskaCare benefits; the member would not be responsible for premiums for this plan, unless they are already required to pay premiums for their current health plan. The group is still in the early stages of discussion about whether or not this is feasible, and there are many questions and details to work through before making any determination to move forward. The Division will communicate along the way and ensure members have opportunities to provide feedback before any decision is made. If this concept moves forward, staff will communicate what the options are for designing a plan that meets retirees' needs.

The State of Washington has some experience with Medicare Advantage, and has been asked to present to the board this afternoon. Their plan is somewhat different because their MA plan included medical and pharmacy benefits, which Alaska is not considering. But their recent experience can provide a useful example, and help Alaska evaluate the options.

Richard Ward presented the overview slides beginning on page 28 in the packet:

Medicare has 4 parts: hospital care (A), physician and outpatient services (B), Medicare Advantage supplemental plans (C), and pharmacy benefits (D). Parts A and B are administered by CMS, Part C are private-sector plans offered with additional benefits, and Part D has multiple plans, including group plans like EGWP, which AlaskaCare offers. The Medicare Modernization Act of 2003 had several components, including allowing Medicare Advantage, EGWP and the Retiree Drug Subsidy (RDS).

Medicare coordinates with other plans: by law in Alaska, a person eligible for Medicare must enroll and the Medicare plan becomes their primary plan, and coordinates with any secondary plans. There are options to coordinate plans, but it is complex to administer, has a lengthy claims process, and where wellness or preventive benefits are offered, there is little incentive within the plan to do this, because most of the savings (about 80%) for avoided health care costs go back to Medicare, not the plan itself.

Medicare Advantage (MA) plans creates an integrated claims process, including Parts A and B claims, rather than coordinating with the secondary plan. This is similar to the non-Medicare retiree plan and other commercial plans, where all claims go to Aetna. The plan can also offer additional benefits beyond what is covered by Medicare itself, such as wellness programs. In addition to being fully insured (premiums cover the cost of benefits provided), MA plan carriers receive a capitated payment (per member) subsidizing overall cost of coverage. Payments are determined from multiple factors, including by geographic area/county, risk level of the population, etc.

There are individual MA plans, offered by carriers on the commercial market, and also group MA plans, which operate through the person's existing health plan. For a group plan offered through a health plan, individual members do not have to enroll with a third party, but within the plan, and do not have to participate in the annual enrollment period for individual plans. Additionally, the plans do have differences from other plans: services, particularly for office visits and outpatient care, do not have large deductibles, but instead use co-pays for routine services. This is beneficial to the member, not having to

pay significant cost upfront earlier in the year. There is additional latitude to design benefits. CMS has standards for these plans, including conducting customer service satisfaction surveys; a star rating system for quality of care and providers; and other oversight to ensure MA plans are operated well. Richard noted that all of the major MA carriers in the U.S. have 4- or 5-star (highest) rating. There is a lag in the rating system for new plans, since it is based on customer feedback and other metrics, but within 2 years would likely reach this threshold if operated well. Highly rated plans come with additional performance incentives.

The slide on page 33 illustrates key differences between traditional Medicare and a Group Medicare Advantage PPO (the MA plan being discussed). Some features of MA plans make them operate more like commercial health plans, but also offer the benefit of Medicare's larger network: any provider who accepts Medicare is "in network." While Alaska currently has significant challenges with a limited number of providers accepting Medicare, and therefore a limited network in-state, nationally there are a wide variety of providers within the network. This is also different from individual MA plans, which also can have a narrower network of providers based on the carrier's negotiations. Traditional Medicare plans have rates set annually by CMS; MA plans are set by the individual carrier, within the bounds that the program allows.

There are no MA plans operating in Alaska currently, but CMS has determined approximate per member per month (PMPM) fees for Alaska's boroughs: currently they are estimated to be about \$1,000 PMPM, comparable to many other places offering plans. This would be adjusted according to the local population's risk factors and other components, but this is potentially a significant subsidy.

- Paula Harrison asked whether this plan is considered an HMO, and would coverage change if a person moves or spends time in another state or local area?
 - Richard confirmed coverage would be the same regardless of where you are in the U.S., as long as there are Medicare-accepting providers in those areas. If an area does not have providers in network, this would require separate coverage.
 This is not an HMO, but a group PPO. Rather than limiting services or providers to control costs, the plan has thresholds that can be met on an area basis, that give more advantageous rates and coverage if enough of the eligible population in that area is participating in the plan.
 - o Emily added this includes coverage across all U.S. states and territories.

Richard continued: another benefit of MA plan is the ability to achieve avoided costs by covering wellness and preventive care, encouraging members to make healthy choices and behaviors that can avoid higher-cost incidents. Additionally, there are other medical management options and use of subsidies that can help manage overall costs, which can result in savings to the plan with effective use of the available tools in this plan. "Plan management" includes many things: health education, wellness, chronic disease management (diabetes, heart disease, etc.), care coordination, utilization management and review, essentially anything that makes most effective use of care to address a person's health needs, at the lowest or least intensive level. Alaska has the lowest utilization of these plans (1% of the population enrolled), followed by Wyoming (3%). MA plans have grown steadily over recent years. Slides 35 and 36 illustrate the market by state and increase in enrollment since its creation in 2003.

Segal Consulting conducts an annual survey of state health plans, including which offer MA plans and whether they are optional or supplemental, vs. replacing the previous plan. Almost all plans (86%) offer

an MA plan, but most are optional; only 5 states have fully replaced their health plans with an MA plan. Hawaii, Arizona, Colorado, and many other states have offered these plans for several years.

Slide 38 outlines advantages and disadvantages of these plans: positives include significant potential savings to the plan and members, particularly if additional services can be covered at the same or less cost; some discounts to providers; and a number of other programs, such as Silver Sneakers (physical activity), chronic condition management, and in-home care. However, there are drawbacks: there are more CMS rules and requirements than the current plan, does have considerable administrative cost to run, and CMS is subject to annual funding and negotiations in the plan.

Slide 39 illustrates how a national passive PPO network works for group plans: this mechanism rewards a carrier can achieve a certain threshold in the number of eligible people who are enrolled as members in their plan. If a large portion of people are enrolled in this plan, economies of scale can be achieved and therefore produce a financial benefit to the carrier and the plan. If 51% or more of the people enrolled in the plan are in a service (geographic) area, this means that all members enrolled in that plan (including those in the plan, but not in that geographic area) can access the same network benefits, costsharing and other benefits. Currently, approximately 30% of AlaskaCare retirees already live in one of these areas. However, there is still a gap: it would require, for example, the plan to meet that threshold in Anchorage, because the largest number of Medicare-eligible retirees in state live in this area and the city would need to be one of the market areas. If 100 members are enrolled in the plan, across the state, but of those 51 (or more) are living in Anchorage which is a service area, this would trigger that additional benefit. It would be ideal to have multiple service areas in the state (Juneau, Fairbanks, Mat Su, etc.) operating. Currently, the largest numbers of retirees are in Anchorage, Mat-Su and Juneau.

Emily added: the RFI responses indicated that people assumed 100% of members would enroll in this plan, which is likely too optimistic, certainly in the short term. Alaska is disadvantaged by not already having a plan in place, but also advantaged by having so many retirees living out of state. She also observed that the growth over time suggests that once a plan has a "foothold" in a state, it has opportunity to grow as well.

Richard gave the example of New Mexico: this plan started modestly, but increased enrollment over time allowed expansion of network of providers, which also made the plan attractive and helped increase member enrollment. In a little over 10 years, the percentage of members who choose Medicare Advantage has grown from about 3-5% the first year to nearly half now, and now with multiple carriers. The program has a self-reinforcing component. As the number of members in the plan grows, the membership base enables the carrier to negotiate with more providers, which makes the plan more affordable, allowing the carrier to contract with more providers. As more providers are contracted, they will provide better passive discounts that members aren't exposed to. It makes the plan more viable, enables the plan sponsor to offer more value (usually via a lower premium), which makes it attractive to more retirees. He noted that the RFI responses indicated significant market interest, and that because AlaskaCare retirees are the largest proportion of the state's Medicare eligible population, this health plan has a unique opportunity to potentially help establish that market in Alaska.

 Cammy asked for clarification: does this require a majority of people living in that area enroll in the plan? She noted that there are about 55,000 retirees across the U.S., some of whom already live in service areas. However, those living in Alaska are not in a service area. If Anchorage is the service area, is it 51% of people who live in the Anchorage service area or in the combined service areas (Anchorage plus any other service areas outside Alaska)?

- Richard clarified: If you take everyone who enrolled, and if 51% of them live in a service area, you're good. It doesn't matter if they are in the Anchorage service area or another service area. The 51% is the cumulative percentage of those enrolled (*not those eligible to enroll*) across all service areas.
- Paula Harrison asked how providers are incentivized to participate? She is concerned about the
 trend of providers opting out of accepting Medicare, there are fewer and fewer, and
 understands that the payment rates are a factor. If there is a way to increase the payments they
 are receiving, that would be an enticement. Can the money received by the plan go to increasing
 payments?
 - Richard responded providers negotiate with the carrier, but there is opportunity because they can be paid beyond the base rates CMS approves for traditional Medicare. There are other mechanisms to incentivize providers, through pricing or other options, because it is rates are negotiated. Providers have steerage incentives, encouraging patients to seek in-network services, through the carrier and generally contract for individual and group. For the individual member, in-network incentives can also benefit patients. Sometimes, the contract with the carrier results in enhanced payments to providers over what they are receiving on regular Medicare and they get paid faster. They are not waiting for CMS to process the claim, then the administrator to process the claim. There is a cash flow benefit and an ease of administration benefit. They could get paid more than they currently get. Richard did not have insight into different carrier strategies in negotiating with different providers in the service area. It is speculative, but possible, at least initially, that a carrier might need a more generous pricing structure to get a provider to contract with them. If they do that, maybe some providers that don't accept Medicare today would reconsider joining the Medicare Advantage network. Richard speculated that, depending on how this new plan would incentivize more providers to accept Medicare, it could improve results and create better access for everybody, whether in the Medicare Advantage plan or not, or in AlaskaCare or not.
- Betsy commented that in order for a provider to participate in the Medicare Advantage plan, they would have to accept all Medicare patients. If they did that, knowing how many Medicare Advantage plan members are in their area, they would get paid more for Medicare Advantage members than traditional Medicare members. Is this correct?
 - Richard responded yes; providers would get paid faster. The carrier would offer policies to the general public in areas where they have a qualified service area (e.g., Anchorage, Mat-Su Borough). If things work out with the 51% rule, AlaskaCare could have achieve the more desirable threshold for their own group plan. Separately, a carrier offering MA plans could also sell individual policies in Anchorage and the Mat-Su Borough to eligible individuals who aren't enrolled in AlaskaCare. This is another reason it may be of interest to providers to sign up with a carrier.
- Betsy asked what happens if Alaska offers Medicare Advantage, goes through the enrollment process, but doesn't meet the 51% rule. Would we just cancel or have to change the plan until next year, then start over again?

- o Richard replied, hopefully Alaska doesn't have to do that, but if an AlaskaCare MA plan is not performing as anticipated, he speculated the way to mitigate negative impacts would be to either limit the enrollment, so it is only available to those in a service area; cancel it and have the same outcome for everyone; or scale back who is eligible for the Medicare Advantage plan, to limit the size of the pool.
- Emily commented that the Division prefers to be as confident as possible that we can meet the 51% service area enrollment. That is a key guestion for our decision.
- Richard advised if the number of eligible members for the Anchorage service area is closer to 51%, Alaska should wait until the Mat-Su Borough, Juneau or other Alaska service area is added so the 50% eligible members gets closer to 70%.
- Emily commented this puts providers under pressure to get under contract, and that is difficult because there is no plan in existence today. Carriers have identified this as an opportunity, and there is a push right now in anticipation of these discussions to begin relationships with providers. The hope is that the more we talk about it as a possibility, the more confident we can be that we will meet the threshold, which makes it more feasible for AlaskaCare to adopt this type of plan option.
- Richard agreed. The more discussion there is, the more you indicate that it is a serious possibility, that gets people's attention that it could be viable. This might increase providers' interest as well as carriers' interest.
- Cammy commented that if Alaska did this today, any provider who currently provides Medicare services would be included, but we are hoping to encourage additional providers to participate. If providers join, could they limit the patients they see to just those in the group Medicare Advantage plan? Or would they see everyone, and those who are not in the plan would be reimbursed at a different rate?
 - Richard clarified that the providers get paid for at the negotiated rate in the plan's
 contract. With the general public, they are getting paid from another Medicare contract
 or from traditional Medicare. It depends on the situation with other individuals who are
 not AlaskaCare, but a provider would not automatically receive the same
 reimbursement for different populations.
 - Cammy commented that this is a challenge because the number of existing providers is limited; there are not too many options than to go with an existing Medicare provider.
 - Richard explained Medicare Advantage contracts with providers already using Medicare, at least initially. This means providers don't need to accept Medicare and then the carrier's contract. Over time, that second effect may occur to some degree.
- Judy commented some providers who have decided to not take Medicare patients will say the
 amount of reimbursement and the reimbursement process is cumbersome. If we start with a
 group of providers who are already accepting Medicare patients, the next group would be those
 who have left providing Medicare but might be drawn back in because of the lessened
 timeframe for payment.
 - Richard agreed. In 2020, a number of providers experienced an unprecedented cash flow crunch, with patients deferring care, including non-urgent or elective procedures and services that are typically profitable for providers. In April and May of 2020, there was a lot of discussion about how to accelerate payment to providers in general, not just Medicare-related.

Richard quickly walked the group through the remaining overview slides.

Slide 40 is a refresher on our Medicare Advantage from last fall; most of this was covered already.

Slide 41 is a description of benefits and enhanced program offerings. Ask for a suggested benefit design: lower deductible, no deductible, maximum out-of-pocket, enhanced services, and programs. He also noted "Digital Engagement Platforms" which provide guidance about how to care for chronic conditions digitally. This is an opportunity to provide benefits and/or programs that are not part of the current plan.

Emily commented as we think about moving forward, we will identify what is important to Alaska retirees, what they want, and put that together with the financial feasibility to see what aligns with what a potential carrier can provide. One thing we discussed was a retiree survey to get a sense of priorities and what will be most appreciated as we develop a Medicare Advantage plan.

Slide 42 is meant to answer the question, "is this viable?" It addresses how to meet the 51% rule. The plan also needs to be financially viable, which is unlikely to happen if it costs more than the current plan. So far, we believe that It is likely viable with some work. Because it doesn't exist, we have to work with a carrier to develop the plan in such a way that it is financially viable.

Emily commented this illustrates presents opportunities: we could offer richer benefits as an option to retiree members in a way that saves the plan money. The process of achieving this is not straightforward, but we may look at substantial savings to the plan during a time when the State is facing fiscal challenges, with an option to offer retirees services to address the gaps they are experiencing and potentially lower the cost to them. This is why we are investing time in this; we think there is potential.

- Nan asked how might changes occur over time with what the plans offer? Will there be annual
 negotiations with providers? Do we have the ability to say that we want our members to have
 certain benefits?
 - o Emily clarified that the plan would negotiate with carriers to provide a health plan with a set of benefits that may be subject to annual change, particularly in response to federal changes. We might have specific timeframe (longer than a year) with some level of stability. We probably need to review contracts on a regular basis (e.g., 3 years, 2 years, 5 years). The benefits drive the overall costs, so it's almost a math exercise: estimate the anticipated costs, subtract the CMS subsidies, and identify the benefits that can be provided within that. From the Division's perspective, it must be cost neutral or a cost savings. Even if there are minor changes required from the federal level, we want to avoid having benefits set at a level where we would need to adjust the plan relative to the overall premium. We don't want to offer a set of benefits that adds expense to the plan but need to make long-term decisions to keep it sustainable.
 - Richard also clarified there is an annual renewal cycle. As the plan sponsor, within CMS requirements, you can decide what the benefits will be. They may affect premiums, but you can customize the plan however you want, even to the penny of the deductible.
- Judy Salo commented that there is an expectation of no diminishment of benefit. Sometimes a
 change in benefit can be viewed by some as a diminishment but not by others. As we build this
 program, we must consider that the floor is the current benefit level.

o Emily clarified that the plan everyone has today would still be available to members; we are not proposing changes to that. Medicare Advantage would be an option. We would have to be able to make changes to it so members can maintain stability. The question for the Division and the Board is: by offering an optional plan, can we make sure that plan changes with time? Healthcare policies and plans change. There are some rules right now that allow members to opt out of Medicare to a traditional plan on a monthly basis. They can elect back to a traditional plan on a more frequent basis than people are used to. Within certain edibility requirements (we have a lot of flexibility), this is a core component of why it could be feasible.

Decision Points

Emily presented the decision points and potential timeline on Slide 44. We are just at the beginning; several things could occur to make this not feasible. We are thinking about tackling it in phases; each phase involves a couple of decision points. At each of these decision points, we will ask: Do we want to keep putting time and resources into this because we still think it's feasible? We will be asking the Board and the Division. The Division's decision point may not always align with the Board in terms of timing.

- **Phase 1:** We are in this information gathering phase now. Do we think this could work? As we work through these phases, we are defining the parameters under which this can work. What needs to be in place for this to work? Does it provide the same or better level of benefit at the same or lower cost? What are the other parameters to think through and talk about with Board?
- Phase 2: Is there anything we found that doesn't align with our essential parameters?
- **Phase 3:** We will do a deeper analysis, looking at impacts across the spectrum. Is there anything in these impacts that puts us outside our essential parameters? Do we want to move forward?
- **Phase 4:** If we choose to move forward, we focus on member outreach, looking to meet or exceed the 51% rule.
- **Phase 5:** For vendor selection, we essentially outline a contract and make sure it aligns with our essential parameters and operational impacts. We decide if it works or not; if it does work, we move forward. If we can do this faster, we will.

Potential Timeline

Emily presented decision points and potential timeline on Slide 44. It is a draft timeline, as discussed with the Modernization Committee in its January 20 meeting. It includes a long timeline for evaluating and operationalizing the Medicare Advantage plan, which would be available January 1, 2023 at the earliest. Staff are discussing whether it is feasible to offer as early as January 1, 2022. If an earlier date is feasible, they will bring it back to the Board and the Modernization Committee. There are advantages to members, the Division and to the plan if starting a year earlier. If it's a good plan for all stakeholders involved, implementing the plan as soon as possible would be beneficial. But this new plan is complex to design and launch and will realistically take time to work through considerations.

The Board took a 1-hour break at noon, and returned to the meeting at 1:00 p.m.

Chair Salo welcomed the group back to the meeting, and invited Emily and the presenters to speak.

Item 4. Medicare Advantage, Continued

Emily introduced staff from the State of Washington Health Care Authority Public Employee Benefits Board (PEBB) to share their experience with implementing a Medicare Advantage plan.

State of Washington Program

Materials: Presentation provided as a separate attachment to 2/4/21 meeting packet

Sara Whitley, Ellen Wolfhagen and Molly Christie presented:

The State of Washington has multiple options for members: 1) a self-insured plan that coordinates benefits with Medicare, about 55%; 2) a new Medicare Advantage Part D plan, with about 2% enrollment; 3) an HMO MA plan, with about 26% enrollment; and 4) Medicare Supplement plans (parts F and G), at about 17%. The mix of enrollment has changed over time, as new options were added.

Washington HCA made these options available to increase plans for retirees that are also sustainable over the long term. One significant trend is the increase in specialty drugs, which has impacts on the plan and members, including requiring premium increases. The state plan is primary payer for pharmacy benefits. The agency explored multiple options and decided to implement an MA plan because it allows the state to take advantage of federal resources, stabilize premiums over the long term, offer additional benefits outside traditional Medicare, offering retirees choice.

When considering options, the agency wanted to find a plan option that closely matches the current self-insured option and allow the state to take advantage of the national network. Allowing for an expanded network of providers (the PPO ESA, described this morning by Richard) also benefits members. The plan allows for a customizable benefit design, beyond what are required standard benefits under Parts A, B and D. Plans offered by large employer group plans have flexibility to set limits on members' portion of covered services. MA plans also offer supplemental benefits not available through Medicare: vision, dental, hearing, and other alternative therapies (such as massage).

The team surveyed retirees, including "how could we improve your retiree plan experience?" Cost was the top concern. The top responses for specific changes included "More options," "Gym membership" and "Prescription drug coverage (including specialty drugs)." Vision, dental and audio coverage was also important, either offering this coverage or increasing the benefit level.

The second to last slide in the presentation provides a detailed overview of the plan provisions, including premiums, deductibles, and others.

- Paula Harrison asked whether providers in Washington state often do not accept Medicare? In Alaska, many primary care providers do not accept Medicare.
 - Ellen responded this has not been an issue in Washington, as there have been Medicare plans in place for several years. This also differs by area of the state, with urban Seattle having a number of providers, while options are sparse in rural areas such as the eastern area of the state. Some rural areas in Washington may have similar issues to Alaska.
 - Sara added that she is aware that is an issue in Alaska and noted that members living in other states also encountered this issue particularly in rural areas.
- Nan Thompson asked two questions: first, about how long did this take to implement? Second, what was surprising or unexpected in the process?
 - Ellen estimated the timeframe to be 18 to 24 months, beginning with an appropriation in 2018 from the state for planning. The state issued an RFI shortly after to gather information, then started the RFP process early in 2019. Overall, the process took two

- years, from designing the plan to the procurement and evaluation process, to launch of the program corresponding with open enrollment for the following year. The plan went into place in January 2020.
- To the second question, staff noted that the procurement process was an excellent way to identify issues, questions, gaps, things that the team had not thought about yet; leaving plenty of time in this process, including for design of the RFP and working through the details before it is released, is important.
- Judy Salo asked how long between the RFI process and the release of the RFP for the new plan?
 - Molly responded their plan was designed on the self-insured plan, but this exposed several areas where MA plans are different from their traditional plan, and confusion on the part of carriers how to interpret. The RFP was long but provided great information.
 It allowed the agency to design a significantly different plan.
- Emily Ricci asked about the reception of retirees to this new plan option. How fast did enrollment grow? What perceived benefits are there for this plan?
 - Ellen commented that there are still only 2% of retirees in this plan, but most who
 moved to the new plan were previously enrolled in the self-insured plan. This indicated
 that people feel confident that the coverage is similar and that they won't lose benefits.
 Initial feedback over the last year was positive. They will be looking at enrollment this
 year to see how it grows, and what this indicates about confidence in this plan as well.
 - Sara added that the premiums for this new plan is approximately 50% more than the self-insured plan, so it was a challenge communicating the value of this plan given the cost difference. The agency communicated that the cost difference equates to higher value (more benefits not available otherwise), but the retiree population can be hesitant to change generally, so this was not surprising to see only some of the group choose this plan. They anticipate that as retirees have experience with this plan and share that experience with peers, the value will become clearer, enrollment will likely increase.
 - Emily added that Alaska does not currently have an open enrollment period for the medical plan for retirees.
- Emily asked what communications was most effective to inform retirees about the new plan?
 - Ellen noted that they were still using paper forms and dealt with a number of CMS requirements. This was a challenge.
 - Sara added that typically during open enrollment, the agency holds an open enrollment benefits fair, a town-hall style event where retirees can ask questions in person and learn more about the plans. In 2020 they could not hold these events, but instead held virtual town halls and Q&A sessions, as well as e-newsletters and mailings to educate people about their options. When in-person events are feasible, this would be a great way to answer questions.
 - Molly added that there is also a retiree workgroup including a number of stakeholders and utilized the liaisons of these groups to share back information with their respective members. She highly recommended this structure, or equivalent with a diverse representation of stakeholders, to reach retirees.
 - Ellen added outreach to retiree groups is also helpful and keeping open lines of communication with these groups.

- Emily asked whether they believe the effort would be easier or more difficult if they were creating an MA plan for medical services, not just pharmacy? Alaska is contemplating this plan for medical services.
 - Ellen noted that it could be easier in some ways, because of the differences between their current pharmacy plan versus the new plan (tiers for each drug, etc.). The medical plan is easier to compare because you can match up services or rates across plans more easily. The biggest question is likely to be, "Is my provider in network?" She noted that there are required benefits to offer in Medicare and using a member survey to identify additional benefits or coverage retirees want can help inform the design and make it valuable to retirees.
 - Sara emphasized the value of the member survey to gather input on what retirees wanted to see in the plan and allowed the agency to ask for a more itemized list of which benefits are offered in which carriers' plans. There is significant variation among the carriers in terms of what they include in their standard plans, revealed in the RFP process and asking for this list. She noted that a primary motivation for the plan was to address prescription drugs, but also wanted to potentially offer other benefits. The agency also considered whether to adopt an EGWP instead of this plan to address pharmacy costs but found there was additional benefit in expanding to other benefits as well. She also noted the time it takes to have a formulary approved by CMS was also a significant part of the timeline.
- Emily asked what time period for the current contract they have?
 - Sara responded that there are annual updates and changes in benefits, built into the contract, and there is a formal annual renewal for the MA carrier.
- Betsy asked about how retirees who are not Medicare eligible (under 65), and what options they have? Do they have the same benefits or equivalent to this plan?
 - Molly responded retirees under age 65 are included in the same risk pool as active employees, so their benefits are the same as employees.
- Judy asked if vision benefits were included in the MA plan? Were they offered as part of the plan already available?
 - Vision benefits are already included within the medical plan.
- Paula Harrison asked how many retirees enrolled in the MA plan?
 - Ellen reiterated that approximately 2% of retirees have chosen the new plan. Overall, there are over 100,000 retirees enrolled in Medicare.
- Betsy asked whether retirees were already enrolled in an MA plan?
 - Most are already enrolled in traditional Medicare, with another percentage enrolled in the supplemental plans.
 - Betsy noted that Alaska, not having any active MA plans currently, would need additional education and time to become familiar with these offerings. Washington, having these plans already available on the market or through the agency's offerings,

Emily and the Board thanked Washington HCA staff for being available to attend today's meeting and sharing helpful information about their experience creating an MA plan.

Item 5. Public Comment, Continued

Chair Salo reiterated the public comment guidelines and invited the public to provide comment.

Public Comments

• Wendy Woolf. She noted she is speaking as an individual, and not affiliated with an organization in her testimony. Wendy thanked the Board and staff for the presentation and information about these options. She suggested that the Division send a survey out to all retirees, including the modernization topics that were prioritized by the Board in early 2020, and ask them to prioritize or identify which benefits they are most interested in. This would not only inform which benefits would be of greatest interest if included in a Medicare Advantage plan, but also which are most important to consider if the Division decides to continue discussion of changes to the existing plan.

Item 6. Closing Thoughts + Meeting Adjournment

Closing Thoughts

Judy invited Board members to share any thoughts before the close of the meeting.

- Cammy shared that the Modernization Committee discussed at its January 20 meeting whether
 to schedule regular meetings before the next quarterly RHPAB meeting in May. Committee
 members are interested in staying engaged and can be available for meetings.
 She also requested that staff provide a list of Medicare-accepting providers across the state,
 responding to Paula's concerns that there are few providers and that perhaps the number
 continues to decrease.
 - o Emily replied staff will research this and how they could measure trends.
- Dallas appreciated the valuable information and sees potential opportunity to serve retirees through this type of plan.
- Paula also appreciated the presentation and is interested in learning more about how to increase Medicare-accepting providers in state, this is an issue for Alaska retirees. She is interested in looking at other states' experience, like Wyoming and other rural states.
 - Emily noted Wyoming specifically does not have any Medicare Advantage plans offered, but staff can research other rural states who do have these plans offered for their residents and how they address serving rural areas.
- Lorne Bretz asked what communications the Division is using to reach out to retirees, particularly on the issue of IRMAA reimbursement. He is finding that several retirees are unaware that reimbursement is available. He is curious what the e-mail open rate is, attendance at meetings, and other measures of how effective communications have been.
 - Emily shared staff will provide an update on IRMAA-related communications and a calendar of communications to illustrate outreach for retirees.
 - Andrea shared that the new system with OptumRx went into effect for January 1 and includes submitting forms online as well as paper forms. During this period, approximately 73% of enrollees completed forms online. In total, 2,050 accounts have been established and providing reimbursement for the IRMAA premiums. OptumRx is also providing reimbursement directly through its financial agency. There have been administrative issues, but staff worked through them and will hopefully have the process fully streamlined after this initial rollout.

- Emily added while the vendor is one already working with AlaskaCare, this was a new function for them, and a new process for the state, with the goal of making the process smoother going forward. Please contact the Division if you are having any issues.
- Judy asked whether instructions for the new process are available on the website?
 - o Andrea confirmed yes, the information and how to set up reimbursement .
- Nan commented that she is excited for the potential benefits of the Medicare Advantage program and looks forward to continuing discussion.

2021 Board Meetings

The board's quarterly meetings are scheduled as follows for the remainder of 2021. Meetings will be held virtually for the foreseeable future. For each date, quarterly vendor meetings will be held the day before (Wednesday).

- Thursday, May 13, 2021
- Thursday, August 5, 2021
- Thursday, November 4, 2021
- Motion by Cammy Taylor to adjourn the meeting. **Second** by Dallas Hargrave.
 - o **Result**: No objection to adjournment. The meeting was adjourned at 2:14 p.m.

The next Retiree Health Plan Advisory Board meeting will be Thursday, May 13, 2021.

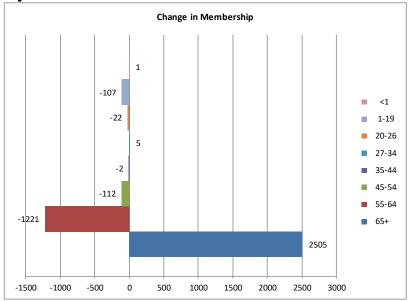
Check RHPAB's web page closer to the meeting to confirm the schedule, location and to download materials for upcoming meetings. http://doa.alaska.gov/drb/alaskacare/retiree/advisory.html.

STATE OF ALASKA - 0000000089657584

Current Data For Claims Incurred January 01, 2020 - December 31, 2020 with 2 months lag Prior Data For Claims Incurred January 01, 2019 - December 31, 2019 with 2 months lag

Executive Summary

DEMOGRAPHICS				
	Prior	Current	%Change	Aetna BOB
Number of Employees	44,197	44,964	1.7%	N/A
Number of Members	73,654	74,700	1.4%	N/A
Percent Male Members	45.4%	45.3%	-0.1%	48.4%
Percent Female Members	54.6%	54.7%	0.1%	51.6%
Average Age of Membership	67.7	68.3	0.8%	38.3
Members by Age Band				
<1	3	4	15.4%	N/A
1-19	1,641	1,534	-6.5%	N/A
20-26	683	661	-3.3%	N/A
27-34	105	110	4.7%	N/A
35-44	227	225	-1.2%	N/A
45-54	1,569	1,457	-7.1%	N/A
55-64	17,816	16,595	-6.9%	N/A
65+	51,609	54,114	4.9%	N/A



MEMBERSHIP STATISTICS AS OF DECEMBER 31, 2020

			PE	RS					TRS			JRS	NGNMRS	SBS	DCP
		D	В		DCR	SYSTEM		DB		DCR	SYSTEM				
	Tier I	Tier II	Tier III	Total	Tier IV	TOTAL	Tier I	Tier II	Total	Tier III	TOTAL				
Active Members	752	2,499	7,529	10,780	24,352	35,132	196	3,623	3,819	6,432	10,251	73	n/a	20,381	6,450
Terminated Members															
Entitled to Future Benefits	261	1,701	3,128	5,090	1,830	6,920	24	607	631	689	1,320	2	n/a	28,652	5,830
Other Terminated Members	1,010	2,033	7,428	10,471	15,175	25,646	234	1,471	1,705	2,613	4,318	1	n/a	n/a	n/a
Total Terminated Members	1,271	3,734	10,556	15,561	17,005	32,566	258	2,078	2,336	3,302	5,638	3	n/a	28,652	5,830
Retirees & Beneficiaries	22,502	8,970	4,949	36,421	144	36,565	10,062	3,223	13,285	42	13,327	142	713	n/a	n/a

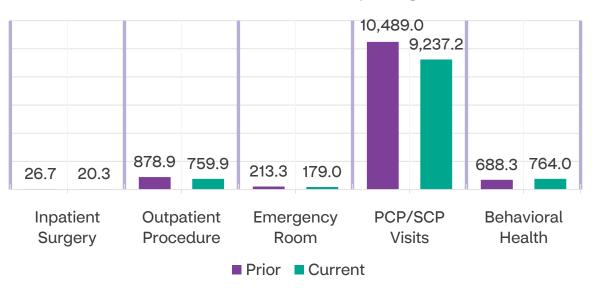
Impact of COVID-19 on Overall Results

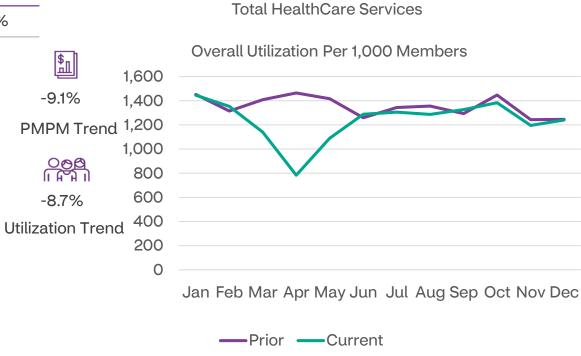
Why is this important? Important insight into overall healthcare changes in 2020 due to the COVID pandemic may have impacted healthcare utilization.

	Prior	Current	Change	Aetna BoB
% members using benefits	83.8%	82.5%	-1.3%	85.0%
Telemedicine visits ¹ /1,000	5.2	1,179.4	22,508.7%	790.1

¹Represents all types of telemedicine visits including Teladoc® and Minute Clinic® virtual visits if applicable.

Utilization Per 1,000 Trends - Key Categories







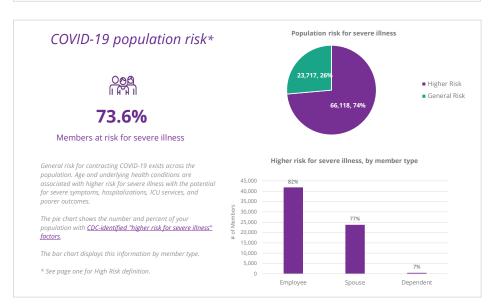


Time period: Jan 2020 - Mar 2021, paid through March 2021

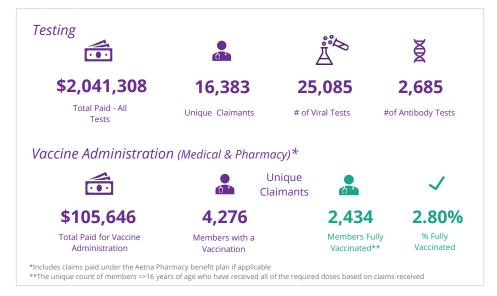
At a glance COVID-19 All-time experience

Average Members: 89,463





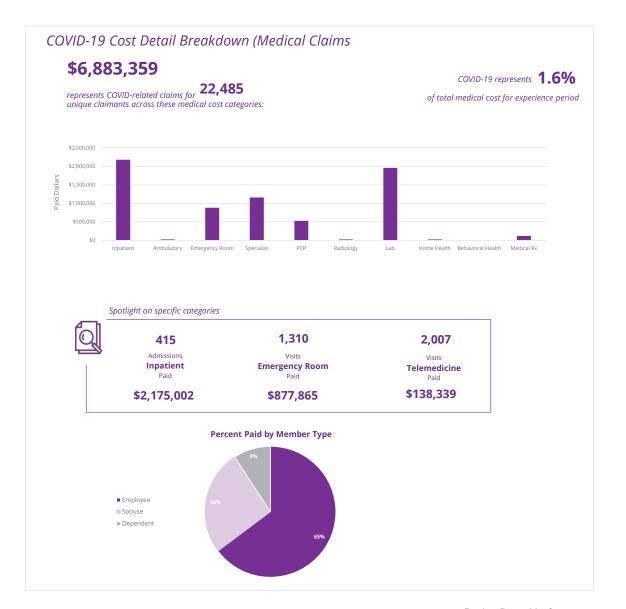
Claimant Distribution* how your total claimants break down based on diagnosis code information 2.208 \$3,699,285 **Confirmed Probable** \$6,235 27 \$2,496,587 Exposure 10.232 Lab test, screening 10,018 \$681,252 encounter or vaccine only *refer to Report terms on page 1



♥aetna™

COVID-19 All-time experience details

Average Members: 89,463



Claimant distribution - All Members*

h	ow your total medical cla	imants break down based on diagnosis cod	e
	2,208	\$3,699,285	Confirmed
	27	\$6,235	Probable
	10,232	\$2,496,587	Exposure
	10,018	\$681,252	Lab test, screening encounter or vaccine only

*refer to Report terms on page 1

Time period: Jan 2020 - Mar 2021, paid through March 2021

Claimant distribution - Employees*

how your total claimants break down based on diagnosis code information

1,366	\$2,559,119	Confirmed
18	\$4,133	Probable
5,905	\$1,471,071	Exposure
6,250	\$423,334	Lab test, screening encounter or vaccine onl

*refer to Report terms on page 1

Claimant distribution - Spouse & Dependents*

ow your total claimants break down based on diagnosis code information

-	now your total claimants br	eak down based on diagnosis code injormo	nion
	842	\$1,140,166	Confirmed
	9	\$2,102	Probable
	4,327	\$1,025,515	Exposure
	3,768	\$257,918	Lab test, screening encounter or vaccine only

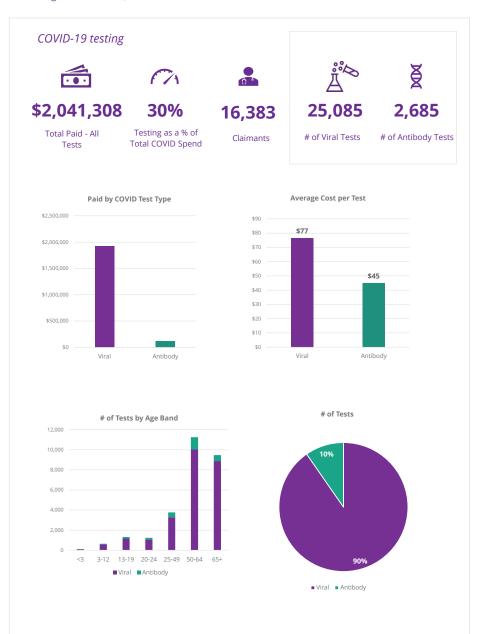
*refer to Report terms on page 1

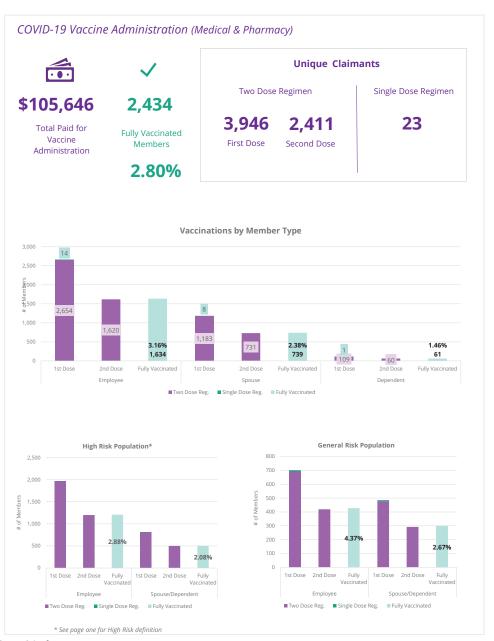


COVID-19 All-time experience - Testing and Vaccination

Average Members: 89,463

Time period: Jan 2020 - Mar 2021, paid through March 2021





! UPDATE! COVID-19: What Your AlaskaCare Retiree Health Plan is Doing for You



The COVID-19 outbreak has caused us all to make adjustments and changes to our daily routines. Here at AlaskaCare, we made temporary changes and limited benefit expansions to your health plan to support the public health COVID-19 response, reduce the strain on the medical system, and to assist you in accessing the care you need. You can find up-to-date information about the temporary changes to your benefits at AlaskaCare.gov.

The Division of Retirement and Benefits is monitoring the status of COVID-19 in Alaska and will continue to provide updates regarding the effective dates of the remaining temporary changes when more information becomes available. For more information, click here.

AlaskaCare Retiree Plan Coverage for Flu and Pneumonia Shots: Available through December 31, 2021

What does this mean for you?

- In response to the COVID-19 outbreak, retiree plan members have been provided temporary coverage for flu (influenza) and pneumonia (pneumococcal) shots.
- To receive AlaskaCare coverage for your flu or pneumonia shots before December 31, 2021:
 - Visit your local network pharmacy and AlaskaCare will cover 100% of the cost. Call OptumRx at (855) 409-6999 if you need help locating a network pharmacy.
 - If you get your shots at an out-of-network pharmacy, you will need to pay for the shot up-front and <u>submit a claim to OptumRx</u> to be reimbursed for the plan's portion of the cost.
 - If you get your shots at your doctor's office, the standard deductible and coinsurance will apply.
- In 2019, AlaskaCare expanded coverage for vaccines covered by Medicare Part D
 for all AlaskaCare retiree plan members. Flu and pneumonia vaccines are covered
 by Medicare Part B and therefore are not included in the regular AlaskaCare plan
 benefits. Common vaccines that have been added to the AlaskaCare retiree
 pharmacy benefit include shingles, diphtheria, tetanus, measles-mumps-rubella
 (MMR), polio, hepatitis, and HPV.

Teladoc® for Retirees: Available through June 30, 2021

After June 30, 2021, Teladoc® services will *no longer* be a temporary benefit available to retiree plan members.

What does this mean for you?

- In response to the COVID-19 outbreak, retiree plan members have been provided temporary access to general medical consultations through Teladoc®—a virtual care system offering telehealth visits with licensed health care providers for nonemergency conditions.
- To access your temporary Teladoc® benefits before June 30, 2021:
 - Register or login: teladoc.com/Aetna
 - o Use the mobile app: teladoc.com/mobile
 - Schedule a consult via phone: (855) TELADOC or (855) 835-2362

<u>The AlaskaCare retiree health plan currently covers and will continue to cover telemedicine services delivered by your regular providers.</u> If you or your provider are unsure which telehealth services are eligible for coverage, please contact Aetna at (855)

784-8646 for more information. Teladoc® continues to be available to AlaskaCare **active employee** health plan members.

The following benefits are permanently available to all AlaskaCare members.

- COVID-19 Testing: If you receive laboratory tests to diagnose or treat COVID-19, AlaskaCare is waiving your deductible and coinsurance. To qualify, your laboratory tests must be deemed medically necessary under the terms of the plan and they must be FDA-approved.
- COVID-19 Vaccines: The AlaskaCare health plan covers the cost for FDA approved COVID-19 vaccines, subject to recognized charge, under both the medical and pharmacy plans, at any authorized site of care. AlaskaCare members receive the vaccine at no cost.

The COVID-19 vaccine is available to anyone living or working in Alaska age 16 or older at no cost.

Do you have family or friends planning to visit Alaska this summer?

 Beginning June 1, 2021, vaccines will be provided for anyone traveling to Alaska who chooses to be vaccinated. Read Governor Mike Dunleavy's <u>Administrative</u> Order.

Check availability with Alaska COVID-19 vaccine providers in your community **covidvax.alaska.gov**.

Call the COVID-19 Vaccine helpline if you need assistance making your vaccine appointment (907) 646-3322. If you are located outside of Alaska, check with your local health authorities to find out more about vaccine eligibility and availability in your area.

Alaska Department of Administration **Division of Retirement and Benefits**

6th Fl. State Office Building, PO Box 110203, Juneau, AK 99811-0203

Fax: (907) 465-3086 • TDD: (907) 465-2805 •

Telephone: (907) 465-4460 • Toll-Free: (800) 821-2251

Questions?
Contact Us



EGWP

Impact of EGWP Implementation

Dollars in Millions

	2019 Actual	2020 Actual	2021 Projection
Direct Subsidy	\$1.30	\$0.04	\$0.05
Coverage Gap Discount	\$28.80	\$36.26	\$38.00
Catastrophic Reinsurance	\$18.20	\$20.76	\$23.00
Low Income Premiums Subsidy	\$0.20	\$0.22	\$0.20
Low Income Cost Sharing Subsidy	\$1.00	\$1.10	\$1.00
Total	\$49.50	\$58.38	\$62.25

DRAFT



Proposal Title	Expanded Preventive Coverage (R007)		
Health Plan Affected	Defined Benefit Retiree Plan		
Proposed Effective Date	January 1 st , 2022		
Reviewed By	Retiree Health Plan Advisory Board		
Review Date	May 13, 2021		

Contents

1)	SUMMARY OF CURRENT STATE	2
2)	OBJECTIVES	
3)	SUMMARY OF PROPOSED CHANGE	
4)	ANALYSIS	
5)	IMPACTS	.10
	ctuarial Impact <mark>Increase 0.45% - 0.50%</mark>	10
Fi	nancial Impact <mark>Annual Cost Increase \$3m - \$3.35m</mark>	11
М	ember Impact Enhancement	13
O	perational Impact (DRB) Neutral	13
0	perational Impact (TPA) <mark>Moderate</mark>	13
	CONSIDERATIONS	
Clini	cal Considerations	14
Prov	ider Considerations	14
7)	IMPLEMENTATION OPTIONS	.14
Impl	ementation Options:	14
8)	PROPOSAL RECOMMENDATIONS	.15
DRB	Recommendation	15
RHP	AB Board Recommendation	15

1) Summary of Current State

The AlaskaCare Defined Benefit Retiree Health Plan (Plan) was first developed in 1975 and provides extensive and valuable benefits for retirees and their dependents necessary for *the diagnosis and treatment* of an injury or disease. The Plan was not established as a preventive or 'wellness' plan. Plan coverage for preventive services that are used to screen individuals prior to symptoms being exhibited is limited to mammograms, Pap smears and Prostate Specific Antigen tests (to detect prostate cancer in males).

One of the most common reoccurring complaints the Division of Retirement and Benefits (Division) receives is related to the retiree plan's lack of preventive care coverage. This lack of coverage impacts retirees and their dependents differently, depending on whether the member is eligible for Medicare or not.

Members who are under the age of 65 (U65) are more impacted by the lack of preventive coverage. U65 members generally do not qualify for Medicare coverage and have AlaskaCare as their primary coverage. Because the Plan excludes most preventive services, U65 members typically must pay out of pocket for the entire cost of those services.

Members who are over the age of 65 (O65) are less impacted by the lack of preventive coverage. O65 members are generally eligible for Medicare, which becomes their primary coverage. Their AlaskaCare coverage becomes secondary to Medicare. Because Medicare offers many preventive services at little or no cost to the beneficiary¹, adding preventive coverage to the AlaskaCare retiree plan is less impactful to those eligible for Medicare benefits.

Around 2014, in conjunction with the effective date of certain requirements in the Patient Protection and Affordable Care Act (ACA), insurance coverage for preventive care following age-specific guidelines indicating the utilization of screening and preventive services for older adults became required coverage in most health plans. Preventive services are intended to increase early detection and treatment of health conditions in order to improve clinical outcomes, arrest disease at an earlier stage when it is easier and more effectively treated, and to promote health-conscious behavior. As a retiree-only plan, the Plan is exempt from the ACA provisions mandating coverage for preventive care.

The lack of Plan coverage for most preventive benefits may result in U65 retirees foregoing recommended age-specific vaccinations, screenings, and other preventive services.

2) Objectives

- a) Support members in maintaining their health.
- b) Promote high-value care.
- c) Increase accessibility to patient care for non-emergency health episodes.

¹ Details regarding Medicare coverage and cost-sharing for preventive and screening services can be found here: https://www.medicare.gov/coverage/preventive-screening-services.

3) Summary of Proposed Change

The Division proposes adding the full suite of evidence-based preventive services to the Plan that mirror those provided in most employee plans in accordance with the Affordable Care Act.² These preventive services include:

- 1. evidence based preventive services with an "A" or "B" rating by the United States Preventive Services Task Force (USPSTF),³
- 2. standard vaccines recommend by the Advisory Committee on Immunization Practices (ACIP),⁴
- 3. preventive care for children recommended under the *Bright Futures* guidelines, developed by the American Academy of Pediatrics,⁵
- 4. women-specific preventive care as outlined by the USPSTF and other evidence-based guidelines.⁶

The specific services covered by the Plan will change over time as the recommendations are updated to reflect the most current research and evidence.

The Division proposes two different member cost sharing options for preventive services, as outlined below in Table 1.

Option A would apply the current retiree plan cost share provisions to preventive care received from network providers. Members would first have to meet the \$150 deductible, and then the plan would pay 80% coinsurance for covered services, until the member meets their \$800 out-of-pocket maximum. At that point, the plan would pay 100% of covered services.

For preventive care received from out-of-network providers, members would first have to meet the \$150 deductible, and then the plan would pay 60% coinsurance for covered services. Out-of-network preventive services would not be subject to the out-of-pocket maximum; the plan would continue to pay 60% coinsurance.

If there are no network provider options in a member's area, the member may contact Aetna and request precertification of use of an out-of-network provider for preventive services. If this precertification is approved, the in-network cost sharing provisions (subject to recognize charge) would apply.

Option B would implement richer cost share provisions for preventive care received from network providers. The deductible would not apply, and the plan would pay 100% coinsurance for covered services.

For preventive care received from out-of-network providers, members would first have to meet the \$150 deductible, and then the plan would pay 80% coinsurance for covered services. Out-of-network preventive services would not be subject to the out-of-pocket maximum; the plan would continue to pay 80% coinsurance.

² https://www.healthcare.gov/coverage/preventive-care-benefits/

³ https://www.uspreventiveservicestaskforce.org/Page/Name/uspstf-a-and-b-recommendations/

⁴ https://www.cdc.gov/vaccines/hcp/acip-recs/index.html

⁵ https://brightfutures.aap.org/Pages/default.aspx

⁶ https://www.healthcare.gov/preventive-care-women/

If there are no network provider options in a member's area, the member may contact Aetna and request precertification of use of an out-of-network provider for preventive services. If this precertification is approved, the in-network cost sharing provisions (subject to recognize charge) would apply.

Under both Option A and Option B, the plan would continue to coordinate with Medicare in accordance with the 2021 AlaskaCare Retiree Insurance Information Booklet, *Section 3.1.7, Effect of Medicare.*⁷

The coverage outlined in Option B is similar to most commercial plan standards including the AlaskaCare employee plan.

Table 1. Comparison of Current to Proposed Change: Cost Sharing Provisions

Benefit	Current	Prop	osed
Coinsurance / Out-of-	In or Out-of-Network	Option A	Option A
Pocket Limits	No plan coverage for	In-Network	Out-of-Network
	most preventive care.	\$150 deductible	\$150 deductible
		applies.	applies.
	For limited covered	80% coinsurance for	60% coinsurance for
	preventive services,	remaining charges up	remaining charges.
	80% coinsurance (100%	to \$850 individual out-	Not subject to the
	after annual out-of-	of-pocket maximum.	individual out-of-pocket
	pocket reached).	(100% coinsurance	maximum.
	Deductible applies.	after annual out-of-	
		pocket reached).	If use of out-of-network
			provider is pre-certified,
			in-network cost share
			and out-of-pocket
			maximums apply.
Coinsurance / Out-of-	In or Out-of-Network	Option B	Option B
Pocket Limits	No plan coverage for	In-Network	Out-of-Network
	most preventive care.	Deductible does not	\$150 deductible
		apply.	applies.
	For covered preventive	100% coinsurance.	80% coinsurance.
	services, 80%		Not subject to the
	coinsurance (100%		individual out-of-pocket
	after annual out-of-		maximum.
	pocket reached).		
	Deductible applies.		If use of out-of-network
			provider is pre-certified,
			in-network cost sharing provisions apply.

Table 2 provides an overview of current ACA-compliant coverage provisions. These represent the current guidelines from the USTPF, ACIP, and other relevant sources, and are subject to change as those

⁷ http://doa.alaska.gov/drb/pdf/ghlb/retiree/AlaskaCareDBRetireeBooklet2021.pdf

guidelines are updated. Please note that some of the services included in Table 2 may be currently covered by the Plan if they are performed to aid in a diagnosis, rather than performed as a screening.

Table 2. Comparison of Current to Proposed Change: Service Coverage

Benefit	Current	Proposed ⁸	Medicare Coverage ⁹
Mammograms	One baseline between age 35-40. One every two years between age 40-50. Annually at age 50 and above and for those with a personal or family history of breast cancer.	Screening every 1 to 2 years for women over 40. Earlier or additional screenings for those at high risk. 10,11	One baseline between age 35-39. Screening mammograms once every 12 months age 40 or older. Diagnostic mammograms more frequently than once a year, if medically necessary.
Pap Smear	One per year for women 18 years of age and older. Also includes limited office visit to collect the pap smear.	One every 3 years for women aged 21 to 65. One every 5 years for women aged 30 to 65 when combined with HPV testing for women who do not want a Pap smear every 3 years.	One every 24 months. One every 12 months for those at high risk. HPV testing once every five years for women aged 30 to 65 without HPV symptoms.

⁸ These represent the current guidelines from the USPSTF, ACIP, and other relevant sources and are subject to change as those guidelines are updated.

⁹ Unless otherwise noted, Medicare coverage in this table aligns with coverage descriptions provided at www.Medicare.gov, accessed May 4, 2021.

¹⁰ Frequency of covered mammograms is dependent on the patient's individual medical condition and history. See Aetna Clinical Policy Bulletin 0584 for medical necessity information as of 3/11/2021: https://www.aetna.com/cpb/medical/data/500 599/0584.html

¹¹ As of May 4, 2021, an update for this topic is in progress by the USTPF.

Benefit	Current	Proposed ⁸	Medicare Coverage ⁹
Prostate specific antigen (PSA)	One annual screening test for men between ages 35 and 50 with a personal or family history of prostate cancer, One annual screening test for men 50 years and older.	The USTPF gave a "C" grade to PSA screening for men ages 55 to 69, encouraging them to make an individual decision about prostate cancer screening with their clinician. The USTPF provided a "D" grade recommendation against routine PSA screening for men age 70 and older. 12 However, Aetna considers PSA screening a medically necessary preventive service for men age 45 and older who are at average risk, and for men age 40 and older who are at high risk. 13	One annual screening every 12 months for men over 50.
Vaccines	Limited coverage for all members for vaccines covered by Medicare Part D through the pharmacy plan. Common vaccines include shingles, diphtheria, tetanus, measles-mumps-rubella (MMR), polio, hepatitis, and HPV.	Coverage for those recommended by ACIP. Recommended vaccine schedules are released for children 0-18 years and for adults age 19 and older. 14 Common vaccines include hepatitis A & B, HPV, flu, measles-mumps-rubella (MMR), meningitis, pneumonia, tetanus, diphtheria, pertussis, polio, chickenpox, rabies.	Flu, pneumonia, hepatitis B for persons at increased risk of hepatitis, COVID-19, vaccines directly related to the treatment of an injury or direct exposure to a disease or condition, such as rabies and tetanus. ¹⁵

¹² https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/prostatecancer-screening1

¹³ Aetna Clinical Policy Bulletin 0521, https://www.aetna.com/cpb/medical/data/500 599/0521.html.

¹⁴ See attachment E: https://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined- schedule.pdf and attachment F: https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combinedschedule.pdf

¹⁵ How to pay for Vaccines: Medicare https://www.cdc.gov/vaccines/adults/pay-for-vaccines.html

Benefit	Current	Proposed ⁸	Medicare Coverage ⁹
Annual Routine Physical	Not Covered	Covered.	"Welcome to Medicare" visit covered once within first 12 months of Medicare Part B coverage. Yearly wellness visits once every 12 months.
Well Woman Preventive Visits	Not Covered (exception of limited exam to collect the pap smear)	Covered as outlined by the USPSTF and other evidence-based guidelines. Commonly covered services include cervical cancer screenings (Pap smear every 3 years for women age 21-65, HPV screening), well-woman visits to get recommended services for women under 65.	Screening Pap tests, pelvic exams, and HPV screening once every 24 months. More frequently for those at high risk. 16
Well Child Preventive Visits	Not Covered	Covered as outlined by the USPSTF and other evidence-based guidelines. ¹⁷ Commonly covered services include developmental screenings, physical examinations, behavioral assessments, blood screenings, hearing screenings, immunization vaccines.	Children under the age of 20 may only be eligible for Medicare in very limited circumstances. However, "Welcome to Medicare" visits are covered once within first 12 months of Medicare Part B coverage. Yearly wellness visits once every 12 months.

¹⁶ https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/Screening-papPelvic-Examinations.pdf

¹⁷ https://www.healthcare.gov/preventive-care-children/

Benefit	Current	Proposed ⁸	Medicare Coverage ⁹
Routine Cancer	Not Covered (except	Subject to any age, family	Subject to specific
Screening	Mammograms, PSA	history and frequency	age, family history
	and Pap Smear as	guidelines that are	and frequency
	outlined above)	evidence-based items or	guidelines.
		services that have in effect a	
		rating of A or B ¹⁸ in the	Includes breast
		recommendation so the	cancer, cervical
		United States Preventive	cancer, colorectal
		Services Task Force and	cancer, lung cancer,
		Evidence informed items or	prostate cancer, and
		services provided in the	skin cancer
		comprehensive guidelines	screenings.
		supported by the Health	
		Resources and Services	
		Administration. ¹⁹	
		Includes breast cancer,	
		cervical cancer, colorectal	
		cancer, lung cancer,	
		prostate cancer, and skin	
		cancer screenings.	

Actuarial Impact | Increase 0.45% - 0.50%

Financial Impact | Annual Cost Increase \$3m - \$3.35m

Member Impact | Enhancement
Operational Impact (DRB) | Neutral
Operational Impact (TPA) | Moderate

4) Analysis

Screening tests look for a disease before a person exhibits symptoms, while preventive care services are meant to prevent diseases or conditions from developing or progressing. Adding coverage for preventive care services and screenings to the AlaskaCare defined benefit retiree health plan is anticipated to increase the use of preventive services and to support members in maintaining their health.

Screenings and preventive services can help ward off or detect diseases early, when the disease is easier to treat. For example, colorectal cancer nearly always develops from abnormal, precancerous growths. Screening tests can identify these growths before they become cancerous or before they progress to later stages of the disease, and they can be removed before they progress. Approximately 90% of new cases of

¹⁸ https://www.uspreventiveservicestaskforce.org/Page/Name/uspstf-a-and-b-recommendations/

¹⁹ https://www.hrsa.gov/womens-guidelines/index.html

colorectal cancer occur in people over the age of 50, making colorectal cancer screenings an important and valuable benefit for a retiree population.²⁰

The United States Department of Health and Human Services (DHHS) outlines increasing the use of various preventive care services as key objectives in their Healthy People 2030 framework.²¹ These objectives include increasing the proportion of the population who receive preventive services and who are screened for cancer including lung, breast, cervical and colon cancer. A 2009 joint report by the Centers for Disease Control and Prevention, the AARP, and the American Medical Association specifically highlights the importance of preventive care for individuals age 50 to 64 years of age and the difference in screenings provided to individuals who have insurance coverage versus those who do not have insurance coverage.²²

Currently, data regarding retiree member's use of preventive visits outside of those currently covered by the plan (e.g. mammograms or PSA testing) is limited as retirees may be receiving these services and paying for them out of pocket. O65 members are likely receiving more preventive visits due to Medicare's coverage, but those visits are typically not captured in AlaskaCare's claims data. However, when comparing the prevalence of preventive visits based on the AlaskaCare active employee plan and the AlaskaCare retiree plan claims data there are striking differences between the plans. Figures 1 and 2 reflect prevalence of preventive visits for males and females as reflected in AlaskaCare claims data from February of 2019 and January of 2021.

²⁰ Colorectal (Colon) Cancer. US Centers for Disease Control and Prevention. https://www.cdc.gov/cancer/colorectal/basic_info/screening/index.htm

²¹ Healthy People 2030. US DHSS. https://health.gov/healthypeople/objectives-and-data/browse-objectives/preventive-care

²² Promoting Preventive Services for Adults 50-64: Community and Clinical Partnerships. CDC, AARP, AMA, https://www.cdc.gov/aging/pdf/promoting-preventive-services.pdf

Figure 1. AlaskaCare Retiree Plan (U65 and O65)
Preventive Visit Claims

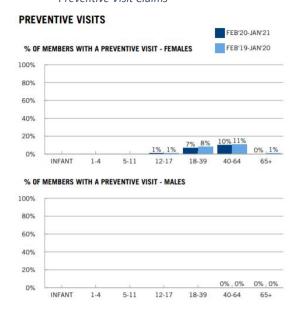
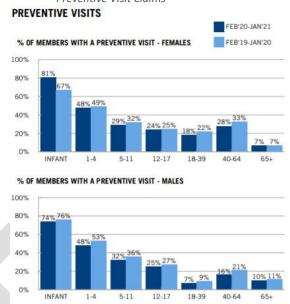


Figure 2. AlaskaCare Active Employee Plan
Preventive Visit Claims



Expanding preventive care coverage to the AlaskaCare retiree plan is anticipated to increase member's use of these important services, support early detection of disease, and prevent disease progression.

5) Impacts

Actuarial Impact | Increase 0.45% - 0.50%

Expanding the scope of covered preventive services to align with the benefit coverage mandated by the ACA would increase the actuarial value of the plan by 0.45% - 0.50%, depending on the member cost share structure elected. See Table 2 for details.

Table 3. Actuarial Impact

	Actuarial Impact
Current	N/A
Expanded Preventive Care Coverage: Option A	0.45% increase ²³
<u>In-Network:</u>	
 \$150 deductible applies 	
80% coinsurance	
 out-of-pocket limit applies 	
Out-of-Network:	
60% coinsurance	
 deductible applies 	
 out-of-pocket limit does not apply 	

²³ Preventive Care Benefits – Focus on Actuarial and Financial Impact for the Retiree Plan (Updated), Segal Consulting memo dated April 19, 2021.

	Actuarial Impact
Expanded Preventive Care Coverage: Option B	0.50% increase ²⁴
<u>In-Network:</u>	
• 100% coinsurance	
 deductible does not apply 	
 out-of-pocket limit not applicable 	
Out-of-Network:	
80% coinsurance	
 deductible applies 	
 out-of-pocket limit does not apply 	

Financial Impact | Annual Cost Increase \$3m - \$3.35m

Potential Future Claims Impact

Coverage for preventive screenings does not necessarily result in plan savings as articulated by the Robert Woods Johnson Foundation in their 2009 study. ²⁵ They found high-risk groups often stay away from screenings, ²⁶ and health-conscious members may use the screenings in excess. The result is higher procedure volume and total costs without the net savings associated with early detection or treatment.

"It is unlikely that substantial cost savings can be achieved by increasing the level of investment in clinical preventive care measures. On the other hand, research suggests that many preventive measures deliver substantial health benefits given their costs.

Moreover, while the achievement of cost savings is beneficial, it is important to keep in mind that the goal of prevention, like that of other health initiatives, is to improve health. Even those interventions that cost more than they save can still be desirable. Because health care resources are finite, however, it is useful to identify those interventions that deliver the greatest health benefits relative to their incremental costs."²⁷

Annual Cost Impact

Based on a Segal Consulting's preliminary retiree claims projection of \$633,000,000 for 2021 and trended forward at 6% for 2022, the annual anticipated fiscal impact of this changes is estimated to be approximately \$3,000,000 (for Option A) and \$3,350,000 (for Option B) in additional costs depending on the cost share structure elected.²⁸

²⁴ Ibid.

²⁵ Goodell, S., Cohen, J., & Neumann, P. (2009, Sep 1). Cost Savings and Cost-Effectiveness of Clinical Preventive Care. Retrieved from https://www.rwjf.org/en/library/research/2009/09/cost-savings-and-cost-effectiveness-of-clinical-preventive-care.html.

²⁶ Benson WF and Aldrich N, CDC Focuses on Need for Older Adults to Receive Clinical Preventive Services, Critical Issue Brief, Centers for Disease Control and Prevention, 2012, http://www.chronicdisease.org/nacdd-initiatives/healthy-aging/meeting-records.

²⁷ Ibid.

²⁸ Ibid.

Medicare covers many preventive and screening services at 100%. For Medicare-eligible members, no change in utilization is assumed and the impact on the Plan is anticipated to be negligible. The analysis details the financial impacts associated with the approximately 21,000 members under the age of 65 and not yet eligible for Medicare.

Projected Long-Term Financial Impacts

The annual cost increase associated with the proposed benefit additions will have long-term impacts to the healthcare Actuarial Accrued Liability (AAL)²⁹ and to the Additional State Contributions (ASC)³⁰ associated with the Plan. These impacts are somewhat tempered because the additional costs are primarily associated with the U65 retiree population, and also because the defined benefit retirement system is a closed system, meaning it is closed to brand new entrants and the total number of potential future participants is finite.

In an illustrative example, if the proposed changes had been reflected in the June 30, 2020 valuations, the AAL would have increased by approximately \$25.6 million (for Option A) or \$28.6 million (for Option B), and the ASC for Fiscal Year (FY) 2023 would have increased by approximately \$400,000, regardless of which cost share option was implemented.^{31,32}

The ASC provides payment assistance to participating employers' Actuarially Determined Contribution (ADC). The ADC is determined by adding the "Normal Cost"³³ to the amount needed to offset the amortization of any existing unfunded accrued liability over a period of 25 years.

The illustrative increase to the FY23 ASC is associated with the Normal Cost only. The current overfunded status³⁴ of the retiree health care liabilities has eliminated the immediate need for amortization payments to offset any unfunded liability. It is important to note the that long-term funded status of the trusts is subject to change in response to market volatility and many other factors.

If the retiree health care liabilities were not overfunded, in accordance with the Alaska Retirement Management Board's (ARMB) current funding policy, the total illustrative increases in the FY23 ASC would be approximately \$2.0 million (for Option A) or \$2.3 million (for Option B).³⁵

²⁹ AAL: The excess of the present value of a pension fund's total liability for future benefits and fund expenses over the present value of future normal costs for those benefits.

³⁰ Employer contributions to retirement payments were capped in FY08. Since then, the state makes additional assistance contributions to help cover the accrued unfunded liability associated with participating employers.

³¹ Each cost share option produced a different estimated illustrative increase to the FY23 ASC, however when those estimates are rounded, the impact of both options is \$400K.

³²Impact of Potential Change in Preventive Care Benefits for AlaskaCare Retiree Health Plan, Buck Consulting, May 7, 2021.

³³ The normal cost represents the present value of benefits earned by active employees during the current year. The employer normal cost equals the total normal cost of the plan reduced by employee contributions.

³⁴ Due in part to the savings realized as a result of the 2019 implementation of the enhanced Employer Group Waiver Program (EGWP) group Medicare Part D prescription drug program, the retiree health care liabilities are currently overfunded. The Division's 2020 draft Actuarial Valuation Reports for the Public Employees' Retirement System (PERS) and the Teachers' Retirement System (TRS) indicate that the PERS actuarial funded ratio is 113.5% and the TRS actuarial funded ratio is 121.4%.

³⁵ Impact of Potential Change in Preventive Care Benefits for AlaskaCare Retiree Health Plan, Buck Consulting, May 7, 2021.

Member Impact | Enhancement

Neutral / Enhancement / Diminishment

Studies suggest that increasing coverage for preventive care may increase the use of preventive services by members. As noted above, most members over the age of 65 receive coverage for preventive services through Medicare, but many of those members have dependents covered by the plan who are not yet Medicare-eligible. This proposed change will be an added benefit for all members, providing access to preventive care previously excluded under the retiree health plan.

As an example, one of the more expensive preventive services is a screening colonoscopy. The USPSTF guidelines recommend screening colonoscopies once every 10 years for non-high-risk adults starting at age 50. The AlaskaCare retiree plan has approximately 17,000 members between the ages of 50-64 who would benefit from expanded coverage for screening colonoscopies. Colonoscopies are a covered benefit under Medicare for which most retirees aged 65 and above are eligible.

The Division regularly receives feedback from members about the lack of preventive coverage in the plan, and the addition of these services is something the Division believes members will find both valuable and beneficial.

Operational Impact (DRB) | Neutral

To implement this change, the Division will need to make updates to the AlaskaCare Retiree Insurance Information Booklet. These booklet changes will be provided to the public to review and to comment on prior to the 2022 plan year. Sample plan language outlining coverage for preventive services is attached. **Note: this language is not the final proposed language for inclusion in the AlaskaCare retiree health plan; it is meant to only serve as an example.

The Division anticipates the expansion of preventive benefits in the retiree health plan will reduce calls, complaints and appeals to the Division related to lack of preventive coverage.

The retiree health plan is an antiquated plan design and is unusual in its lack of coverage for most preventive services. For this reason, there is a substantial communication and education need for the Division to notice members regarding the lack of preventive services. That need would no longer exist if the benefits were expanded.

Operational Impact (TPA) | Moderate

Using the industry standard set by the Affordable Care Act to determine what services are covered, the impact to the TPA is minimal. The TPA would need to update and test the coding in their claims adjudication system to ensure that the claims are processed correctly. This is often an "yes/no" indicator switch in a TPA's claims adjudication system. The change would simplify the administration of the AlaskaCare retiree health plan, which currently requires customization to provide the limited preventive services covered by the plan today.

Similarly, it is industry standard to have a separate network/out-of-network coinsurance for preventive services and therefore will not require any customization.

Last, offering the full suite of preventive services allows greater flexibility in disease management and broader communication options when there is not a concern about recommending a service not covered under the health plan.

6) Considerations

Clinical Considerations

It is largely agreed that the recommended preventive services can help detect disease, delay their onset, or identify them early on when the disease is most easy to manage or treat. Adding these services could have a positive clinical impact.

An example is colonoscopies. Excluding skin cancers, colorectal cancer is the third most common cancer diagnosed in both men and women. Screening can prevent colorectal cancer by finding and removing precancerous polyps before they develop into cancer. The cost of treatment is often lowest, and the survivor rates are better, when the tumor is found in the earlier stages.

Provider Considerations

The Division expects that expanding preventive coverage will have a positive impact on providers. They may gain customers in members who previously would have forgone the non-covered services, and they should see ease in administration in that they will not need to bill the member directly for the non-covered services.

The coinsurance differential may incentivize some doctors to join the network, as many members may look for a network provider to maximize their health plan benefits.

7) <u>Implementation Options</u>

Implementation Options:

Option A: Add the full suite of evidence-based preventive services in alignment with the Affordable Care Act, implement the following cost sharing provisions:

Option A	Option A
In-Network	Out-of-Network
\$150 deductible applies.	\$150 deductible applies.
80% coinsurance up to \$850 annual out-	60% coinsurance.
of-pocket maximum.	Not subject to the individual out-of-pocket
100% coinsurance after annual out-of-	maximum.
pocket reached.	
	If use of out-of-network provider is pre-certified, in-
	network cost share and out-of-pocket maximums
	apply.

Option B: Add the full suite of evidence-based preventive services in alignment with the Affordable Care Act, implement the following cost sharing provisions:

<u>Option B</u> In-Network	<u>Option B</u> Out-of-Network
Deductible does not apply.	\$150 deductible applies.
100% coinsurance.	80% coinsurance.
	Not subject to the individual out-of-pocket maximum.
	If use of out-of-network provider is pre-certified, in- network cost sharing provisions apply.

8) Proposal Recommendations

DRB Recommendation

Insert the Division recommendation here when final.

RHPAB Board Recommendation

Insert the RHPRAB recommendation here when final along with any appropriate comments.

Description	Date
Proposal Drafted	07/20/2018
Reviewed by Modernization Subcommittee	08/10/2018, 09/28/2018, 10/30/2018, 04/23/2019, 06/12/2019
Reviewed by RHPAB	08/29/2018, 11/28/2018, 02/06/2019, 05/08/2019, 08/07/2019, 05/13/2021

Documents attached include:

Attachment	Document Name
Α	Preventive Care Benefits — Focus on Actuarial and Financial Impact for the
	Retiree Plan (Updated), Segal Consulting memo dated April 19, 2021
В	Impact of Potential Change in Preventive Care Benefits for AlaskaCare
	Retiree Health Plan, Buck Consulting, May 7, 2021.
С	Sample Preventive Care Plan Language: Aetna Fully Insured Preventive
	Service Booklet Language 2021
D	A and B Recommendations United States Preventive Services Taskforce
	2021
E	Recommended Child and Adolescent Immunization Schedule for Ages 18
	Years or Younger, 2021
F	Recommended Adult Immunization Schedule for Ages 19 Years or Older,
	2021



Richard Ward, FSA, FCA, MAAA West Region Market Director, Public Sector T 956.818.6714 M 619.710.9952 RWard@Segalco.com 500 North Brand Boulevard Suite 1400 Glendale, CA 91203-3338 segalco.com

Memorandum

To: Ajay Desai, Director, Division of Retirement and Benefits

From: Richard Ward, FSA, FCA, MAAA

Date: April 19, 2021

Re: Preventive Care Benefits – Focus on Actuarial and Financial Impact for the Retiree

Plan (Updated)

The AlaskaCare Retiree Plan currently provides coverage for some select preventive benefits. Currently, the Plan provides coverage for the following routine lab tests:

- One pap smear per year for all women age 18 or older. Charges for a limited office visit to collect the pap smear are also covered.
- Prostate specific antigen (PSA) tests as follows:
 - One annual screening PSA test for men between ages 35 and 50 with a personal or family history of prostate cancer, and
 - o One annual screening PSA test for men 50 years and older
- Mammograms as follows:
 - o One baseline mammogram between age 35 and 40
 - o One mammogram every two years between ages 40 and 50, and
 - One annual mammogram at age 50 years and above, and for those with a personal or family history of breast cancer.

Coverage is provided in the same manner that other medical treatments and services are covered. The Plan applies the general plan provisions, such as deductible, coinsurance and out-of-pocket limitations, to determine any portion of the costs that are the member's responsibility. If the member has additional coverage, such as Medicare or other employer provided coverage, any portion of the costs covered by that plan is also considered.

Below is a table outlining the current benefits offered under the Plan:

Deductibles			
Annual individual / family unit deductible	\$150 / up to	3x per family	
Coinsurance			
Most medical expenses	80)%	
Most medical expenses after out-of-pocket limit is satisfied	10	0%	
Second surgical opinions, Preoperative testing, Outpatient testing/surgery • No deductible applies	10	0%	
Out-of-Pocket Limit			
Annual individual out-of-pocket limit • Applies after the deductible is satisfied • Expenses paid at a coinsurance rate other than 80% do not apply against the out-of-pocket limit \$800			
Benefit Maximums			
Individual lifetime maximum • Prescription drug expenses do not apply against the lifetime maximum	\$2,000,000		
Individual limit per benefit year on substance abuse treatment without precertification. Subject to change every three years	\$12,715		
Individual lifetime maximum on substance abuse treatment without precertification. Subject to change every three years	\$25,430		
Prescription Drugs	•	Day or 100 Unit Supply Brand Name	
Network pharmacy copayment	\$4	\$8	
Mail order copayment	\$0	\$0	

A change to the benefits under consideration would align the scope of benefits with those required of non-Grandfathered plans under the Affordable Care Act (ACA). Note that retiree plans, such as the AlaskaCare Retiree Plan, are not subject to the same provisions under the ACA that apply to the AlaskaCare Employee Plan. The changes to preventive benefits have been analyzed in the following two ways:

- A. Option A: In-Network: 80% coinsurance/deductible applies/out-of-pocket limit applies; Out-of-Network: 60% coinsurance/deductible applies/out-of-pocket limit does not apply.
- B. Option B: In-Network: 100% coinsurance/deductible does not apply; Out-of-Network: 80% coinsurance/deductible applies/out-of-pocket limit does not apply.

Actuarial Value

Our updated analysis utilizes claims data and the Optum Comprehensive Benefit Pricing Model¹, along with previously completed work using the Apex Actuarial Rate Modeling System².

The impact of expanding the scope of covered services to align the scope of benefits with those required of non-Grandfathered plans under the ACA while being subject to deductibles, coinsurance and other plan provisions (Option A) would increase the actuarial value by 0.45%³.

The impact of expanding the scope of covered services to align the scope of benefits with those required of non-Grandfathered plans under the ACA at no member cost, 100% plan paid, for network provided services (Option B), would be an increase of 0.50% in actuarial value.⁴

The updated analysis reflects additional anticipated utilization resulting from the expanded benefits. For Medicare members, many of these services, including colonoscopies, are currently covered at 100% by Medicare. For these members, no change in utilization is assumed and the impact on the Plan is anticipated to be negligible.

Financial Impact

Based on the most recent retiree medical and pharmacy claims projection of \$633,000,000 for 2021 (dated August 28, 2020), and trended forward at 6% to \$670,000,000 for 2022, this equates to approximately \$3,000,000 (Option A) to \$3,350,000 (Option B) in additional annual costs to the Plan depending on the cost sharing provisions.

Additional Notes

The data used for this analysis was reviewed, but not audited, and found to be sufficient and credible.

The above projection is an estimate of future cost and is based on information available to Segal at the time the projection was made. Segal has not audited the information provided. A projection is not a guarantee of future results. Actual experience may differ due to, but not limited to, such variables as changes in the regulatory environment, local market pressure, change in demographics, overall inflation rates and claims volatility. Projection of retiree costs takes into account only the dollar value of providing benefits for current retirees during the period referred to in the projection. It does not reflect the present value of any future retiree benefits for active, disabled, or terminated employees during a period other than that which is

¹ The Optum Comprehensive Benefit Pricing Model provides comprehensive plan design and rate modeling capabilities, and is widely utilized throughout the industry by insurance carriers and consulting actuaries. Segal held an annual license to utilize this model at the time the analysis was conducted.

² The Apex Actuarial Rate Modeling System provides comprehensive plan design and rate modeling capabilities, and is widely utilized throughout the industry by insurance carriers and consulting actuaries. Segal held an annual license to utilize this model at the time the analysis was conducted.

³ The previous analysis did not review the actuarial value change for a plan benefit that was subject to subject to deductibles, coinsurance and other plan provisions.

⁴ The previous analysis included in the July 25, 2018 Preventive Care Benefits – Focus on Actuarial and Financial Impact for the Retiree Plan memo provide an actuarial value change of 0.75%.

April 19, 2021 Page 4

referred to in the projection, nor does it reflect any anticipated increase in the number of those eligible for retiree benefits, or any changes that may occur in the nature of benefits over time.

The Coronavirus (COVID-19) pandemic is rapidly evolving and will likely impact the 2021 US economy and health plan claims projections for most Health Plan Sponsors. As a result, projections could be significantly altered by emerging events. At this point, it is unclear what the impact will be for Health Plan Sponsors. Segal continues to develop and review plan cost adjustment factors and reports to apply to both short-term and long-term financial projections. Additionally, the potential for federal or state fiscal relief is also not contemplated in these budget projections.

cc: Emily Ricci, Division of Retirement and Benefits
Betsy Wood, Division of Retirement and Benefits
Andrea Mueca, Division of Retirement and Benefits
Noel Cruse, Segal
Eric Miller, Segal
Quentin Gunn, Segal

Preventive care and wellness

This section describes the eligible health services and supplies available under your plan when you are well.

Important notes:

- 1. You will see references to the following recommendations and guidelines in this section:
 - Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention
 - United States Preventive Services Task Force
 - Health Resources and Services Administration
 - American Academy of Pediatrics/Bright Futures/Health Resources and Services
 Administration guidelines for children and adolescents

These recommendations and guidelines may be updated periodically. When these are updated, they will be applied to this plan. The updates will be effective on the first day of the Calendar Year, one year after the updated recommendation or guideline is issued.

- 2. Diagnostic testing will not be covered under the preventive care benefit. For those tests, you will pay the cost sharing specific to **eligible health services** for diagnostic testing.
- 3. Gender- specific preventive care benefits include **eligible health services** described below regardless of the sex you were assigned at birth, your gender identity, or your recorded gender.
- 4. To learn what frequency and age limits apply to routine physical exams and routine cancer screenings, contact your **physician** or contact Member Services by logging on to your Aetna member website at www.aetna.com or calling the number on your ID card. This information can

also be found at the www.HealthCare.gov website.

Routine physical exams

Eligible health services include office visits to your **physician**, **PCP** or other **health professional** for routine physical exams. This includes routine vision and hearing screenings given as part of the exam. A routine exam is a medical exam given by a **physician** or other **health professional** for a reason other than to diagnose or treat a suspected or identified **illness** or **injury**, and also includes:

- Evidence-based items that have in effect a rating of A or B in the current recommendations of the United States Preventive Services Task Force.
- Services as recommended in the American Academy of Pediatrics/Bright Futures/Health Resources and Services Administration guidelines for children and adolescents.
- Screenings and counseling services as provided for in the comprehensive guidelines recommended by the Health Resources and Services Administration. These services may include but are not limited to:
 - Screening and counseling services on topics such as:
 - o Interpersonal and domestic violence
 - Sexually transmitted diseases
 - o Human immune deficiency virus (HIV) infections
 - Screening for gestational diabetes for women
 - High risk human papillomavirus (HPV) DNA testing for women age 30 and older
- Radiological services, lab and other tests given in connection with the exam.
- For covered children, from birth to age 2:
 - An initial hospital checkup
 - Periodic well child exams
 - Consultation between the health professional and a parent

Newborn hearing screening exam

Eligible health services include:

- Screening test for hearing loss prior to the date the child is 30 days old and
- Diagnostic hearing evaluation if the initial screening test shows the child may have a hearing impairment.

Preventive care immunizations

Eligible health services include immunizations for infectious diseases recommended by the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention.

Your plan does not cover immunizations that are not considered preventive care, such as those required due to your employment or travel.

Well woman preventive visits

Eligible health services include your routine:

- Well woman preventive exam office visit to your physician, PCP, obstetrician (OB), gynecologist (GYN) or OB/GYN. This includes pap smears. Your plan covers the exams recommended by the Health Resources and Services Administration. A routine well woman preventive exam is a medical exam given for a reason other than to diagnose or treat a suspected or identified illness or injury.
- Preventive care breast cancer (BRCA) gene blood testing by a **physician** and lab.
- Preventive breast cancer genetic counseling provided by a genetic counselor to interpret the test results and evaluate treatment.

Preventive screening and counseling services

Eligible health services include screening and counseling by your **health professional** for some conditions. These are obesity, misuse of alcohol and/or drugs, use of tobacco products, sexually transmitted infection counseling and genetic risk counseling for breast and ovarian cancer. Your plan will cover the services you get in an individual or group setting. Here is more detail about those benefits.

Obesity and/or healthy diet counseling

Eligible health services include the following screening and counseling services to aid in weight reduction due to obesity:

- Preventive counseling visits and/or risk factor reduction intervention
- Nutritional counseling
- Healthy diet counseling visits provided in connection with Hyperlipidemia (high cholesterol) and other known risk factors for cardiovascular and diet-related chronic disease

Misuse of alcohol and/or drugs

Eligible health services include the following screening and counseling services to help prevent or reduce the use of an alcohol agent or controlled substance:

- Preventive counseling visits
- Risk factor reduction intervention
- A structured assessment

Use of tobacco products

Eligible health services include the following screening and counseling services to help you to stop the use of tobacco products:

- Preventive counseling visits
- Treatment visits
- Class visits;
- Tobacco cessation prescription and over-the-counter drugs
 - Eligible health services include FDA- approved prescription drugs and over-the-counter (OTC) drugs to help stop the use of tobacco products, when prescribed by a prescriber and the prescription is submitted to the pharmacist for processing.

Tobacco product means a substance containing tobacco or nicotine such as:

- Cigarettes
- Cigars
- Smoking tobacco
- Snuff
- Smokeless tobacco
- Candy-like products that contain tobacco

Sexually transmitted infection counseling

Eligible health services include the counseling services to help you prevent or reduce sexually transmitted infections.

Genetic risk counseling for breast and ovarian cancer

Eligible health services include counseling and evaluation services to help you assess whether or not you are at increased risk for breast and ovarian cancer.

Routine cancer screenings

Eligible health services include the following routine cancer screenings:

- Mammograms
- Prostate specific antigen (PSA) tests
- Digital rectal exams
- Fecal occult blood tests
- Sigmoidoscopies
- Double contrast barium enemas (DCBE)
- Colonoscopies which includes removal of polyps performed during a screening procedure, and a pathology exam on any removed polyps
- Lung cancer screenings

These benefits will be subject to any age, family history and frequency guidelines that are:

- Evidence-based items or services that have in effect a rating of A or B in the recommendations of the United States Preventive Services Task Force
- Evidence-informed items or services provided in the comprehensive guidelines supported by the Health Resources and Services Administration
- Found in the American Cancer Society guidelines for colorectal cancer screening

Eligible health services include:

- A mammogram for women:
 - With a history of breast cancer
 - Who have a parent or sibling with a history of breast cancer
 - Who have received a referral from a physician
- Additional cancer screenings at frequencies that may not be included in the guidelines referenced above. See your schedule of benefits for details.

Prenatal care

Eligible health services include your routine prenatal physical exams, which is the initial and subsequent history and physical exam such as:

- Maternal weight
- Blood pressure
- Fetal heart rate check
- Fundal height

You can get this care at your physician's, PCP's, OB's, GYN's, or OB/GYN's office.

Important note:

You should review the benefit under *Eligible health services under your plan- Maternity and related newborn care* and the *Exceptions* sections of this booklet-certificate for more information on coverage for pregnancy expenses under this plan.

Comprehensive lactation support and counseling services

Eligible health services include comprehensive lactation support (assistance and training in breast feeding) and counseling services during pregnancy or at any time following delivery for breast feeding. Your plan will cover this when you get it in an individual or group setting. Your plan will cover this counseling only when you get it from a certified lactation support **provider**.

Breast feeding durable medical equipment

EXAMPLE PLAN LANGUAGE – NOT PROPOSED FOR INCLUSION IN THE ALASKACARE RETIREE HEALTH PLAN

Eligible health services include renting or buying **durable medical equipment** you need to pump and storebreast milk as follows:

Breast pump

Eligible health services include:

- Renting a hospital grade electric pump while your newborn child is confined in a hospital.
- The buying of:
 - An electric breast pump (non-**hospital** grade). Your plan will cover this cost once every three years,or
 - A manual breast pump. Your plan will cover this cost once per pregnancy.

If an electric breast pump was purchased within the previous three year period, the purchase of another electricbreast pump will not be covered until a three year period has elapsed since the last purchase.

Breast pump supplies and accessories

Eligible health services include breast pump supplies and accessories. These are limited to only one purchaseper pregnancy in any year where a covered female would not qualify for the purchase of a new pump.

Coverage for the purchase of breast pump equipment is limited to one item of equipment, for the same or similar purpose, and the accessories and supplies needed to operate the item. You are responsible for the entirecost of any additional pieces of the same or similar equipment you purchase or rent for personal convenience ormobility.

Family planning services – female contraceptives

Eligible health services include family planning services such as:

Counseling services

Eligible health services include counseling services provided by a **physician**, OB, GYN, or OB/GYN on contraceptive methods. These will be covered when you get them in either a group or individual setting.

Devices

Eligible health services include contraceptive devices (including any related services or supplies) when they are provided by, administered or removed by a **physician** during an office visit.

Voluntary sterilization

Eligible health services include charges billed separately by the **provider** for female voluntary sterilization procedures and related services and supplies. This also could include tubal ligation and sterilization implants.

Important note:

EXAMPLE PLAN LANGUAGE – NOT PROPOSED FOR INCLUSION IN THE ALASKACARE RETIREE HEALTH PLAN

See the following sections for more information:

- Family planning services other
- Maternity and related newborn care
- Outpatient prescription drugs
- Treatment of basic infertility



Topic	Description	Grade	Release Date of Current Recommendation
Abdominal Aortic Aneurysm: Screening: men aged 65 to 75 years who have ever smoked	The USPSTF recommends 1-time screening for abdominal aortic aneurysm (AAA) with ultrasonography in men aged 65 to 75 years who have ever smoked.	В	December 2019 *
Abnormal Blood Glucose and Type 2 Diabetes Mellitus: Screening: adults aged 40 to 70 years who are overweight or obese	The USPSTF recommends screening for abnormal blood glucose as part of cardiovascular risk assessment in adults aged 40 to 70 years who are overweight or obese. Clinicians should offer or refer patients with abnormal blood glucose to intensive behavioral counseling interventions to promote a healthful diet and physical activity.	В	October 2015 *
Aspirin Use to Prevent Cardiovascular Disease and Colorectal Cancer: Preventive Medication: adults aged 50 to 59 years with a 10% or greater 10-year cvd risk	The USPSTF recommends initiating low-dose aspirin use for the primary prevention of cardiovascular disease (CVD) and colorectal cancer (CRC) in adults aged 50 to 59 years who have a 10% or greater 10-year CVD risk, are not at increased risk for bleeding, have a life expectancy of at least 10 years, and are willing to take low-dose aspirin daily for at least 10 years.	В	April 2016 *
Asymptomatic Bacteriuria in Adults: Screening: pregnant persons	The USPSTF recommends screening for asymptomatic bacteriuria using urine culture in pregnant persons.	В	September 2019 *
BRCA-Related Cancer: Risk Assessment, Genetic Counseling, and Genetic Testing: women with a personal or family history of breast, ovarian, tubal, or peritoneal cancer or an ancestry associated with brcal/2 gene mutation	The USPSTF recommends that primary care clinicians assess women with a personal or family history of breast, ovarian, tubal, or peritoneal cancer or who have an ancestry associated with breast cancer susceptibility 1 and 2 (BRCAI/2) gene mutations with an appropriate brief familial risk assessment tool. Women with a positive result on the risk assessment tool should receive genetic counseling and, if indicated after counseling, genetic testing.	В	August 2019 *
Breast Cancer: Medication Use to Reduce Risk: women at increased risk for breast cancer aged 35 years or older	The USPSTF recommends that clinicians offer to prescribe risk-reducing medications, such as tamoxifen, raloxifene, or aromatase inhibitors, to women who are at increased risk for breast cancer and at low risk for adverse medication effects.	В	September 2019 *

0/4/2021	A and b Neconfinendations Officed States Preventive Services Taskio	.00	
Breast Cancer: Screening: women aged 50 to 74 years	The USPSTF recommends biennial screening mammography for women aged 50 to 74 years. †	В	January 2016 *
Breastfeeding: Primary Care Interventions: pregnant women, new mothers, and their children	The USPSTF recommends providing interventions during pregnancy and after birth to support breastfeeding.	В	October 2016 *
Cervical Cancer: Screening: women aged 21 to 65 years	The USPSTF recommends screening for cervical cancer every 3 years with cervical cytology alone in women aged 21 to 29 years. For women aged 30 to 65 years, the USPSTF recommends screening every 3 years with cervical cytology alone, every 5 years with high-risk human papillomavirus (hrHPV) testing alone, or every 5 years with hrHPV testing in combination with cytology (cotesting). See the Clinical Considerations section for the relative benefits and harms of alternative screening strategies for women 21 years or older.	А	August 2018 *
Colorectal Cancer: Screening: adults aged 50 to 75 years	The USPSTF recommends screening for colorectal cancer starting at age 50 years and continuing until age 75 years. The risks and benefits of different screening methods vary. See the Clinical Considerations section and the Table for details about screening strategies.	А	June 2016 *
Dental Caries in Children from Birth Through Age 5 Years: Screening: children from birth through age 5 years	The USPSTF recommends that primary care clinicians prescribe oral fluoride supplementation starting at age 6 months for children whose water supply is deficient in fluoride.	В	May 2014 *
Dental Caries in Children from Birth Through Age 5 Years: Screening: children from birth through age 5 years	The USPSTF recommends that primary care clinicians apply fluoride varnish to the primary teeth of all infants and children starting at the age of primary tooth eruption.	В	May 2014 *
Depression in Adults: Screening: general adult population, including pregnant and postpartum women	The USPSTF recommends screening for depression in the general adult population, including pregnant and postpartum women. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up.	В	January 2016 *
Depression in Children and Adolescents: Screening: adolescents aged 12 to 18 years	The USPSTF recommends screening for major depressive disorder (MDD) in adolescents aged 12 to 18 years. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up.	В	February 2016 *

The USPSTF recommends exercise interventions to prevent falls in community-dwelling adults 65 years or older who are at increased risk for falls.	В	April 2018 *
The USPSTF recommends that all women who are planning or capable of pregnancy take a daily supplement containing 0.4 to 0.8 mg (400 to 800 µg) of folic acid.	А	January 2017 *
The USPSTF recommends screening for gestational diabetes mellitus (GDM) in asymptomatic pregnant women after 24 weeks of gestation.	В	January 2014
The USPSTF recommends screening for chlamydia in sexually active women age 24 years and younger and in older women who are at increased risk for infection.	В	September 2014 *
The USPSTF recommends screening for gonorrhea in sexually active women age 24 years and younger and in older women who are at increased risk for infection.	В	September 2014 *
The USPSTF recommends offering or referring adults with cardiovascular disease risk factors to behavioral counseling interventions to promote a healthy diet and physical activity.	В	November 2020 *
The USPSTF recommends screening for hepatitis B virus (HBV) infection in adolescents and adults at increased risk for infection. See the Practice Considerations section for a description of adolescents and adults at increased risk for infection.	В	December 2020 *
The USPSTF recommends screening for hepatitis B virus (HBV) infection in pregnant women at their first prenatal visit	А	July 2019 *
	community-dwelling adults 65 years or older who are at increased risk for falls. The USPSTF recommends that all women who are planning or capable of pregnancy take a daily supplement containing 0.4 to 0.8 mg (400 to 800 µg) of folic acid. The USPSTF recommends screening for gestational diabetes mellitus (GDM) in asymptomatic pregnant women after 24 weeks of gestation. The USPSTF recommends screening for chlamydia in sexually active women age 24 years and younger and in older women who are at increased risk for infection. The USPSTF recommends screening for gonorrhea in sexually active women age 24 years and younger and in older women who are at increased risk for infection. The USPSTF recommends offering or referring adults with cardiovascular disease risk factors to behavioral counseling interventions to promote a healthy diet and physical activity. The USPSTF recommends screening for hepatitis B virus (HBV) infection in adolescents and adults at increased risk for infection. See the Practice Considerations section for a description of adolescents and adults at increased risk for infection.	Community-dwelling adults 65 years or older who are at increased risk for falls. The USPSTF recommends that all women who are planning or capable of pregnancy take a daily supplement containing 0.4 to 0.8 mg (400 to 800 μg) of folic acid. The USPSTF recommends screening for gestational diabetes mellitus (GDM) in asymptomatic pregnant women after 24 weeks of gestation. The USPSTF recommends screening for chlamydia in sexually active women age 24 years and younger and in older women who are at increased risk for infection. The USPSTF recommends screening for gonorrhea in sexually active women age 24 years and younger and in older women who are at increased risk for infection. Be a supplement of the property of the practice Considerations section for a description of adolescents and adults at increased risk for infection. Be a supplement on the planning of the property of the practice Considerations section for a description of adolescents and adults at increased risk for infection. Be a supplement containing or property of the practice Considerations section for a description of adolescents and adults at increased risk for infection.

5/4/2021	A and B Recommendations United States Preventive Services Taskfo	ice	
Hepatitis C Virus Infection in Adolescents and Adults: Screening: adults aged 18 to 79 years	The USPSTF recommends screening for hepatitis C virus (HCV) infection in adults aged 18 to 79 years.	В	March 2020 *
Human Immunodeficiency Virus (HIV) Infection: Screening: adolescents and adults aged 15 to 65 years	The USPSTF recommends that clinicians screen for HIV infection in adolescents and adults aged 15 to 65 years. Younger adolescents and older adults who are at increased risk of infection should also be screened. See the Clinical Considerations section for more information about assessment of risk, screening intervals, and rescreening in pregnancy.	А	June 2019 *
Human Immunodeficiency Virus (HIV) Infection: Screening: pregnant persons	The USPSTF recommends that clinicians screen for HIV infection in all pregnant persons, including those who present in labor or at delivery whose HIV status is unknown.	А	June 2019 *
Screening for Hypertension in Adults: adults 18 years or older without known hypertension	The USPSTF recommends screening for hypertension in adults 18 years or older with office blood pressure measurement (OBPM). The USPSTF recommends obtaining blood pressure measurements outside of the clinical setting for diagnostic confirmation before starting treatment.	А	April 2021 *
Intimate Partner Violence, Elder Abuse, and Abuse of Vulnerable Adults: Screening: women of reproductive age	The USPSTF recommends that clinicians screen for intimate partner violence (IPV) in women of reproductive age and provide or refer women who screen positive to ongoing support services. See the Clinical Considerations section for more information on effective ongoing support services for IPV and for information on IPV in men.	В	October 2018 *
Latent Tuberculosis Infection: Screening: asymptomatic adults at increased risk for infection	The USPSTF recommends screening for latent tuberculosis infection (LTBI) in populations at increased risk.	В	September 2016 *
Low-Dose Aspirin Use for the Prevention of Morbidity and Mortality From Preeclampsia: Preventive Medication: pregnant women who are at high risk for preeclampsia	The USPSTF recommends the use of low-dose aspirin (81 mg/d) as preventive medication after 12 weeks of gestation in women who are at high risk for preeclampsia.	В	September 2014

014/2021	A and b Neconfinendations Officed States Preventive Services Taskio		
Lung Cancer: Screening: adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years	The USPSTF recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.	В	March 2021 *
Obesity in Children and Adolescents: Screening: children and adolescents 6 years and older	The USPSTF recommends that clinicians screen for obesity in children and adolescents 6 years and older and offer or refer them to comprehensive, intensive behavioral interventions to promote improvements in weight status.	В	June 2017 *
Ocular Prophylaxis for Gonococcal Ophthalmia Neonatorum: Preventive Medication: newborns	The USPSTF recommends prophylactic ocular topical medication for all newborns to prevent gonococcal ophthalmia neonatorum.	Α	January 2019 *
Osteoporosis to Prevent Fractures: Screening: postmenopausal women younger than 65 years at increased risk of osteoporosis	The USPSTF recommends screening for osteoporosis with bone measurement testing to prevent osteoporotic fractures in postmenopausal women younger than 65 years who are at increased risk of osteoporosis, as determined by a formal clinical risk assessment tool. See the Clinical Considerations section for information on risk assessment.	В	June 2018 *
Osteoporosis to Prevent Fractures: Screening: women 65 years and older	The USPSTF recommends screening for osteoporosis with bone measurement testing to prevent osteoporotic fractures in women 65 years and older.	В	June 2018 *
Perinatal Depression: Preventive Interventions: pregnant and postpartum persons	The USPSTF recommends that clinicians provide or refer pregnant and postpartum persons who are at increased risk of perinatal depression to counseling interventions.	В	February 2019
Preeclampsia: Screening: pregnant woman	The USPSTF recommends screening for preeclampsia in pregnant women with blood pressure measurements throughout pregnancy.	В	April 2017 *
Prevention of Human Immunodeficiency Virus (HIV) Infection: Preexposure Prophylaxis: persons at high risk of hiv acquisition	The USPSTF recommends that clinicians offer preexposure prophylaxis (PrEP) with effective antiretroviral therapy to persons who are at high risk of HIV acquisition. See the Clinical Considerations section for information about identification of persons at high risk and selection of effective antiretroviral therapy.	А	June 2019

0/4/2021	A and B Recommendations United States Preventive Services Taskto	100	
Prevention and Cessation of Tobacco Use in Children and Adolescents: Primary Care Interventions: school-aged children and adolescents who have not started to use tobacco	The USPSTF recommends that primary care clinicians provide interventions, including education or brief counseling, to prevent initiation of tobacco use among school-aged children and adolescents.	В	April 2020 *
Rh(D) Incompatibility: Screening: unsensitized rh(d)-negative pregnant women	The USPSTF recommends repeated Rh(D) antibody testing for all unsensitized Rh(D)-negative women at 24 to 28 weeks' gestation, unless the biological father is known to be Rh(D)-negative.	В	February 2004 *
Rh(D) Incompatibility: Screening: pregnant women, during the first pregnancy-related care visit	The USPSTF strongly recommends Rh(D) blood typing and antibody testing for all pregnant women during their first visit for pregnancy-related care.	А	February 2004 *
Sexually Transmitted Infections: Behavioral Counseling: sexually active adolescents and adults at increased risk	The USPSTF recommends behavioral counseling for all sexually active adolescents and for adults who are at increased risk for sexually transmitted infections (STIs). See the Practice Considerations section for more information on populations at increased risk for acquiring STIs.	В	August 2020 *
Skin Cancer Prevention: Behavioral Counseling: young adults, adolescents, children, and parents of young children	The USPSTF recommends counseling young adults, adolescents, children, and parents of young children about minimizing exposure to ultraviolet (UV) radiation for persons aged 6 months to 24 years with fair skin types to reduce their risk of skin cancer.	В	March 2018 *
Statin Use for the Primary Prevention of Cardiovascular Disease in Adults: Preventive Medication: adults aged 40 to 75 years with no history of cvd, 1 or more cvd risk factors, and a calculated 10-year cvd event risk of 10% or greater	The USPSTF recommends that adults without a history of cardiovascular disease (CVD) (ie, symptomatic coronary artery disease or ischemic stroke) use a low- to moderate-dose statin for the prevention of CVD events and mortality when all of the following criteria are met: 1) they are aged 40 to 75 years; 2) they have 1 or more CVD risk factors (ie, dyslipidemia, diabetes, hypertension, or smoking); and 3) they have a calculated 10-year risk of a cardiovascular event of 10% or greater. Identification of dyslipidemia and calculation of 10-year CVD event risk requires universal lipids screening in adults aged 40 to 75 years. See the "Clinical Considerations" section for more information on lipids screening and the assessment of cardiovascular risk.	В	November 2016 *

0/4/2021	A and B Recommendations United States Preventive Services Taskto	100	
Syphilis Infection in Nonpregnant Adults and Adolescents: Screening: asymptomatic, nonpregnant adults and adolescents who are at increased risk for syphilis infection	The USPSTF recommends screening for syphilis infection in persons who are at increased risk for infection.	Α	June 2016 *
Syphilis Infection in Pregnant Women: Screening: pregnant women	The USPSTF recommends early screening for syphilis infection in all pregnant women.	А	September 2018 *
Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Persons: nonpregnant adults	The USPSTF recommends that clinicians ask all adults about tobacco use, advise them to stop using tobacco, and provide behavioral interventions and US Food and Drug Administration (FDA) approved pharmacotherapy for cessation to nonpregnant adults who use tobacco.	Α	January 2021 *
Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Persons: pregnant persons	The USPSTF recommends that clinicians ask all pregnant persons about tobacco use, advise them to stop using tobacco, and provide behavioral interventions for cessation to pregnant persons who use tobacco.	А	January 2021 *
Unhealthy Alcohol Use in Adolescents and Adults: Screening and Behavioral Counseling Interventions: adults 18 years or older, including pregnant women	The USPSTF recommends screening for unhealthy alcohol use in primary care settings in adults 18 years or older, including pregnant women, and providing persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce unhealthy alcohol use.	В	November 2018 *
Unhealthy Drug Use: Screening: adults age 18 years or older	The USPSTF recommends screening by asking questions about unhealthy drug use in adults age 18 years or older. Screening should be implemented when services for accurate diagnosis, effective treatment, and appropriate care can be offered or referred. (Screening refers to asking questions about unhealthy drug use, not testing biological specimens.)	В	June 2020
Vision in Children Ages 6 Months to 5 Years: Screening: children aged 3 to 5 years	The USPSTF recommends vision screening at least once in all children aged 3 to 5 years to detect amblyopia or its risk factors.	В	September 2017 *

Weight Loss to Prevent Obesity-Related Morbidity and Mortality in Adults: Behavioral Interventions: adults	The USPSTF recommends that clinicians offer or refer adults with a body mass index (BMI) of 30 or higher (calculated as weight in kilograms divided by height in meters squared) to intensive, multicomponent behavioral interventions.	В	September 2018 *
--	---	---	------------------

Pages: 1

†The Department of Health and Human Services, under the standards set out in revised Section 2713(a)(5) of the Public Health Service Act and Section 9(h)(v)(229) of the 2015 Consolidated Appropriations Act, utilizes the 2002 recommendation on breast cancer screening of the U.S. Preventive Services Task Force. To see the USPSTF 2016 recommendation on breast cancer screening, go to http://www.uspreventiveservicestaskforce.org/uspstf/recommendation/breast-cancer-screening1.

*Previous recommendation was an "A" or "B."

Vaccines in the Child and Adolescent Immunization Schedule*

Vaccines	Abbreviations	Trade names
Diphtheria, tetanus, and acellular pertussis vaccine	DTaP	Daptacel® Infanrix®
Diphtheria, tetanus vaccine	DT	No trade name
Haemophilus influenzae type b vaccine	Hib (PRP-T) Hib (PRP-OMP)	ActHIB® Hiberix® PedvaxHIB®
Hepatitis A vaccine	НерА	Havrix® Vaqta®
Hepatitis B vaccine	НерВ	Engerix-B® Recombivax HB®
Human papillomavirus vaccine	HPV	Gardasil 9®
Influenza vaccine (inactivated)	IIV	Multiple
Influenza vaccine (live, attenuated)	LAIV4	FluMist® Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R II®
Meningococcal serogroups A, C, W, Y vaccine	MenACWY-D	Menactra®
	MenACWY-CRM	Menveo®
	MenACWY-TT	MenQuadfi®
Meningococcal serogroup B vaccine	MenB-4C	Bexsero®
	MenB-FHbp	Trumenba®
Pneumococcal 13-valent conjugate vaccine	PCV13	Prevnar 13®
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax 23®
Poliovirus vaccine (inactivated)	IPV	IPOL [®]
Rotavirus vaccine	RV1 RV5	Rotarix® RotaTeq®
Tetanus, diphtheria, and acellular pertussis vaccine	Tdap	Adacel® Boostrix®
Tetanus and diphtheria vaccine	Td	Tenivac® Tdvax™
Varicella vaccine	VAR	Varivax®
Combination vaccines (use combination vaccines instead of separate injection	ns when appropriate,	
DTaP, hepatitis B, and inactivated poliovirus vaccine	DTaP-HepB-IPV	Pediarix®
DTaP, inactivated poliovirus, and <i>Haemophilus influenzae</i> type b vaccine	DTaP-IPV/Hib	Pentacel®
DTaP and inactivated poliovirus vaccine	DTaP-IPV	Kinrix® Quadracel®
DTaP, inactivated poliovirus, Haemophilus influenzae type b, and hepatitis B vaccine	DTaP-IPV-Hib-	Vaxelis®

^{*}Administer recommended vaccines if immunization history is incomplete or unknown. Do not restart or add doses to vaccine series for extended intervals between doses. When a vaccine is not administered at the recommended age, administer at a subsequent with the recommended age. for identification purposes only and does not imply endorsement by the ACIP or CDC.

Measles, mumps, rubella, and varicella vaccine

HepB

MMRV

ProOuad®

How to use the child/adolescent immunization schedule

Determine recommended vaccine by age (Table 1)

Determine recommended interval for catch-up vaccination (Table 2)

Assess need for additional recommended vaccines by medical condition and other indications situations (Table 3)

Review vaccine types, frequencies, intervals, and considerations for special (Notes)

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/acip) and approved by the Centers for Disease Control and Prevention (www.cdc.gov), American Academy of Pediatrics (www.aap.org), American Academy of Family Physicians (www.aafp.org), American College of Obstetricians and Gynecologists (www.acog.org), American College of Nurse-Midwives (www.midwife.org), American Academy of Physician Assistants (www.aapa.org), and National Association of Pediatric Nurse Practitioners (www.napnap.org).

Report

- Suspected cases of reportable vaccine-preventable diseases or outbreaks to your state or local health department
- Clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or 800-822-7967



Download the CDC Vaccine Schedules App for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html.

Helpful information

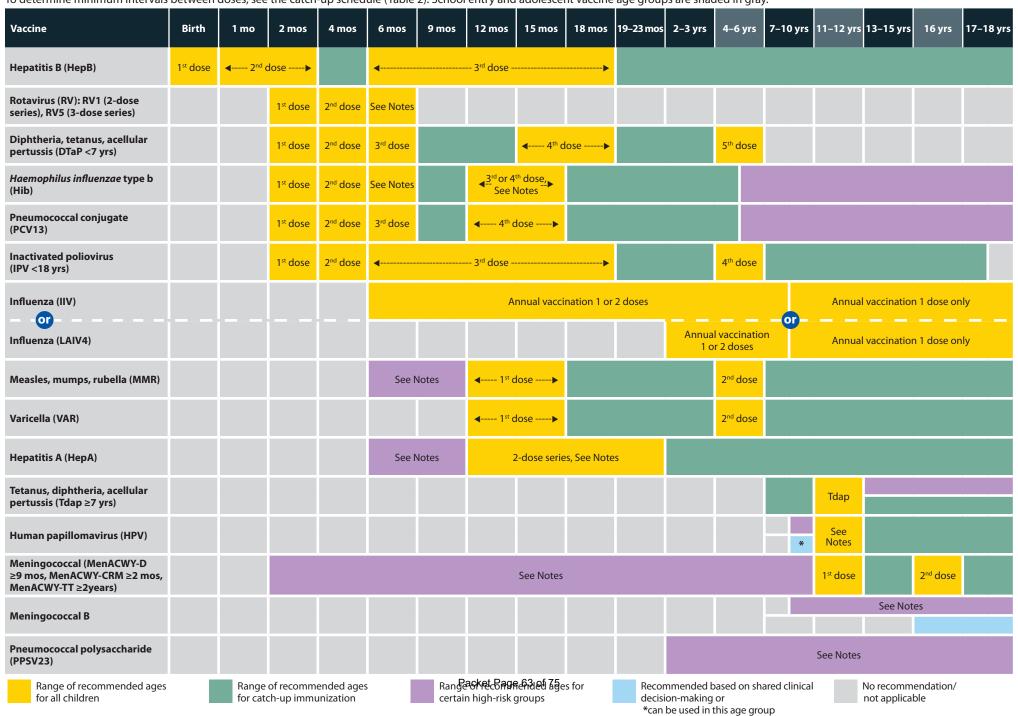
- Complete ACIP recommendations: www.cdc.gov/vaccines/hcp/acip-recs/index.html
- General Best Practice Guidelines for Immunization: www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Outbreak information (including case identification and outbreak response), see Manual for the Surveillance of Vaccine-Preventable Diseases: www.cdc.gov/vaccines/pubs/surv-manual
- ACIP Shared Clinical Decision-Making Recommendations www.cdc.gov/vaccines/acip/acip-scdm-fags.html



U.S. Department of Health and Human Services Centers for Disease Control and Prevention



These recommendations must be read with the notes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars. To determine minimum intervals between doses, see the catch-up schedule (Table 2). School entry and adolescent vaccine age groups are shaded in gray.





Recommended Catch-up Immunization Schedule for Children and Adolescents Who Start Late or Who Are More than 1 month Behind, United States, 2021 The table below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age. Always use this table in conjunction with Table 1 and the notes that follow.

			Children age 4 months through 6 years		
Vaccine	Minimum Age for		Minimum Interval Between Doses		
	Dose 1	Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose
Hepatitis B	Birth	4 weeks	8 weeks and at least 16 weeks after first dose. Minimum age for the final dose is 24 weeks.		
Rotavirus	6 weeks Maximum age for first dose is 14 weeks, 6 days.	4 weeks	4 weeks Maximum age for final dose is 8 months, 0 days.		
Diphtheria, tetanus, and acellular pertussis	6 weeks	4 weeks	4 weeks	6 months	6 months
Haemophilus influenzae type b	6 weeks	No further doses needed if first dose was administered at age 15 months or older. 4 weeks if first dose was administered before the 1st birthday. 8 weeks (as final dose) if first dose was administered at age 12 through 14 months.	No further doses needed if previous dose was administered at age 15 months or older. 4 weeks if current age is younger than 12 months and first dose was administered at younger than age 7 months and at least 1 previous dose was PRP-T (ActHib, Pentacel, Hiberix) or unknown. 8 weeks and age 12 through 59 months (as final dose) if current age is younger than 12 months and first dose was administered at age 7 through 11 months; OR if current age is 12 through 59 months and first dose was administered before the 1st birthday and second dose was administered at younger than 15 months; OR if both doses were PRP-OMP (PedvaxHIB, Comvax) and were administered before the 1st birthday.	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before the 1st birthday.	
Pneumococcal conjugate	6 weeks	No further doses needed for healthy children if first dose was administered at age 24 months or older. 4 weeks if first dose was administered before the 1st birthday. 8 weeks (as final dose for healthy children) if first dose was administered at the 1st birthday or after.	No further doses needed for healthy children if previous dose was administered at age 24 months or older. 4 weeks if current age is younger than 12 months and previous dose was administered at <7 months old. 8 weeks (as final dose for healthy children)	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before age 12 months or for children at high risk who received 3 doses at any age.	
Inactivated poliovirus	6 weeks	4 weeks	4 weeks if current age is <4 years. 6 months (as final dose) if current age is 4 years or older.	6 months (minimum age 4 years for final dose).	
Measles, mumps, rubella	12 months	4 weeks			
Varicella	12 months	3 months			
Hepatitis A	12 months	6 months			
Meningococcal ACWY	2 months MenACWY- CRM 9 months MenACWY-D 2 years MenACWY-TT	8 weeks	See Notes	See Notes	
			Children and adolescents age 7 through 18 years		
Meningococcal ACWY	Not applicable (N/A)	8 weeks			
Tetanus, diphtheria; tetanus, diphtheria, and acellular pertussis	7 years	4 weeks	4 weeks if first dose of DTaP/DT was administered before the 1st birthday. 6 months (as final dose) if first dose of DTaP/DT or Tdap/Td was administered at or after the 1st birthday.	6 months if first dose of DTaP/DT was administered before the 1 st birthday.	
Human papillomavirus	9 years	Routine dosing intervals are recommended.			
Hepatitis A	N/A	6 months			
Hepatitis B	N/A	4 weeks	8 weeks and at least 16 weeks after first dose.		
Inactivated poliovirus	N/A	4 weeks	6 months A fourth dose is not necessary if the third dose was administered at age 4 years or older and at least 6 months after the previous dose.	A fourth dose of IPV is indicated if all previous doses were administered at <4 years or if the third dose was administered <6 months after the second dose.	
Measles, mumps, rubella	N/A	4 weeks	Packet Page 64 of 75		
Varicella	N/A	3 months if younger than age 13 years.4 weeks if age 13 years or older.	. 22.3t. ago 0 . 5. 75		



Recommended Child and Adolescent Immunization Schedule by Medical Indication, **United States, 2021**

Always use this table in conjunction with Table 1 and the notes that follow

	INDICATION									
VACCINE	Pregnancy	Immunocom- promised status (excluding HIV infection)	HIV infection <15% and total CD4 cell count of <200/mm ³	≥15% and total CD4 cell count of ≥200/mm ³	Kidney failure, end-stage renal disease, or on hemodialysis	Heart disease or chronic lung disease	CSF leak or cochlear implant	Asplenia or persistent complement component deficiencies	Chronic liver disease	Diabetes
Hepatitis B										
Rotavirus		SCID ²								
Diphtheria, tetanus, and acellular pertussis (DTaP)										
Haemophilus influenzae type b										
Pneumococcal conjugate										H
Inactivated poliovirus										
Influenza (IIV)										
Influenza (LAIV4)						Asthma, wheezing: 2–4yrs³				
Measles, mumps, rubella	*									
Varicella	*									
Hepatitis A										
Tetanus, diphtheria, and acellular pertussis (Tdap)										
Human papillomavirus	*									
Meningococcal ACWY										
Meningococcal B										
Pneumococcal polysaccharide										
Vaccination according routine schedule recommended	p ri	ecommended for ersons with an additio sk factor for which the accine would be indica	onal and e nec	cination is recomr additional doses essary based on n dition. See Notes.	may be cont nedical shou	recommended/ raindicated—vaccine ıld not be administered. cinate after pregnancy.		cated if benefit appl outweighs risk	ecommendat icable	ion/not

¹ For additional information regarding HIV laboratory parameters and use of live vaccines, see the General Best Practice Guidelines for Immunization, "Altered Immunocompetence," at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.html and Table 4-1 (footnote D) at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html. Packet Page 65 of 75

² Severe Combined Immunodeficiency

³ LAIV4 contraindicated for children 2-4 years of age with asthma or wheezing during the preceding 12 months



For vaccination recommendations for persons ages 19 years or older, see the Recommended Adult Immunization Schedule, 2021.

Additional information

COVID-19 Vaccination

ACIP recommends use of COVID-19 vaccines within the scope of the Emergency Use Authorization or Biologics License Application for the particular vaccine. Interim ACIP recommendations for the use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/hcp/acip-recs/.

- Consult relevant ACIP statements for detailed recommendations at www.cdc.gov/vaccines/hcp/acip-recs/index.html.
- For information on contraindications and precautions for the use of a vaccine, consult the General Best Practice Guidelines for Immunization at www.cdc.gov/vaccines/hcp/acip-recs/generalrecs/contraindications.html and relevant ACIP statements at www.cdc.gov/vaccines/hcp/acip-recs/index.html.
- For calculating intervals between doses, 4 weeks = 28 days. Intervals of ≥4 months are determined by calendar months.
- Within a number range (e.g., 12–18), a dash (–) should be read as "through."
- Vaccine doses administered ≤4 days before the minimum age or interval are considered valid. Doses of any vaccine administered ≥5 days earlier than the minimum age or minimum interval should not be counted as valid and should be repeated as age appropriate. The repeat dose should be spaced after the invalid dose by the recommended minimum interval. For further details, see Table 3-1, Recommended and minimum ages and intervals between vaccine doses, in *General Best Practice Guidelines for Immunization* at www.cdc.gov/vaccines/hcp/aciprecs/general-recs/timing.html.
- Information on travel vaccination requirements and recommendations is available at www.cdc.gov/travel/.
- For vaccination of persons with immunodeficiencies, see Table 8-1, Vaccination of persons with primary and secondary immunodeficiencies, in *General Best Practice Guidelines for Immunization* at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.html, and Immunization in Special Clinical Circumstances (In: Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. *Red Book: 2018 Report of the Committee on Infectious Diseases*. 31st ed. Itasca, IL: American Academy of Pediatrics; 2018:67–111).
- For information about vaccination in the setting of a vaccinepreventable disease outbreak, contact your state or local health department.
- The National Vaccine Injury Compensation Program (VICP) is a no-fault alternative to the traditional legal system for resolving vaccine injury claims. All routine child and adolescent vaccines are covered by VICP except for pneumococcal polysaccharide vaccine (PPSV23). For more information, see www.hrsa.gov/ vaccinecompensation/index.html.

Diphtheria, tetanus, and pertussis (DTaP) vaccination (minimum age: 6 weeks [4 years for Kinrix or Quadracel])

Routine vaccination

- 5-dose series at 2, 4, 6, 15-18 months, 4-6 years
- **Prospectively:** Dose 4 may be administered as early as age 12 months if at least 6 months have elapsed since dose 3.
- Retrospectively: A 4th dose that was inadvertently administered as early as age 12 months may be counted if at least 4 months have elapsed since dose 3.

Catch-up vaccination

- Dose 5 is not necessary if dose 4 was administered at age 4 years or older and at least 6 months after dose 3.
- For other catch-up guidance, see Table 2.

Special situations

• Wound management in children less than age 7 years with history of 3 or more doses of tetanus-toxoid-containing vaccine: For all wounds except clean and minor wounds, administer DTaP if more than 5 years since last dose of tetanus-toxoid-containing vaccine. For detailed information, see www.cdc.gov/mmwr/volumes/67/rr/rr6702a1.htm.

Haemophilus influenzae type b vaccination (minimum age: 6 weeks)

Routine vaccination

- ActHIB, Hiberix, or Pentacel: 4-dose series at 2, 4, 6, 12–15 months
- PedvaxHIB: 3-dose series at 2, 4, 12–15 months

Catch-up vaccination

- Dose 1 at age 7–11 months: Administer dose 2 at least 4 weeks later and dose 3 (final dose) at age 12–15 months or 8 weeks after dose 2 (whichever is later).
- Dose 1 at age 12–14 months: Administer dose 2 (final dose) at least 8 weeks after dose 1.
- Dose 1 before age 12 months and dose 2 before age 15 months: Administer dose 3 (final dose) 8 weeks after dose 2.
- 2 doses of PedvaxHIB before age 12 months: Administer dose 3 (final dose) at 12–59 months and at least 8 weeks after dose 2.
- 1 dose administered at age 15 months or older: No further doses needed
- Unvaccinated at age 15–59 months: Administer 1 dose.
- Previously unvaccinated children age 60 months or older who are not considered high risk: Do not require catch-up vaccination
- For other catch-up guild sket Page 86 05.75

Special situations

- Chemotherapy or radiation treatment:
- 12-59 months
- Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
- 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose

Doses administered within 14 days of starting therapy or during therapy should be repeated at least 3 months after therapy completion.

- Hematopoietic stem cell transplant (HSCT):
- 3-dose series 4 weeks apart starting 6 to 12 months after successful transplant, regardless of Hib vaccination history
- Anatomic or functional asplenia (including sickle cell disease):

12-59 months

- Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
- 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose

Unvaccinated persons age 5 years or older*

- 1 dose

• Elective splenectomy:

Unvaccinated* persons age 15 months or older

- 1 dose (preferably at least 14 days before procedure)

HIV infection:

12-59 months

- Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
- 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose

Unvaccinated persons age 5–18 years*

1 dose

Immunoglobulin deficiency, early component complement deficiency:

12-59 months

- Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
- 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose
- *Unvaccinated = Less than routine series (through age 14 months) OR no doses (age 15 months or older)



Hepatitis A vaccination

(minimum age: 12 months for routine vaccination)

Routine vaccination

 2-dose series (minimum interval: 6 months) beginning at age 12 months

Catch-up vaccination

- Unvaccinated persons through age 18 years should complete a 2-dose series (minimum interval: 6 months).
- Persons who previously received 1 dose at age 12 months or older should receive dose 2 at least 6 months after dose 1.
- Adolescents age 18 years or older may receive the combined HepA and HepB vaccine, **Twinrix**®, as a 3-dose series (0, 1, and 6 months) or 4-dose series (3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months).

International travel

- Persons traveling to or working in countries with high or intermediate endemic hepatitis A (www.cdc.gov/travel/):
- Infants age 6-11 months: 1 dose before departure; revaccinate with 2 doses, separated by at least 6 months, between age 12-23 months.
- Unvaccinated age 12 months or older: Administer dose 1 as soon as travel is considered.

Hepatitis B vaccination

(minimum age: birth)

Birth dose (monovalent HepB vaccine only)

- Mother is HBsAg-negative: 1 dose within 24 hours of birth for all medically stable infants ≥2,000 grams. Infants <2,000 grams: Administer 1 dose at chronological age 1 month or hospital discharge (whichever is earlier and even if weight is still <2,000 grams).
- Mother is HBsAg-positive:
- Administer **HepB vaccine** and **hepatitis B immune globulin (HBIG)** (in separate limbs) within 12 hours of birth, regardless of birth weight. For infants <2,000 grams, administer 3 additional doses of vaccine (total of 4 doses) beginning at age 1 month.
- Test for HBsAg and anti-HBs at age 9–12 months. If HepB series is delayed, test 1–2 months after final dose.
- Mother's HBsAg status is unknown:
- Administer **HepB vaccine** within 12 hours of birth, regardless of birth weight.
- For infants <2,000 grams, administer HBIG in addition to HepB vaccine (in separate limbs) within 12 hours of birth. Administer 3 additional doses of vaccine (total of 4 doses) beginning at age 1 month.
- Determine mother's HBsAg status as soon as possible. If mother is HBsAg-positive, administer **HBIG** to infants ≥2,000 grams as soon as possible, but no later than 7 days of age.

Routine series

- 3-dose series at 0, 1–2, 6–18 months (use monovalent HepB vaccine for doses administered before age 6 weeks)
- Infants who did not receive a birth dose should begin the series as soon as feasible (see Table 2).
- Administration of **4 doses** is permitted when a combination vaccine containing HepB is used after the birth dose.

- Minimum age for the final (3rd or 4th) dose: 24 weeks
- Minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 8 weeks / dose 1 to dose 3: 16 weeks (when 4 doses are administered, substitute "dose 4" for "dose 3" in these calculations)

Catch-up vaccination

- Unvaccinated persons should complete a 3-dose series at 0, 1–2, 6 months
- Adolescents age 11–15 years may use an alternative 2-dose schedule with at least 4 months between doses (adult formulation Recombivax HB only).
- Adolescents age 18 years or older may receive a 2-dose series of HepB (Heplisav-B®) at least 4 weeks apart.
- Adolescents age 18 years or older may receive the combined HepA and HepB vaccine, **Twinrix**, as a 3-dose series (0, 1, and 6 months) or 4-dose series (3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months).
- For other catch-up guidance, see Table 2.

Special situations

- Revaccination is not generally recommended for persons with a normal immune status who were vaccinated as infants, children, adolescents, or adults.
- Revaccination may be recommended for certain populations, including:
- Infants born to HBsAg-positive mothers
- Hemodialysis patients
- Other immunocompromised persons
- For detailed revaccination recommendations, see www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepb.html.

Human papillomavirus vaccination (minimum age: 9 years)

Routine and catch-up vaccination

- HPV vaccination routinely recommended at age 11–12 years (can start at age 9 years) and catch-up HPV vaccination recommended for all persons through age 18 years if not adequately vaccinated
- 2- or 3-dose series depending on age at initial vaccination:
- Age 9–14 years at initial vaccination: 2-dose series at 0, 6–12 months (minimum interval: 5 months; repeat dose if administered too soon)
- Age 15 years or older at initial vaccination: 3-dose series at 0,
 1–2 months, 6 months (minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 12 weeks / dose 1 to dose 3: 5 months; repeat dose if administered too soon)
- Interrupted schedules: If vaccination schedule is interrupted, the series does not need to be restarted.
- No additional dose recommended after completing series with recommended dosing intervals using any HPV vaccine.

Special situations

- İmmunocompromising conditions, including HIV infection: 3-dose series as above
- History of sexual abuse or assault: Start at age 9 years.
- **Pregnancy:** HPV vaccination not recommended until after pregnancy; no intervention regularly for specific pregnancy testing not needed before vaccination

Influenza vaccination

(minimum age: 6 months [IIV], 2 years [LAIV4], 18 years [recombinant influenza vaccine, RIV4])

Routine vaccination

- Use any influenza vaccine appropriate for age and health status annually:
- 2 doses, separated by at least 4 weeks, for children age 6 months-8 years who have received fewer than 2 influenza vaccine doses before July 1, 2020, or whose influenza vaccination history is unknown (administer dose 2 even if the child turns 9 between receipt of dose 1 and dose 2)
- 1 dose for **children age 6 months-8 years** who have received at least 2 influenza vaccine doses before July 1, 2020
- 1 dose for all persons age 9 years or older
- For the 2021–22 season, see the 2021–22 ACIP influenza vaccine recommendations.

Special situations

- Egg allergy, hives only: Any influenza vaccine appropriate for age and health status annually
- Egg allergy with symptoms other than hives (e.g., angioedema, respiratory distress, need for emergency medical services or epinephrine): Any influenza vaccine appropriate for age and health status annually. If using an influenza vaccine other than Flublok or Flucelvax, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions.
- Severe allergic reactions to vaccines can occur even in the absence of a history of previous allergic reaction. All vaccination providers should be familiar with the office emergency plan and certified in cardiopulmonary resuscitation.
- A previous severe allergic reaction to influenza vaccine is a contraindication to future receipt of any influenza vaccine.
- LAIV4 should not be used in persons with the following conditions or situations:
- History of severe allergic reaction to a previous dose of any influenza vaccine or to any vaccine component (excluding egg, see details above)
- Receiving aspirin or salicylate-containing medications
- Age 2–4 years with history of asthma or wheezing
- Immunocompromised due to any cause (including medications and HIV infection)
- Anatomic or functional asplenia
- Close contacts or caregivers of severely immunosuppressed persons who require a protected environment
- Pregnancy
- Cochlear implant
- Cerebrospinal fluid-oropharyngeal communication
- Children less than age 2 years
- Received influenza antiviral medications oseltamivir or zanamivir within the previous 48 hours, peramivir within the previous 5 days, or baloxavir within the previous 17 days



Measles, mumps, and rubella vaccination (minimum age: 12 months for routine vaccination)

Routine vaccination

- 2-dose series at 12–15 months, 4–6 years
- Dose 2 may be administered as early as 4 weeks after dose 1.

Catch-up vaccination

- Unvaccinated children and adolescents: 2-dose series at least 4 weeks apart
- The maximum age for use of MMRV is 12 years.

Special situations

International travel

- Infants age 6–11 months: 1 dose before departure; revaccinate with 2-dose series at age 12–15 months (12 months for children in high-risk areas) and dose 2 as early as 4 weeks later.
- Unvaccinated children age 12 months or older: 2-dose series at least 4 weeks apart before departure

Meningococcal serogroup A,C,W,Y vaccination (minimum age: 2 months [MenACWY-CRM, Menveo], 9 months [MenACWY-D, Menactra], 2 years [MenACWY-TT, MenQuadfi])

Routine vaccination

• 2-dose series at 11–12 years, 16 years

Catch-up vaccination

- Age 13–15 years: 1 dose now and booster at age 16–18 years (minimum interval: 8 weeks)
- Age 16–18 years: 1 dose

Special situations

Anatomic or functional asplenia (including sickle cell disease), HIV infection, persistent complement component deficiency, complement inhibitor (e.g., eculizumab, rayulizumab) use:

- Menveo
- Dose 1 at age 8 weeks: 4-dose series at 2, 4, 6, 12 months
- Dose 1 at age 3–6 months: 3- or 4- dose series (dose 2 [and dose 3 if applicable] at least 8 weeks after previous dose until a dose is received at age 7 months or older, followed by an additional dose at least 12 weeks later and after age 12 months)
- Dose 1 at age 7–23 months: 2-dose series (dose 2 at least 12 weeks after dose 1 and after age 12 months)
- Dose 1 at age 24 months or older: 2-dose series at least 8 weeks apart
- Menactra
- Persistent complement component deficiency or complement inhibitor use:
- · Age 9–23 months: 2-dose series at least 12 weeks apart
- · Age 24 months or older: 2-dose series at least 8 weeks apart
- Anatomic or functional asplenia, sickle cell disease, or HIV infection:
- · Age 9–23 months: Not recommended
- · Age 24 months or older: 2-dose series at least 8 weeks apart
- Menactra must be administered at least 4 weeks after completion of PCV13 series.

MenQuadfi

- Dose 1 at age 24 months or older: 2-dose series at least 8 weeks apart

Travel in countries with hyperendemic or epidemic meningococcal disease, including countries in the African meningitis belt or during the Hajj (www.cdc.gov/travel/):

- Children less than age 24 months:
 - Menveo (age 2-23 months)
 - Dose 1 at age 8 weeks: 4-dose series at 2, 4, 6, 12 months
 - Dose 1 at age 3–6 months: 3- or 4- dose series (dose 2 [and dose 3 if applicable] at least 8 weeks after previous dose until a dose is received at age 7 months or older, followed by an additional dose at least 12 weeks later and after age 12 months)
 - · Dose 1 at age 7–23 months: 2-dose series (dose 2 at least 12 weeks after dose 1 and after age 12 months)
 - Menactra (age 9-23 months)
 - · 2-dose series (dose 2 at least 12 weeks after dose 1; dose 2 may be administered as early as 8 weeks after dose 1 in travelers)
- Children age 2 years or older: 1 dose Menveo, Menactra, or MenOuadfi

First-year college students who live in residential housing (if not previously vaccinated at age 16 years or older) or military recruits:

• 1 dose Menveo, Menactra, or MenQuadfi Adolescent vaccination of children who received MenACWY prior to age 10 years:

- Children for whom boosters are recommended because of an ongoing increased risk of meningococcal disease (e.g., those with complement deficiency, HIV, or asplenia): Follow the booster schedule for persons at increased risk.
- Children for whom boosters are not recommended (e.g., a healthy child who received a single dose for travel to a country where meningococcal disease is endemic): Administer MenACWY according to the recommended adolescent schedule with dose 1 at age 11–12 years and dose 2 at age 16 years.

Note: Menactra should be administered either before or at the same time as DTaP. For MenACWY **booster dose recommendations** for groups listed under "Special situations" and in an outbreak setting and additional meningococcal vaccination information, see www.cdc.gov/mmwr/volumes/69/rr/rr6909a1.htm.

Meningococcal serogroup B vaccination (minimum age: 10 years [MenB-4C, Bexsero; MenB-FHbp, Trumenba])

Shared clinical decision-making

- Adolescents not at increased risk age 16–23 years (preferred age 16–18 years) based on shared clinical decision-making:
- **Bexsero:** 2-dose series at least 1 month apart
- **Trumenba:** 2-dose series at least 6 months apart; if dose 2 is administered earlier than 6 months, administer a 3rd dose at least 4 months after dose 2.

Packet Page 68 of 75

Special situations

Anatomic or functional asplenia (including sickle cell disease), persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use:

- **Bexsero:** 2-dose series at least 1 month apart
- Trumenba: 3-dose series at 0, 1–2, 6 months

Bexsero and **Trumenba** are not interchangeable; the same product should be used for all doses in a series.

For MenB **booster dose recommendations** for groups listed under "Special situations" and in an outbreak setting and additional meningococcal vaccination information, see www.cdc.gov/mmwr/volumes/69/rr/rr6909a1.htm.

Pneumococcal vaccination

(minimum age: 6 weeks [PCV13], 2 years [PPSV23])

Routine vaccination with PCV13

• 4-dose series at 2, 4, 6, 12-15 months

Catch-up vaccination with PCV13

- 1 dose for healthy children age 24–59 months with any incomplete* PCV13 series
- For other catch-up guidance, see Table 2.

Special situations

Underlying conditions below: When both PCV13 and PPSV23 are indicated, administer PCV13 first. PCV13 and PPSV23 should not be administered during same visit.

Chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure); chronic lung disease (including asthma treated with high-dose, oral corticosteroids); diabetes mellitus:

Age 2-5 years

- Any incomplete* series with:
- 3 PCV13 doses: 1 dose PCV13 (at least 8 weeks after any prior PCV13 dose)
- Less than 3 PCV13 doses: 2 doses PCV13 (8 weeks after the most recent dose and administered 8 weeks apart)
- No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after completing all recommended PCV13 doses)

Age 6-18 years

 No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after completing all recommended PCV13 doses)

Cerebrospinal fluid leak, cochlear implant:

Age 2–5 years

- Any incomplete* series with:
- 3 PCV13 doses: 1 dose PCV13 (at least 8 weeks after any prior PCV13 dose)
- Less than 3 PCV13 doses: 2 doses PCV13 (8 weeks after the most recent dose and administered 8 weeks apart)
- No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose)

Age 6–18 years

- No history of either PCV13 or PPSV23: 1 dose PCV13, 1 dose PPSV23 at least 8 weeks later
- Any PCV13 but no PPSV23: 1 dose PPSV23 at least 8 weeks after the most recent dose of PCV13
- PPSV23 but no PCV13: 1 dose PCV13 at least 8 weeks after the most recent dose of PPSV23

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2021

Sickle cell disease and other hemoglobinopathies; anatomic or functional asplenia; congenital or acquired immunodeficiency; HIV infection; chronic renal failure; nephrotic syndrome; malignant neoplasms, leukemias, lymphomas, Hodgkin disease, and other diseases associated with treatment with immunosuppressive drugs or radiation therapy; solid organ transplantation; multiple myeloma:

Age 2–5 years

- Any incomplete* series with:
- 3 PCV13 doses: 1 dose PCV13 (at least 8 weeks after any prior PCV13 dose)
- Less than 3 PCV13 doses: 2 doses PCV13 (8 weeks after the most recent dose and administered 8 weeks apart)
- No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose) and a 2nd dose of PPSV23 5 years later

Age 6–18 years

- No history of either PCV13 or PPSV23: 1 dose PCV13, 2 doses PPSV23 (dose 1 of PPSV23 administered 8 weeks after PCV13 and dose 2 of PPSV23 administered at least 5 years after dose 1 of PPSV23)
- Any PCV13 but no PPSV23: 2 doses PPSV23 (dose 1 of PPSV23 administered 8 weeks after the most recent dose of PCV13 and dose 2 of PPSV23 administered at least 5 years after dose 1 of PPSV23)
- PPSV23 but no PCV13: 1 dose PCV13 at least 8 weeks after the most recent PPSV23 dose and a 2nd dose of PPSV23 administered 5 years after dose 1 of PPSV23 and at least 8 weeks after a dose of PCV13

Chronic liver disease, alcoholism:

Age 6-18 years

- No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose)
- *Incomplete series = Not having received all doses in either the recommended series or an age-appropriate catch-up series See Tables 8, 9, and 11 in the ACIP pneumococcal vaccine recommendations (www.cdc.gov/mmwr/pdf/rr/rr5911.pdf) for complete schedule details.

Poliovirus vaccination (minimum age: 6 weeks)

Routine vaccination

- 4-dose series at ages 2, 4, 6–18 months, 4–6 years; administer the final dose on or after age 4 years and at least 6 months after the previous dose.
- 4 or more doses of IPV can be administered before age 4 years when a combination vaccine containing IPV is used. However, a dose is still recommended on or after age 4 years and at least 6 months after the previous dose.

Catch-up vaccination

- In the first 6 months of life, use minimum ages and intervals only for travel to a polio-endemic region or during an outbreak.
- IPV is not routinely recommended for U.S. residents age 18 years or older.

Series containing oral polio vaccine (OPV), either mixed OPV-IPV or OPV-only series:

- Total number of doses needed to complete the series is the same as that recommended for the U.S. IPV schedule. See www.cdc.gov/mmwr/volumes/66/wr/mm6601a6.htm?s_%20 cid=mm6601a6 w.
- Only trivalent OPV (tOPV) counts toward the U.S. vaccination requirements.
- Doses of OPV administered before April 1, 2016, should be counted (unless specifically noted as administered during a campaign).
- Doses of OPV administered on or after April 1, 2016, should not be counted.
- For guidance to assess doses documented as "OPV," see www.cdc.gov/mmwr/volumes/66/wr/mm6606a7.htm?s_ cid=mm6606a7 w.
- For other catch-up guidance, see Table 2.

Rotavirus vaccination (minimum age: 6 weeks)

Routine vaccination

- Rotarix: 2-dose series at 2 and 4 months
- **RotaTeq:** 3-dose series at 2, 4, and 6 months
- If any dose in the series is either RotaTeq or unknown, default to 3-dose series.

Catch-up vaccination

- Do not start the series on or after age 15 weeks, 0 days.
- The maximum age for the final dose is 8 months, 0 days.
- For other catch-up guidance, see Table 2.

Tetanus, diphtheria, and pertussis (Tdap) vaccination

(minimum age: 11 years for routine vaccination, 7 years for catch-up vaccination)

Routine vaccination

- Adolescents age 11–12 years: 1 dose Tdap
- **Pregnancy:** 1 dose Tdap during each pregnancy, preferably in early part of gestational weeks 27–36
- Tdap may be administered regardless of the interval since the last tetanus- and diphtheria-toxoid-containing vaccine.

Catch-up vaccination

- Adolescents age 13–18 years who have not received Tdap:
 1 dose Tdap, then Td or Tdap booster every 10 years
- Persons age 7–18 years not fully vaccinated* with DTaP:
 1 dose Tdap as part of the catch-up series (preferably the first dose); if additional doses are needed, use Td or Tdap.
- Tdap administered at age 7–10 years:
- **Children age 7–9 years** who receive Tdap should receive the routine Tdap dose at age 11–12 years.
- **Children age 10 years** who receive Tdap do not need the routine Tdap dose at age 11–12 years.
- DTaP inadvertently administered on or after age 7 years:
- **Children age 7–9 years**: DTaP may count as part of catch-up series. Administer routine Tdap dose at age 11–12 years.
- **Children age 10–18 years**: Count dose of DTaP as the adolescent Tdap booster.
- For other catch-up guidance, see Table 2.

Special situations

- Wound management in persons age 7 years or older with history of 3 or more doses of tetanus-toxoid-containing vaccine: For clean and minor wounds, administer Tdap or Td if more than 10 years since last dose of tetanus-toxoid-containing vaccine; for all other wounds, administer Tdap or Td if more than 5 years since last dose of tetanus-toxoid-containing vaccine. Tdap is preferred for persons age 11 years or older who have not previously received Tdap or whose Tdap history is unknown. If a tetanus-toxoid-containing vaccine is indicated for a pregnant adolescent, use Tdap.
- For detailed information, see www.cdc.gov/mmwr/volumes/69/wr/mm6903a5.htm.
- *Fully vaccinated = 5 valid doses of DTaP OR 4 valid doses of DTaP if dose 4 was administered at age 4 years or older

Varicella vaccination (minimum age: 12 months)

Routine vaccination

- 2-dose series at 12-15 months, 4-6 years
- Dose 2 may be administered as early as 3 months after dose 1 (a dose administered after a 4-week interval may be counted).

Catch-up vaccination

- Ensure persons age 7–18 years without evidence of immunity (see *MMWR* at www.cdc.gov/mmwr/pdf/rr/rr5604.pdf) have a 2-dose series:
- **Age 7–12 years**: routine interval: 3 months (a dose administered after a 4-week interval may be counted)
- Age 13 years and older: routine interval: 4–8 weeks (minimum interval: 4 weeks)
- The maximum age for use of MMRV is 12 years.

Packet Page 69 of 75

Recommended Adult Immunization Schedule

for ages 19 years or older

2021

UNITED STATES

How to use the adult immunization schedule

Determine recommended vaccinations by age (Table 1)

Assess need for additional recommended vaccinations by medical condition and other indications (Table 2)

Review vaccine types, frequencies, and intervals and considerations for special situations (Notes)

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/acip) and approved by the Centers for Disease Control and Prevention (www.cdc.gov), American College of Physicians (www.acponline.org), American Academy of Family Physicians (www.aafp. org), American College of Obstetricians and Gynecologists (www.acog.org), American College of Nurse-Midwives (www.midwife.org), and American Academy of Physician Assistants (www.aapa.org).

Vaccines in the Adult Immunization Schedule*

Vaccines	Abbreviations	Trade names
Haemophilus influenzae type b vaccine	Hib	ActHIB® Hiberix® PedvaxHIB®
Hepatitis A vaccine	НерА	Havrix® Vaqta®
Hepatitis A and hepatitis B vaccine	НерА-НерВ	Twinrix®
Hepatitis B vaccine	НерВ	Engerix-B® Recombivax HB® Heplisav-B®
Human papillomavirus vaccine	HPV	Gardasil 9®
Influenza vaccine (inactivated)	IIV	Many brands
Influenza vaccine (live, attenuated)	LAIV4	FluMist® Quadrivalent
Influenza vaccine (recombinant)	RIV4	Flublok® Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R II®
Meningococcal serogroups A, C, W, Y vaccine	MenACWY-D MenACWY-CRM MenACWY-TT	Menactra® Menveo® MenQuadfi®
Meningococcal serogroup B vaccine	MenB-4C MenB-FHbp	Bexsero® Trumenba®
Pneumococcal 13-valent conjugate vaccine	PCV13	Prevnar 13®
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax 23®
Tetanus and diphtheria toxoids	Td	Tenivac® Tdvax™
Tetanus and diphtheria toxoids and acellular pertussis vaccine	Tdap	Adacel® Boostrix®
Varicella vaccine	VAR	Varivax®
Zoster vaccine, recombinant	RZV	Shingrix

^{*}Administer recommended vaccines if vaccination history is incomplete or unknown. Do not restart or add doses to vaccine series if there are extended intervals between doses. The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

Packet Page 70 of 75

Report

- Suspected cases of reportable vaccine-preventable diseases or outbreaks to the local or state health department
- Clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System at www.vaers.hhs.gov or 800-822-7967

Injury claims

All vaccines included in the adult immunization schedule except pneumococcal 23-valent polysaccharide (PPSV23) and zoster (RZV) vaccines are covered by the Vaccine Injury Compensation Program. Information on how to file a vaccine injury claim is available at www.hrsa.gov/vaccinecompensation.

Questions or comments

Contact www.cdc.gov/cdc-info or 800-CDC-INFO (800-232-4636), in English or Spanish, 8 a.m.–8 p.m. ET, Monday through Friday, excluding holidays.



Download the CDC Vaccine Schedules app for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html.

Helpful information

- Complete ACIP recommendations: www.cdc.gov/vaccines/hcp/acip-recs/index.html
- General Best Practice Guidelines for Immunization (including contraindications and precautions): www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Vaccine information statements: www.cdc.gov/vaccines/hcp/vis/index.html
- Manual for the Surveillance of Vaccine-Preventable Diseases (including case identification and outbreak response): www.cdc.gov/vaccines/pubs/surv-manual
- Travel vaccine recommendations: www.cdc.gov/travel
- Recommended Child and Adolescent Immunization Schedule, United States, 2021: www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html
- ACIP Shared Clinical Decision-Making Recommendations www.cdc.gov/vaccines/acip/acip-scdm-fags.html



U.S. Department of Health and Human ServicesCenters for Disease
Control and Prevention

Table 1

Recommended Adult Immunization Schedule by Age Group, United States, 2021

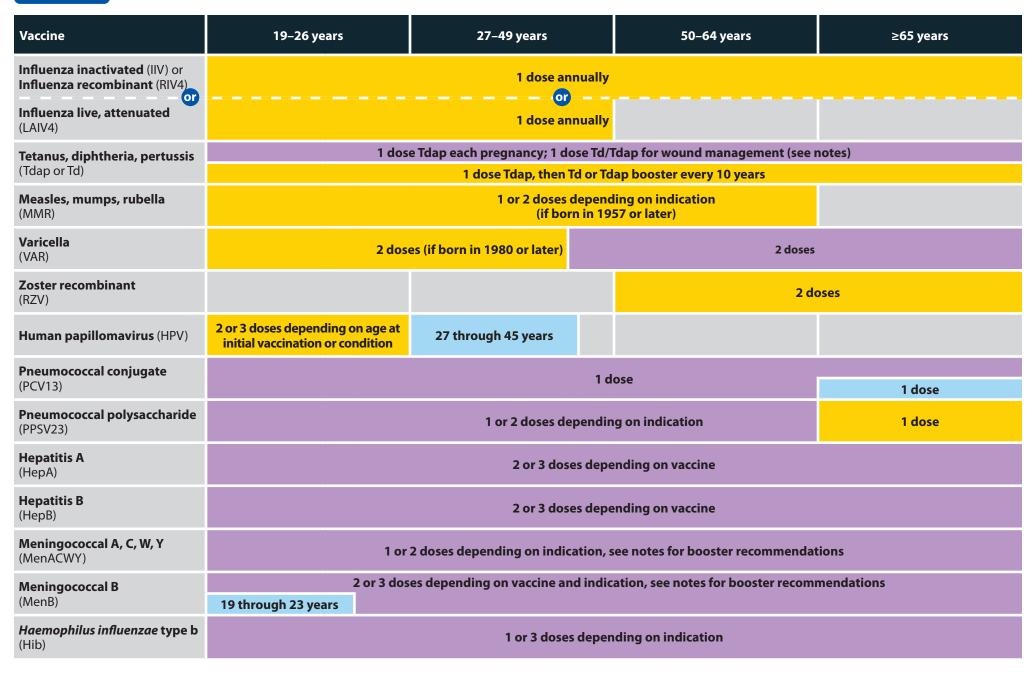
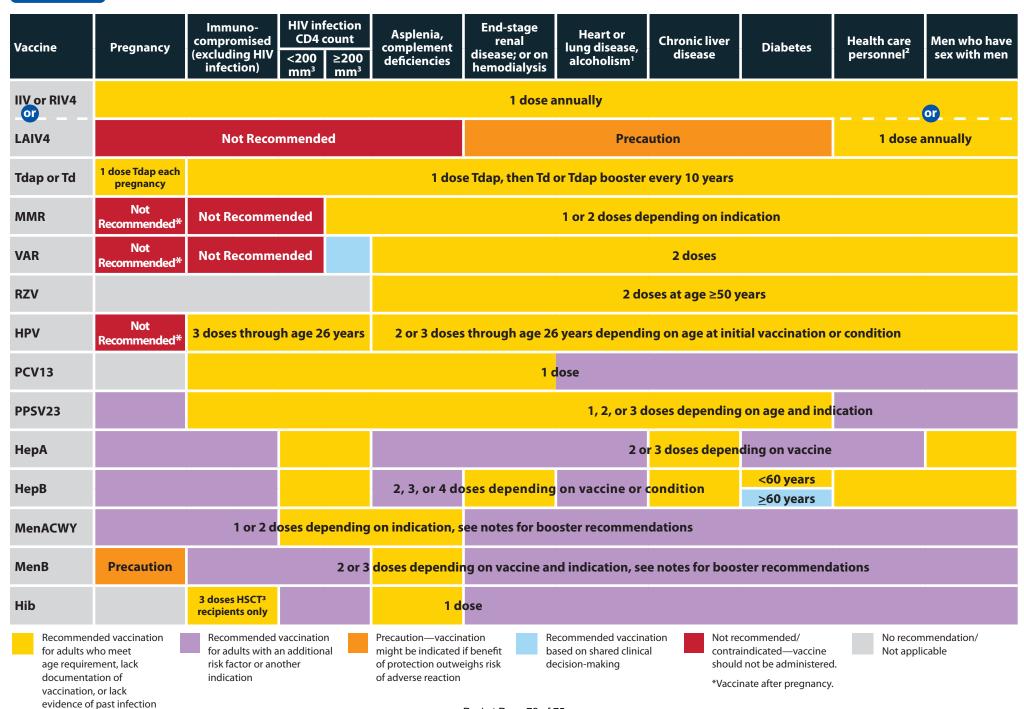


Table 2

Recommended Adult Immunization Schedule by Medical Condition and Other Indications, United States, 2021



Recommended Adult Immunization Schedule for ages 19 years or older, United States, 2021

For vaccine recommendations for persons 18 years of age or younger, see the Recommended Child/ Adolescent Immunization Schedule.

Additional Information

COVID-19 Vaccination

ACIP recommends use of COVID-19 vaccines within the scope of the Emergency Use Authorization or Biologics License Application for the particular vaccine. Interim ACIP recommendations for the use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/covid-19.html

Haemophilus influenzae type b vaccination

Special situations

- Anatomical or functional asplenia (including sickle cell disease): 1 dose if previously did not receive Hib; if elective splenectomy, 1 dose, preferably at least 14 days before splenectomy
- Hematopoietic stem cell transplant (HSCT): 3-dose series 4 weeks apart starting 6–12 months after successful transplant, regardless of Hib vaccination history

Hepatitis A vaccination

Routine vaccination

• Not at risk but want protection from hepatitis A (identification of risk factor not required): 2-dose series HepA (Havrix 6–12 months apart or Vaqta 6–18 months apart [minimum interval: 6 months]) or 3-dose series HepA-HepB (Twinrix at 0, 1, 6 months [minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 5 months])

Special situations

- At risk for hepatitis A virus infection: 2-dose series HepA or 3-dose series HepA-HepB as above
- **Chronic liver disease** (e.g., persons with hepatitis B, hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice the upper limit of normal)
- HIV infection
- Men who have sex with men
- Injection or noninjection drug use

- Persons experiencing homelessness
- **Work with hepatitis A virus** in research laboratory or with nonhuman primates with hepatitis A virus infection
- Travel in countries with high or intermediate endemic hepatitis A (HepA-HepB [Twinrix] may be administered on an accelerated schedule of 3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months)
- Close, personal contact with international adoptee (e.g., household or regular babysitting) in first 60 days after arrival from country with high or intermediate endemic hepatitis A (administer dose 1 as soon as adoption is planned, at least 2 weeks before adoptee's arrival)
- Pregnancy if at risk for infection or severe outcome from infection during pregnancy
- **Settings for exposure, including** health care settings targeting services to injection or noninjection drug users or group homes and nonresidential day care facilities for developmentally disabled persons (individual risk factor screening not required)

Hepatitis B vaccination

Routine vaccination

• Not at risk but want protection from hepatitis B (identification of risk factor not required): 2- or 3-dose series (2-dose series Heplisav-B at least 4 weeks apart [2-dose series HepB only applies when 2 doses of Heplisav-B are used at least 4 weeks apart] or 3-dose series Engerix-B or Recombivax HB at 0, 1, 6 months [minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 8 weeks / dose 1 to dose 3: 16 weeks]) or 3-dose series HepA-HepB (Twinrix at 0, 1, 6 months [minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 5 months])

Special situations

- At risk for hepatitis B virus infection: 2-dose (Heplisav-B) or 3-dose (Engerix-B, Recombivax HB) series or 3-dose series HepA-HepB (Twinrix) as above
- **Chronic liver disease** (e.g., persons with hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice upper limit of normal)
- HIV infection
- Sexual exposure risk (e.g., sex partners of hepatitis B surface antigen [HBsAg]-positive persons; sexually active persons not in mutually monogamous relationships; persons seeking evaluations are to a sexually transmitted infection; men who have sex with men)

- Current or recent injection drug use
- Percutaneous or mucosal risk for exposure to blood (e.g., household contacts of HBsAg-positive persons; residents and staff of facilities for developmentally disabled persons; health care and public safety personnel with reasonably anticipated risk for exposure to blood or blood-contaminated body fluids; hemodialysis, peritoneal dialysis, home dialysis, and predialysis patients; persons with diabetes mellitus age younger than 60 years, shared clinical decision-making for persons age 60 years or older)
- Incarcerated persons
- Travel in countries with high or intermediate endemic hepatitis B
- **Pregnancy** if at risk for infection or severe outcome from infection during pregnancy (Heplisav-B not currently recommended due to lack of safety data in pregnant women)

Human papillomavirus vaccination

Routine vaccination

- HPV vaccination recommended for all persons through age 26 years: 2- or 3-dose series depending on age at initial vaccination or condition:
- **Age 15 years or older at initial vaccination:** 3-dose series at 0, 1–2 months, 6 months (minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 12 weeks / dose 1 to dose 3: 5 months; repeat dose if administered too soon)
- Age 9–14 years at initial vaccination and received 1 dose or 2 doses less than 5 months apart: 1 additional dose
- Age 9–14 years at initial vaccination and received 2 doses at least 5 months apart: HPV vaccination series complete, no additional dose needed
- Interrupted schedules: If vaccination schedule is interrupted, the series does not need to be restarted
- No additional dose recommended after completing series with recommended dosing intervals using any HPV vaccine

Shared clinical decision-making

 Some adults age 27–45 years: Based on shared clinical decision-making, 2- or 3-dose series as above

Special situations

 Age ranges recommended above for routine and catchup vaccination or shared clinical decision-making also apply in special situations

Recommended Adult Immunization Schedule, United States, 2021

- Immunocompromising conditions, including HIV infection: 3-dose series as above, regardless of age at initial vaccination
- Pregnancy: HPV vaccination not recommended until after pregnancy; no intervention needed if vaccinated while pregnant; pregnancy testing not needed before vaccination

Influenza vaccination

Routine vaccination

- Persons age 6 months or older: 1 dose any influenza vaccine appropriate for age and health status annually
- For additional guidance, see www.cdc.gov/flu/professionals/index.htm

Special situations

- Egg allergy, hives only: 1 dose any influenza vaccine appropriate for age and health status annually
- Egg allergy-any symptom other than hives (e.g., angioedema, respiratory distress): 1 dose any influenza vaccine appropriate for age and health status annually. If using an influenza vaccine other than RIV4 or ccIIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions.
- Severe allergic reactions to any vaccine can occur even in the absence of a history of previous allergic reaction.
 Therefore, all vaccine providers should be familiar with the office emergency plan and certified in cardiopulmonary resuscitation.
- A previous severe allergic reaction to any influenza vaccine is a contraindication to future receipt of the vaccine.
- LAIV4 should not be used in persons with the following conditions or situations:
- History of severe allergic reaction to any vaccine component (excluding egg) or to a previous dose of any influenza vaccine
- Immunocompromised due to any cause (including medications and HIV infection)
- Anatomic or functional asplenia
- Close contacts or caregivers of severely immunosuppressed persons who require a protected environment
- Pregnancy
- Cranial CSF/oropharyngeal communications
- Cochlear implant

- Received influenza antiviral medications oseltamivir or zanamivir within the previous 48 hours, peramivir within the previous 5 days, or baloxavir within the previous 17 days
- Adults 50 years or older
- History of Guillain-Barré syndrome within 6 weeks after previous dose of influenza vaccine: Generally, should not be vaccinated unless vaccination benefits outweigh risks for those at higher risk for severe complications from influenza

Measles, mumps, and rubella vaccination

Routine vaccination

- No evidence of immunity to measles, mumps, or rubella: 1 dose
- **Evidence of immunity:** Born before 1957 (health care personnel, see below), documentation of receipt of MMR vaccine, laboratory evidence of immunity or disease (diagnosis of disease without laboratory confirmation is not evidence of immunity)

Special situations

- Pregnancy with no evidence of immunity to rubella:
 MMR contraindicated during pregnancy; after pregnancy
 (before discharge from health care facility), 1 dose
- Nonpregnant women of childbearing age with no evidence of immunity to rubella: 1 dose
- HIV infection with CD4 count ≥200 cells/mm³ for at least 6 months and no evidence of immunity to measles, mumps, or rubella: 2-dose series at least 4 weeks apart; MMR contraindicated for HIV infection with CD4 count
 <200 cells/mm³
- Severe immunocompromising conditions: MMR contraindicated
- Students in postsecondary educational institutions, international travelers, and household or close, personal contacts of immunocompromised persons with no evidence of immunity to measles, mumps, or rubella: 2-dose series at least 4 weeks apart if previously did not receive any doses of MMR or 1 dose if previously received 1 dose MMR
- Health care personnel:
- Born in 1957 or later with no evidence of immunity to measles, mumps, or rubella: 2-dose series at least 4 weeks apart for measles or mumps or at least 1 dose for rubella Page 74 of 75

Born before 1957 with no evidence of immunity to measles, mumps, or rubella: Consider 2-dose series at least 4 weeks apart for measles or mumps or 1 dose for rubella

Meningococcal vaccination

Special situations for MenACWY

- Anatomical or functional asplenia (including sickle cell disease), HIV infection, persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use: 2-dose series MenACWY-D (Menactra, Menveo or MenQuadfi) at least 8 weeks apart and revaccinate every 5 years if risk remains
- Travel in countries with hyperendemic or epidemic meningococcal disease, microbiologists routinely exposed to Neisseria meningitidis: 1 dose MenACWY (Menactra, Menveo or MenQuadfi) and revaccinate every 5 years if risk remains
- First-year college students who live in residential housing (if not previously vaccinated at age 16 years or older) and military recruits: 1 dose MenACWY (Menactra, Menveo or MenQuadfi)
- For MenACWY booster dose recommendations for groups listed under "Special situations" and in an outbreak setting (e.g., in community or organizational settings and among men who have sex with men) and additional meningococcal vaccination information, see www.cdc.gov/mmwr/volumes/69/rr/rr6909a1.htm

Shared clinical decision-making for MenB

• Adolescents and young adults age 16–23 years (age 16–18 years preferred) not at increased risk for meningococcal disease: Based on shared clinical decision-making, 2-dose series MenB-4C (Bexsero) at least 1 month apart or 2-dose series MenB-FHbp (Trumenba) at 0, 6 months (if dose 2 was administered less than 6 months after dose 1, administer dose 3 at least 4 months after dose 2); MenB-4C and MenB-FHbp are not interchangeable (use same product for all doses in series)

Special situations for MenB

 Anatomical or functional asplenia (including sickle cell disease), persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use, microbiologists routinely exposed to Neisseria meningitidis: 2-dose primary series MenB-4C (Bexsero) at least one month apart or

Recommended Adult Immunization Schedule, United States, 2021

- MenB-4C (Bexsero) at least 1 month apart or 3-dose primary series MenB-FHbp (Trumenba) at 0, 1–2, 6 months (if dose 2 was administered at least 6 months after dose 1, dose 3 not needed); MenB-4C and MenB-FHbp are not interchangeable (use same product for all doses in series); 1 dose MenB booster 1 year after primary series and revaccinate every 2–3 years if risk remains
- Pregnancy: Delay MenB until after pregnancy unless at increased risk and vaccination benefits outweigh potential risks
- For MenB booster dose recommendations for groups listed under "Special situations" and in an outbreak setting (e.g., in community or organizational settings and among men who have sex with men) and additional meningococcal vaccination information, see www.cdc.gov/mmwr/volumes/69/rr/rr6909a1.htm

Pneumococcal vaccination

Routine vaccination

- Age 65 years or older (immunocompetent see www.cdc.gov/mmwr/volumes/68/wr/mm6846a5. htm?s cid=mm6846a5 w): 1 dose PPSV23
- If PPSV23 was administered prior to age 65 years, administer 1 dose PPSV23 at least 5 years after previous dose

Shared clinical decision-making

- Age 65 years or older (immunocompetent): 1 dose PCV13 based on shared clinical decision-making if previously not administered.
- PCV13 and PPSV23 should not be administered during the same visit
- If both PCV13 and PPSV23 are to be administered, PCV13 should be administered first
- PCV13 and PPSV23 should be administered at least 1 year apart

Special situations

(www.cdc.gov/mmwr/preview/mmwrhtml/mm6140a4.htm)

 Age 19-64 years with chronic medical conditions (chronic heart [excluding hypertension], lung, or liver disease, diabetes), alcoholism, or cigarette smoking: 1 dose PPSV23

- Age 19 years or older with immunocompromising conditions (congenital or acquired immunodeficiency [including B- and T-lymphocyte deficiency, complement deficiencies, phagocytic disorders, HIV infection], chronic renal failure, nephrotic syndrome, leukemia, lymphoma, Hodgkin disease, generalized malignancy, iatrogenic immunosuppression [e.g., drug or radiation therapy], solid organ transplant, multiple myeloma) or anatomical or functional asplenia (including sickle cell disease and other hemoglobinopathies): 1 dose PCV13 followed by 1 dose PPSV23 at least 8 weeks later, then another dose PPSV23 at least 5 years after previous PPSV23; at age 65 years or older, administer 1 dose PPSV23 at least 5 years after most recent PPSV23 (note: only 1 dose PPSV23 recommended at age 65 years or older)
- Age 19 years or older with cerebrospinal fluid leak or cochlear implant: 1 dose PCV13 followed by 1 dose PPSV23 at least 8 weeks later; at age 65 years or older, administer another dose PPSV23 at least 5 years after PPSV23 (note: only 1 dose PPSV23 recommended at age 65 years or older)

Tetanus, diphtheria, and pertussis vaccination

Routine vaccination

• Previously did not receive Tdap at or after age 11 years: 1 dose Tdap, then Td or Tdap every 10 years

Special situations

- Previously did not receive primary vaccination series for tetanus, diphtheria, or pertussis: At least 1 dose Tdap followed by 1 dose Td or Tdap at least 4 weeks after Tdap and another dose Td or Tdap 6–12 months after last Td or Tdap (Tdap can be substituted for any Td dose, but preferred as first dose), Td or Tdap every 10 years thereafter
- **Pregnancy:** 1 dose Tdap during each pregnancy, preferably in early part of gestational weeks 27–36
- Wound management: Persons with 3 or more doses of tetanus-toxoid-containing vaccine: For clean and minor wounds, administer Tdap or Td if more than 10 years since last dose of tetanus-toxoid-containing vaccine; for all other wounds, administer Tdap or Td if more than 5 years since last dose of tetanus-toxoid-containing vaccine. Tdap is preferred for persons who have not previously received Tdap or whose Tdap history is unknown. If a tetanus-toxoid-containing vaccine is indicated for a pregnant woman, use Tdap. For detailed information, see www.cdc.gov/mmwr/volumes/69/wr/mm6903a5.htm

Packet Page 75 of 75

Varicella vaccination

Routine vaccination

- No evidence of immunity to varicella: 2-dose series 4–8
 weeks apart if previously did not receive varicella-containing
 vaccine (VAR or MMRV [measles-mumps-rubella-varicella
 vaccine] for children); if previously received 1 dose varicellacontaining vaccine, 1 dose at least 4 weeks after first dose
- Evidence of immunity: U.S.-born before 1980 (except for pregnant women and health care personnel [see below]), documentation of 2 doses varicella-containing vaccine at least 4 weeks apart, diagnosis or verification of history of varicella or herpes zoster by a health care provider, laboratory evidence of immunity or disease

Special situations

- Pregnancy with no evidence of immunity to varicella: VAR contraindicated during pregnancy; after pregnancy (before discharge from health care facility), 1 dose if previously received 1 dose varicella-containing vaccine or dose 1 of 2-dose series (dose 2: 4–8 weeks later) if previously did not receive any varicella-containing vaccine, regardless of whether U.S.-born before 1980
- Health care personnel with no evidence of immunity to varicella: 1 dose if previously received 1 dose varicellacontaining vaccine; 2-dose series 4–8 weeks apart if previously did not receive any varicella-containing vaccine, regardless of whether U.S.-born before 1980
- HIV infection with CD4 count ≥200 cells/mm³ with no evidence of immunity: Vaccination may be considered (2 doses 3 months apart); VAR contraindicated for HIV infection with CD4 count <200 cells/mm³
- Severe immunocompromising conditions: VAR contraindicated

Zoster vaccination

Routine vaccination

Age 50 years or older: 2-dose series RZV (Shingrix) 2–6
months apart (minimum interval: 4 weeks; repeat dose if
administered too soon), regardless of previous herpes zoster
or history of zoster vaccine live (ZVL, Zostavax) vaccination
(administer RZV at least 2 months after ZVL)

Special situations

- Pregnancy: Consider delaying RZV until after pregnancy if RZV is otherwise indicated.
- Severe immunocompromising conditions (including HIV infection with CD4 count <200 cells/mm³): Recommended use of RZV under review