

# **Ryan White HIV/AIDS Program AIDS Education and Training Center (AETC) Program**

## **Annual Data Report**

**2023**

**Reporting Periods: July 2018–June 2023**



The *Ryan White HIV/AIDS Program (RWHAP) AIDS Education and Training Center (AETC) Program Annual Data Report 2023* is published by the HIV/AIDS Bureau, Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services, Rockville, Maryland.

Data are presented for training events and event participants reported by RWHAP AETC Program grant recipients from July 2018 through June 2023.

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**Information about the Ryan White HIV/AIDS Program:** [ryanwhite.hrsa.gov](https://ryanwhite.hrsa.gov)

**Information about the RWHAP AETC National Resource Center:** [aidsetc.org](https://aidsetc.org)

### **Acknowledgments**

Publication of this report was made possible by the contributions of the RWHAP AETC Program recipients that provided RWHAP AETC data to HRSA.

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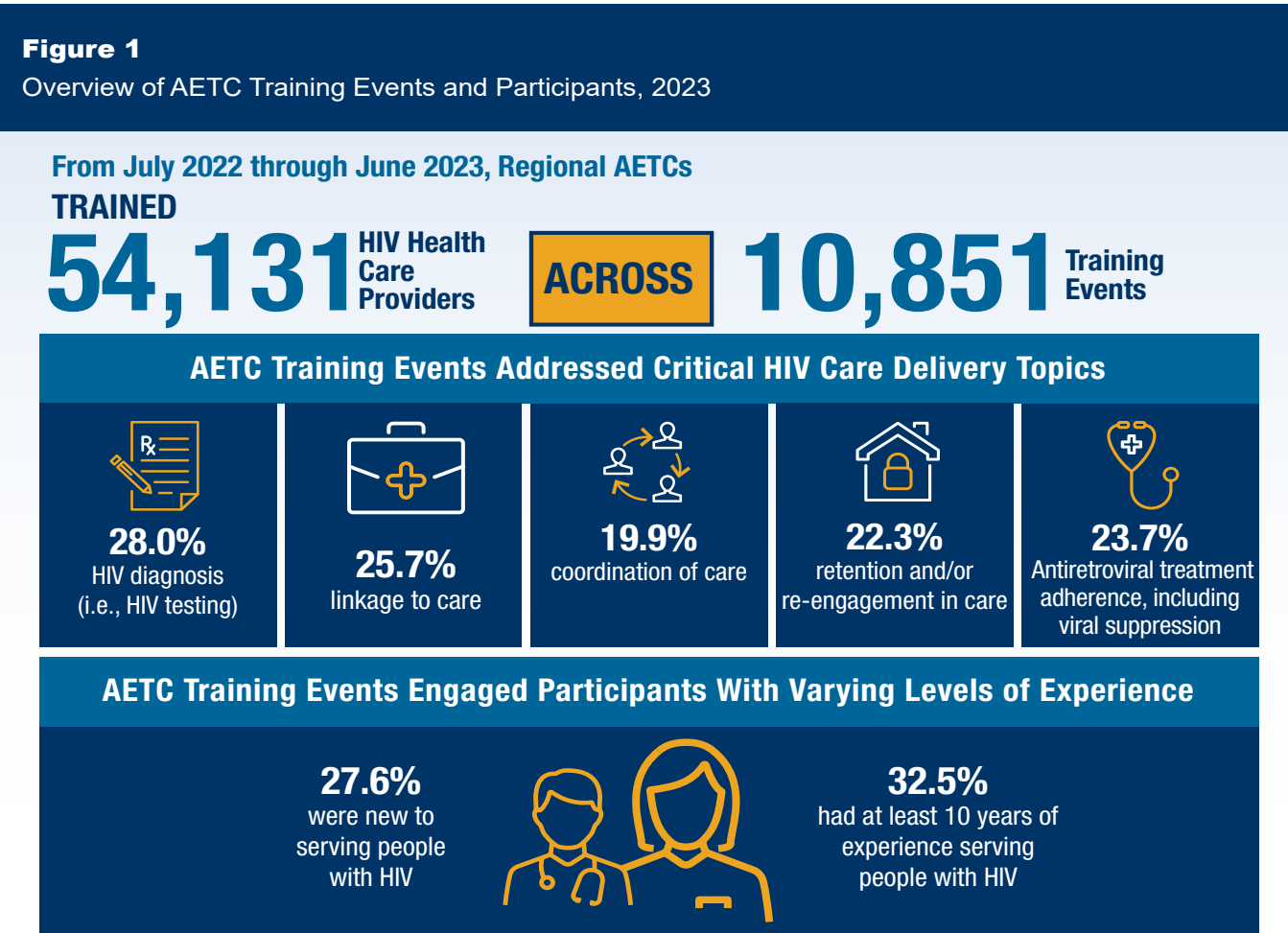
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# RWHAP AETC ANNUAL DATA REPORT

## INSIGHTS

The Ryan White HIV/AIDS Program (RWHAP) Part F AIDS Education and Training (AETC) Program works to increase the size and strengthen the skills of the HIV clinical and nonclinical workforce to improve outcomes along the HIV care continuum, decrease HIV transmissions, and reach people with HIV who are out of care and not virally suppressed. This work is increasingly essential as the HIV workforce shrinks and HIV care needs grow. Each year, regional AETCs collectively train more than 50,000 HIV health care providers across more than 10,000 training events (Figure 1). The regional AETCs reach providers with a range of HIV care experience. AETC training events focus on HIV prevention, team-based HIV care and treatment, management of co-occurring and chronic conditions, and outreach to people and communities disproportionately affected by HIV.



# REPORT OVERVIEW

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Refer to the full [Technical Notes](#) for additional information.

WHY does the Health Resources and Services Administration (HRSA) HIV/AIDS Bureau (HAB) produce the AIDS Education and Training Center (AETC) Program Annual Data Report?

- To measure progress toward expanding and strengthening the HIV health care workforce.
- To assess the numbers and characteristics of the HIV clinical and nonclinical workforce.
- To inform the AETC Program's reach, delivery, and impact of training.

WHO is included in this report?

- HIV health care providers, other health care providers who treat people with HIV, and health care support staff who participated in regional AETC Program training events.

WHAT information is presented?

- Number of AETC training events and training participants.
- Content and topics covered in AETC training events.
- Training participant characteristics, including their race/ethnicity, professional background, and role in the HIV health care workforce.
- Training participant service delivery characteristics (years providing services and patient load).

WHAT TIME PERIODS are included?

- Training participant employment setting (type of health care or services facility, geographic setting, RWHAP-funded setting, EHE jurisdiction setting).
- Five data reporting years, July 2018–June 2019 through July 2022–June 2023.

HOW is information reported to HRSA HAB?

- Each reporting year, regional AETCs use standardized forms to collect training event and training participant data for every training event.
- The eight regional AETCs submit training event and training participant data to HRSA through the Electronic Handbooks (EHBs) system.

# REPORT SUMMARY

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The Health Resources and Services Administration's (HRSA) HIV/AIDS Bureau (HAB) administers the AIDS Education and Training Center (AETC) Program as a component of the Ryan White HIV/AIDS Treatment Extension Act of 2009 (Public Law 111-87) under Section 2692 of the Public Health Service Act 42 U.S.C. 300ff-111(a), known as the Ryan White HIV/AIDS Program (RWHAP). RWHAP Part F supports eight regional AETCs and two national AETC centers [1]:

- The *regional AETCs* train health care providers to counsel, diagnose, treat, and medically manage people with HIV and help prevent HIV transmission.
- The *National AETC Support Center (NASC)* serves as the coordinator and supports the dissemination of the work of the AETCs. The NASC supports the development, dissemination, and optimal utilization of the National HIV Curriculum (NHC) across the United States and its territories. The NASC offers free online HIV continuing education for novice to expert health professionals, students, and faculty [2].
- The *National Clinician Consultation Center (NCCC)* provides timely and appropriate responses to clinical questions related to HIV infection and other infectious diseases and comorbidities [3].

The regional AETCs work to (1) increase the size and strengthen the skills of the HIV clinical workforce in the United States; (2) improve outcomes along the HIV care continuum, including diagnosis, linkage to care, retention in care, and viral suppression; and (3) decrease HIV transmission and, ultimately, reduce HIV incidence by training the frontline workforce.

By statute, the AETC Program is required to use Minority AIDS Initiative funds for the regional AETCs to expand the number of health care professionals who have treatment expertise and knowledge about the most appropriate standards of HIV-related treatments and medical care for racial and ethnic minority adults, adolescents, and children with HIV.<sup>1</sup>

The primary participants for trainings conducted by the regional AETCs are novice and low-volume HIV treatment providers, allied health professionals, and health care support staff who treat people with HIV and those with risk behaviors for HIV acquisition. Trainings also are intended for prescribers (e.g., physicians, physician assistants, nurse practitioners) and other health care professionals (e.g., dentists, psychiatrists, pharmacists).

The AETC Program's capacity-building support of the HIV clinical workforce aligns with national HIV goals, the *Ending the HIV Epidemic in the U.S.* (EHE) initiative to reduce new HIV infections [4], and the recently launched Ryan White Program 2030, which calls on the HIV community to continue to care for RWHAP clients while prioritizing efforts to reach people with HIV who are out of care and not virally suppressed.



## REPORT CHANGES

This report updates the most recent RWHAP AETC Program Annual Data Report with one new year of data: July 2022 through June 2023. Overall, the data are presented for five reporting periods: July 2018 through June 2019, July 2019 through June 2020, July 2020 through June 2021, July 2021 through June 2022, and July 2022 through June 2023. The focus of the narrative is the most recent year, July 2022 through June 2023.

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<sup>1</sup> The Ryan White HIV/AIDS Program Part F includes the Minority AIDS Initiative, which provides funding to address the disproportionate impact of HIV on Blacks/African Americans and other minority populations. Ryan White HIV/AIDS Treatment Extension Act of 2009 (Public Law 111-87) under Section 2692 of the Public Health Service Act 42 U.S.C. 300ff-111(a).



## HIGHLIGHTS OF ANALYSES

### Training Events

From July 2022 through June 2023, the RWHAP regional AETCs conducted 10,851 training events (a five-year average of 10,541 events per year) and reached 54,131 unique training participants (a five-year average of 56,694 training participants per year) (**Table 1**).

### Training Content

The general training content areas most frequently covered by RWHAP AETC training events from July 2022 through June 2023 were HIV prevention (43.0%), management of comorbid conditions (36.0%), antiretroviral treatment and adherence (35.8%), and engagement and retention in HIV care (33.7%) (**Table 2**).

### Training Topics

#### HIV Prevention

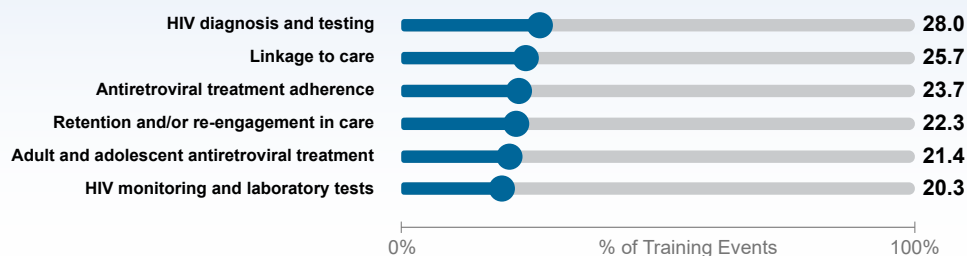
The HIV prevention topic most often presented in AETC trainings from July 2022 through June 2023 was pre-exposure prophylaxis (PrEP), which was featured in nearly one-third (32.2%) of training events. Other HIV prevention topics included HIV transmission risk assessment (17.5%, a slight decrease from 22.4% in the July 2018 through June 2019 reporting period), behavioral prevention (16.9%), and treatment as prevention (15.9%) (**Table 2**).

#### HIV Background and Management

HIV management topics—especially those related to testing, treatment, and care engagement—were popular, and several were featured in more than 20 percent of AETC training events from July 2022 through June 2023 (**Figure 2; Table 2**).

**Figure 2**

Top HIV background and management topics presented in AETC training events, July 2022 to June 2023 (N=10,835)



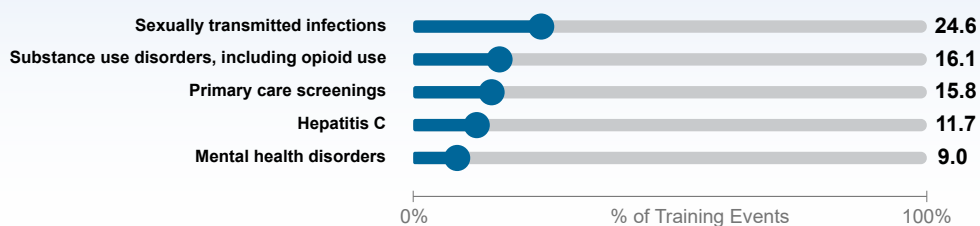
Of note, trainings about antiretroviral treatment adherence and adult and adolescent antiretroviral treatment decreased from the July 2018 through June 2019 reporting period to the July 2022 through June 2023 reporting period by 5.9 percentage points and 8.2 percentage points, respectively.

## Primary Care, Chronic Conditions, and Comorbidities

Primary care, chronic conditions, and comorbidities featured as AETC training event topics included sexually transmitted infections (24.6%); substance use disorder, including opioid use disorder (16.1%); primary care screenings (15.8%); hepatitis C (11.7%, a decrease from 17.6% in the July 2018 through June 2019 reporting period); and mental health disorders (9.0%) (**Figure 3; Table 2**).

**Figure 3**

Top primary care, chronic conditions, and comorbidities topics presented in AETC training events, July 2022 to June 2023 (N=10,835)



## Care of People With HIV

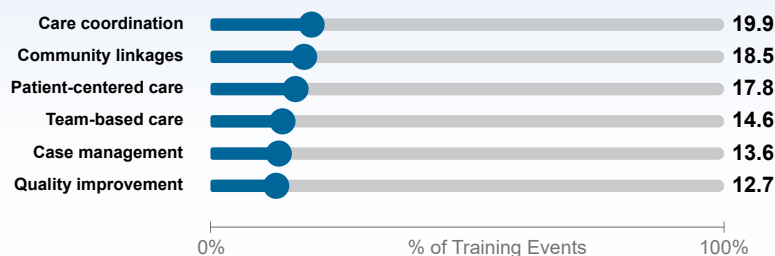
Stigma was the most frequently presented AETC training event topic related to caring for people with HIV (24.1%), followed by health literacy (12.3%) (**Table 2**).

## Health Care Organization or Systems Issues

The health care organizations or systems topics frequently presented in AETC trainings from July 2022 through June 2023 were related to improving the quality and delivery of HIV primary care and essential support services to people with HIV (**Figure 4; Table 2**).

**Figure 4**

Top health care organization or systems issues topics presented in AETC training events, July 2022 to June 2023 (N=10,835)



Of note, trainings about team-based care increased from the July 2018 through June 2019 reporting period to the July 2022 through June 2023 reporting period by 3.8 percentage points. Team-based care is crucial to HIV chronic care management for people with HIV as they grow older and if they experience comorbidities.

## Populations

The AETC Program supports health workforce training to ensure the delivery of quality HIV care and services to all people with HIV, especially populations disproportionately affected by HIV.

More than one-quarter of training events included the topic of young adults aged 18–24 years (26.8%, up from 19.7% from July 2018 through June 2019), and over one-quarter of training events included the topic of adults aged 50 years and older (26.7%, up from 18.4% from July 2018 through June 2019). Other



populations addressed in training events included people experiencing unstable housing (12.6%), rural populations (11.6%), and people with legal system involvement (9.2%) (**Table 2**).

## Training Participants

To improve the quality of health care provided by the HIV health care workforce and increase access to high-quality HIV care for people not in care, regional AETCs concentrate on reaching professionals who have direct patient care responsibilities for people with HIV, especially those who serve racial and ethnic minority patients and those working at RWHAP- and HRSA-supported clinical health centers.

During the period July 2022 through June 2023, 44.0% of RWHAP AETC participants self-identified as White; 21.5% as Black/African American, 23.0% as Hispanic/Latino, and less than 10% each as American Indian/Alaskan Native, Asian, Native Hawaiian/Pacific Islander, or people of multiple races (**Table 3**).

From July 2022 through June 2023, RWHAP AETC participants included nurses and nurse practitioners (20.4%), social workers (13.9%), physicians (12.2%), and community health workers (7.9%). In addition, 23.7% identified as a provider or clinician and 13.2% as a case manager (**Table 3**).

## Service Delivery

Regional AETCs train and support clinicians and health care professionals who provide direct care and services to patients. The AETCs reach providers with a range of HIV care experience and client load. While nearly one-third (32.5%) of providers from July 2022 through June 2023 had at least 10 years of experience caring for patients with HIV, 27.6% were new to serving people with HIV (**Table 4**).

The AETCs reached providers with small and large HIV client loads. Provider client loads ranged from 24.3% who had a small load of fewer than 10 clients with HIV per year to 44.0% who had a large client load of 50 or more clients with HIV per year (**Table 4**).

## Employment Setting

The employment setting most frequently reported by RWHAP AETC participants from July 2022 through June 2023 was academic health center (13.5%), followed by HIV or infectious diseases clinic (13.3%), other community-based organization (12.7%), Federally Qualified Health Center (12.3%), and state or local health department (12.3%) (**Table 4**).

From July 2022 through June 2023, 10.2% of the RWHAP AETC participants were employed in a rural area (only or in combination with a suburban/urban area). During this period, 42.2% of participants worked in an RWHAP-funded employment setting, and 52.9% of participants worked within an EHE jurisdiction (**Table 4**).



# TECHNICAL NOTES



## RYAN WHITE HIV/AIDS PROGRAM AETC DATA

Each year, regional AETCs are required to report data to HRSA HAB about their training events and the participants who attended those events in the United States, Guam, Puerto Rico, and the U.S. Virgin Islands. The yearly AETC data reporting period is July 1 to June 30.

Information collected on training events via Event Record (ER) data forms includes the topics covered, names of collaborating organizations, types of funds used from special initiatives, type and length of sessions, training modalities or technologies used, total number of participants in attendance, and total number of Participant Information Forms (PIFs) collected from participants.

Information collected on participants via PIFs includes characteristics information (e.g., profession, functional role, race/ethnicity). In addition, information about participants' employment setting(s) is collected (e.g., if the setting is in a rural or suburban/urban area, if the setting receives RWHP funding). Patient care information is also collected from participants. For example, participants report whether they provide services directly to people with HIV, and if so, how many years of experience they have providing such services; the average number of people with HIV they serve; and percentage estimates of clients with HIV to whom they provide services that meet certain characteristics (e.g., those who are racial/ethnic minorities or are receiving treatment with antiretroviral therapy).

In March 2020, the EHE initiative [4] was launched and included funding for expanding workforce capacity through the regional AETCs. A new funding source was added to the ER data form to reflect the use of EHE funds for training events. Training content and topics related to EHE appear throughout the current training content/topic variables; there is not a separate variable for EHE training content/topics.

### Report Tables

In all tables, dashes denote that a category did not apply to that reporting period.

**Table 2: Training events, by year and training topic, other support, collaborating organization, and training modality:** Data beginning with the July 2019 through June 2020 reporting period include the "Training Content" section, which includes such categories as antiretroviral treatment and adherence, engagement and retention in HIV care, HIV prevention, HIV testing and diagnosis, linkage/referral to HIV care, and management of comorbid conditions.

**Table 3: Program participants, by year and selected characteristics:** Beginning with July 2019 through June 2020 data, the professional discipline Nurse/Advanced Practice Nurse (non-prescriber) and Nurse Practitioner categories were removed, and the Nurse Practitioner/Nurse Professional (prescriber) and Nurse Professional (non-prescriber) categories were added.

**Table 4: Program participants, by year and employment setting:** Data categories are presented for the years in which they were included on the PIF. Participants reported up to five ZIP codes for their work setting(s). Data presented use the rural/urban classifications of ZIP codes reported by participants, according to the HRSA Federal Office of Rural Health Policy's rural-urban commuting area, or RUCA [5], designation, and identify participants who work only in rural settings, in both rural and suburban/urban settings, or only in suburban/urban settings. Any portion of a participant's ZIP code within an EHE jurisdiction is considered within an EHE jurisdiction.

# REFERENCES

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1. Health Resources and Services Administration. Part F: AIDS Education and Training Center (AETC) Program. Available at <https://ryanwhite.hrsa.gov/about/parts-and-initiatives/part-f-aetc>.
2. National AETC Support Center (NASC). Available at <https://aidsetc.org>.
3. University of California, San Francisco. National Clinician Consultation Center. Available at <https://nccc.ucsf.edu>.
4. HIV.gov. About Ending the HIV Epidemic in the U.S.: Overview. Available at <https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/overview>.
5. U.S. Department of Agriculture. Rural-Urban Commuting Area Codes. Available at <https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes/documentation>.

# ADDITIONAL RESOURCES

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Centers for Disease Control and Prevention, HIV prevention resources: [cdc.gov/hiv](https://cdc.gov/hiv)

Health Resources and Services Administration, HIV/AIDS programs: [ryanwhite.hrsa.gov](https://ryanwhite.hrsa.gov)

HIV.gov, the nation's source for timely and relevant federal HIV policies, programs, and resources: [HIV.gov](https://HIV.gov)

**Table 1. RWHP AIDS Education and Training Center (AETC) Program training events and participants by year, July 2018–June 2023—United States and 3 territories**

Year	Events (N)	Participants (N)
July 2018–June 2019	9,784	56,124
July 2019–June 2020	8,370	56,862
July 2020–June 2021	11,475	59,972
July 2021–June 2022	12,226	56,383
July 2022–June 2023	10,851	54,131

**Table 2. RWHP AIDS Education and Training Center (AETC) Program training events by year and training topic, July 2018–June 2023—United States and 3 territories**

	July 2018–June 2019		July 2019–June 2020		July 2020–June 2021		July 2021–June 2022		July 2022–June 2023	
	N	%	N	%	N	%	N	%	N	%
<b>Training content</b>										
Antiretroviral treatment and adherence	—	—	2,661	31.8	3,587	31.7	4,180	35.0	3,881	35.8
Engagement and retention in HIV care	—	—	2,410	28.8	3,285	29.1	4,128	34.6	3,652	33.7
HIV prevention	—	—	3,224	38.6	4,887	43.2	5,517	46.2	4,656	43.0
HIV testing and diagnosis	—	—	2,013	24.1	3,000	26.5	3,672	30.8	3,460	31.9
Linkage/referral to HIV care	—	—	1,917	22.9	2,994	26.5	3,699	31.0	3,139	29.0
Management of comorbid conditions	—	—	2,573	30.8	3,445	30.5	3,732	31.3	3,902	36.0
Rapid ART	—	—	—	—	—	—	—	—	319	2.9
Other training content	—	—	1,996	23.9	3,904	34.5	2,917	24.5	3,243	29.9
<b>Training topic</b>										
<b>HIV prevention</b>										
Behavioral prevention	1,932	19.8	1,281	15.3	1,759	15.6	2,224	18.6	1,831	16.9
HIV transmission risk assessment	2,190	22.4	1,353	16.2	1,488	13.2	1,901	15.9	1,894	17.5
Postexposure prophylaxis (PEP, occupational and nonoccupational)	1,501	15.4	1,093	13.1	1,034	9.1	1,383	11.6	1,206	11.1
Preexposure prophylaxis (PrEP)	2,761	28.3	2,525	30.2	2,703	23.9	3,712	31.1	3,489	32.2
Prevention of perinatal transmission	675	6.9	492	5.9	464	4.1	539	4.5	507	4.7
Sexual health history taking	—	—	—	—	—	—	—	—	651	6.0
Treatment as prevention	—	—	1,009	12.1	1,103	9.8	1,823	15.3	1,728	15.9
Other HIV prevention topics	1,537	15.7	1,032	12.3	1,231	10.9	1,617	13.6	1,637	15.1
<b>HIV background and management</b>										
Acute HIV	1,174	12.0	739	8.8	666	5.9	934	7.8	897	8.3
Adult and adolescent antiretroviral treatment	2,890	29.6	1,804	21.6	2,131	18.9	2,531	21.2	2,322	21.4
Aging and HIV	948	9.7	546	6.5	509	4.5	731	6.1	813	7.5
Antiretroviral treatment adherence, including viral suppression	2,889	29.6	1,895	22.7	2,245	19.9	2,571	21.6	2,573	23.7
Basic science	1,811	18.6	897	10.7	1,087	9.6	1,786	15.0	1,705	15.7
Clinical manifestations of HIV disease	1,893	19.4	1,112	13.3	1,094	9.7	1,288	10.8	1,335	12.3
HIV diagnosis (i.e., HIV testing)	2,715	27.8	1,812	21.7	2,299	20.3	3,091	25.9	3,031	28.0
HIV epidemiology	1,698	17.4	1,048	12.5	1,150	10.2	1,584	13.3	1,351	12.5
HIV monitoring and laboratory tests (i.e., CD4 and viral load)	2,252	23.1	1,535	18.4	1,972	17.4	2,497	20.9	2,200	20.3
HIV resistance testing and interpretation	1,395	14.3	882	10.5	946	8.4	1,061	8.9	903	8.3
Linkage to care	2,570	26.3	1,788	21.4	2,636	23.3	3,270	27.4	2,781	25.7
Pediatric HIV management	194	2.0	156	1.9	96	0.8	102	0.9	147	1.4
Retention and/or re-engagement in care	1,944	19.9	1,565	18.7	2,259	20.0	2,903	24.3	2,411	22.3
Other HIV background and management topics	—	—	196	2.3	560	5.0	646	5.4	745	6.9
<b>Primary care, chronic conditions, and comorbidities</b>										
Cervical cancer screening, including HPV	299	3.1	174	2.1	174	1.5	243	2.0	175	1.6
Health or wellness maintenance	—	—	—	—	—	—	—	—	600	5.5
Hepatitis B	759	7.8	537	6.4	587	5.2	739	6.2	619	5.7
Hepatitis C	1,718	17.6	1,091	13.0	1,373	12.1	1,572	13.2	1,264	11.7
Immunization	708	7.3	392	4.7	505	4.5	593	5.0	470	4.3

Table 2. RWHAP AIDS Education and Training Center (AETC) Program training events by year and training topic, July 2018–June 2023—United States and 3 territories (cont.)

	July 2018–June 2019		July 2019–June 2020		July 2020–June 2021		July 2021–June 2022		July 2022–June 2023	
	N	%	N	%	N	%	N	%	N	%
Primary care, chronic conditions, and comorbidities (cont.)										
Influenza	269	2.8	198	2.4	165	1.5	119	1.0	87	0.8
Malignancies	357	3.7	178	2.1	208	1.8	292	2.4	221	2.0
Medication-assisted therapy for substance use disorders	518	5.3	404	4.8	446	3.9	445	3.7	430	4.0
Mental health disorders	1,241	12.7	856	10.2	1,117	9.9	1,086	9.1	975	9.0
Non-infection comorbidities of HIV or viral hepatitis	1,101	11.3	636	7.6	577	5.1	752	6.3	757	7.0
Nutrition	307	3.1	181	2.2	197	1.7	235	2.0	180	1.7
Opioid use disorder	—	—	428	5.1	585	5.2	642	5.4	573	5.3
Opportunistic infections	1,207	12.4	714	8.5	789	7.0	945	7.9	946	8.7
Oral health	327	3.4	281	3.4	297	2.6	326	2.7	450	4.2
Osteoporosis	195	2.0	130	1.6	106	0.9	125	1.0	90	0.8
Pain management	309	3.2	187	2.2	166	1.5	207	1.7	160	1.5
Palliative care	99	1.0	90	1.1	68	0.6	113	0.9	56	0.5
Preconception planning	591	6.1	417	5.0	446	3.9	635	5.3	628	5.8
Primary care screenings	1,364	14.0	816	9.8	1,034	9.1	1,656	13.9	1,710	15.8
Sexually transmitted infections	2,113	21.6	1,439	17.2	1,682	14.9	2,555	21.4	2,661	24.6
Substance use disorders	1,488	15.2	—	—	—	—	—	—	—	—
Substance use disorders, not including opioid use	—	—	956	11.4	1,027	9.1	1,294	10.8	1,168	10.8
Tobacco cessation	331	3.4	170	2.0	178	1.6	218	1.8	96	0.9
Tuberculosis	259	2.7	183	2.2	190	1.7	211	1.8	157	1.4
Other primary care and morbidities topics	—	—	761	9.1	2,553	22.6	1,697	14.2	1,091	10.1
Care of people with HIV										
Health literacy	1,308	13.4	676	8.1	1,244	11.0	1,962	16.4	1,333	12.3
Stigma	2,210	22.6	1,615	19.3	2,349	20.8	3,460	29.0	2,614	24.1
Stress management	—	—	—	—	—	—	—	—	243	2.2
Other care of people with HIV topics	276	2.8	301	3.6	316	2.8	403	3.4	531	4.9
Education										
Adult learning principles	880	9.0	—	—	—	—	—	—	—	—
Best practices in training	1,389	14.2	—	—	—	—	—	—	—	—
Curriculum development	910	9.3	—	—	—	—	—	—	—	—
Use of technology for education	367	3.8	—	—	—	—	—	—	—	—
Health care organization or systems issues										
Billing for services and payment models	417	4.3	330	3.9	371	3.3	570	4.8	—	—
Care coordination	1,930	19.8	1,640	19.6	2,030	18.0	2,654	22.2	2,153	19.9
Case management	1,236	12.7	982	11.7	1,065	9.4	1,325	11.1	1,469	13.6
Community linkages	1,758	18.0	1,215	14.5	1,527	13.5	2,109	17.7	2,007	18.5
Confidentiality/HIPAA	632	6.5	415	5.0	392	3.5	417	3.5	335	3.1
Funding or resource allocation	441	4.5	345	4.1	455	4.0	465	3.9	472	4.4
Health care coverage	696	7.1	461	5.5	520	4.6	640	5.4	550	5.1
Legal issues	378	3.9	273	3.3	283	2.5	291	2.4	275	2.5
Motivational interviewing	923	9.5	684	8.2	845	7.5	1,228	10.3	502	4.6
Organizational infrastructure	652	6.7	866	10.4	1,024	9.1	1,104	9.3	803	7.4
Organizational needs assessment	448	4.6	504	6.0	720	6.4	734	6.2	399	3.7
Patient-centered care	2,091	21.4	1,526	18.2	2,099	18.6	2,913	24.4	1,930	17.8
Patient-centered medical home	323	3.3	202	2.4	249	2.2	427	3.6	415	3.8
Practice transformation	767	7.9	813	9.7	1,316	11.6	1,524	12.8	1,091	10.1
Quality improvement	1,278	13.1	1,098	13.1	1,717	15.2	2,348	19.7	1,371	12.7
Team-based care	1,051	10.8	671	8.0	958	8.5	1,323	11.1	1,577	14.6
Telehealth	—	—	271	3.2	669	5.9	483	4.0	269	2.5
Use of technology for patient care	486	5.0	435	5.2	499	4.4	422	3.5	424	3.9
Other health care organization or systems issues topics	—	—	—	—	—	—	—	—	547	5.0

**Table 2. RWHP AIDS Education and Training Center (AETC) Program training events by year and training topic, July 2018–June 2023—United States and 3 territories (cont.)**

	July 2018–June 2019		July 2019–June 2020		July 2020–June 2021		July 2021–June 2022		July 2022–June 2023	
	N	%	N	%	N	%	N	%	N	%
<b>Populations</b>										
Children (Ages 0–12)	337	3.5	272	3.3	489	4.3	383	3.2	388	3.6
Adolescents (Ages 13–17)	917	9.4	741	8.9	1,210	10.7	1,312	11.0	1,519	14.0
Young adults (Ages 18–24)	1,923	19.7	1,670	20.0	2,692	23.8	3,150	26.4	2,904	26.8
Older adults (Ages 50 and over)	1,793	18.4	1,381	16.5	2,390	21.1	2,819	23.6	2,892	26.7
American Indian or Alaska Native	465	4.8	322	3.9	638	5.6	769	6.4	932	8.6
Asian	301	3.1	323	3.9	674	6.0	677	5.7	662	6.1
Black or African American	2,005	20.5	1,676	20.0	3,028	26.8	2,741	23.0	2,639	24.4
Hispanic or Latino	1,447	14.8	1,245	14.9	2,305	20.4	2,424	20.3	2,255	20.8
Native Hawaiian or Pacific Islander	242	2.5	221	2.6	445	3.9	530	4.4	478	4.4
Other race/ethnicity	255	2.6	106	1.3	132	1.2	247	2.1	142	1.3
Women	1,961	20.1	1,586	19.0	2,577	22.8	2,627	22.0	2,510	23.2
People experiencing unstable housing	1,160	11.9	1,242	14.9	1,772	15.7	1,718	14.4	1,364	12.6
People who inject drugs	—	—	—	—	—	—	—	—	735	6.8
People with legal system involvement	749	7.7	736	8.8	1,298	11.5	1,128	9.5	995	9.2
Rural populations	1,216	12.5	1,076	12.9	1,608	14.2	1,655	13.9	1,259	11.6
Veterans	—	—	—	—	—	—	—	—	93	0.9
Other populations	3,611	37.0	3,050	36.5	4,828	42.7	5,535	46.4	6,152	56.8
<b>Number of training events held during the year</b>	9,761	—	8,362	—	11,305	—	11,929	—	10,835	—

*Abbreviations:* ART, antiretroviral therapy; HIPAA, Health Insurance Portability and Accountability Act; HPV, human papillomavirus.

*Notes:* Participants selected all that apply for the training content and each training topic. The number of training events held during the year is based on training events with information reported for participants and training topics and it serves as the denominator for percentage calculations.

**Table 3. RWHAP AIDS Education and Training Center (AETC) Program participants by year and selected characteristics, July 2018–June 2023—United States and 3 territories**

	July 2018– June 2019		July 2019– June 2020		July 2020– June 2021		July 2021– June 2022		July 2022– June 2023	
	N	%	N	%	N	%	N	%	N	%
<b>Race/ethnicity</b>										
American Indian/Alaska Native	785	1.5	348	0.7	389	0.8	419	0.9	431	0.9
Asian	3,737	7.3	3,516	7.2	3,638	7.1	3,335	6.9	3,420	7.2
Black/African American	10,663	20.9	10,717	22.0	11,526	22.4	10,721	22.2	10,218	21.5
Hispanic/Latino <sup>a</sup>	8,818	17.3	8,726	17.9	9,591	18.6	9,273	19.2	10,958	23.0
Native Hawaiian/Pacific Islander	153	0.3	261	0.5	207	0.4	119	0.2	149	0.3
White	25,271	49.5	23,505	48.2	24,207	47.0	22,670	46.9	20,962	44.0
Multiple races	1,652	3.2	1,679	3.4	1,907	3.7	1,798	3.7	1,172	2.5
Other	—	—	—	—	—	—	—	—	312	0.7
<b>Subtotal</b>	<b>51,079</b>	<b>100.0</b>	<b>48,752</b>	<b>100.0</b>	<b>51,465</b>	<b>100.0</b>	<b>48,335</b>	<b>100.0</b>	<b>47,622</b>	<b>100.0</b>
<b>Professional discipline</b>										
Clergy/faith-based professional	127	0.2	100	0.2	85	0.2	87	0.2	84	0.2
Community health worker	3,420	6.4	3,287	6.4	4,024	7.2	4,155	7.8	4,113	7.9
Dentist	1,983	3.7	1,843	3.6	2,078	3.7	1,720	3.2	1,777	3.4
Dietitian/nutritionist	183	0.3	184	0.4	217	0.4	184	0.3	167	0.3
Mental/behavioral health professional	1,912	3.6	1,869	3.7	2,029	3.6	1,712	3.2	1,434	2.8
Midwife	90	0.2	104	0.2	82	0.1	116	0.2	78	0.2
Nurse/advanced practice nurse (non-prescriber)	8,813	16.5	—	—	—	—	—	—	—	—
Nurse practitioner	3,059	5.7	—	—	—	—	—	—	—	—
Nurse practitioner/nurse professional (prescriber)	—	—	3,190	6.3	3,166	5.6	3,033	5.7	3,171	6.1
Nurse professional (non-prescriber)	—	—	7,743	15.2	7,309	13.0	7,996	15.1	7,440	14.3
Pharmacist	3,279	6.1	3,112	6.1	3,274	5.8	2,705	5.1	2,897	5.6
Physician	7,416	13.9	6,779	13.3	5,986	10.7	6,075	11.4	6,348	12.2
Physician assistant	1,525	2.9	1,311	2.6	1,370	2.4	1,352	2.5	1,345	2.6
Practice administrator or leader	798	1.5	756	1.5	889	1.6	906	1.7	987	1.9
Social worker	7,107	13.3	7,011	13.7	8,865	15.8	7,754	14.6	7,228	13.9
Substance abuse professional	1,051	2.0	918	1.8	1,137	2.0	1,055	2.0	759	1.5
Other allied health professional	3,214	6.0	1,971	3.9	1,578	2.8	1,752	3.3	1,503	2.9
Other clinical professional	—	—	—	—	—	—	—	—	1,996	3.8
Other dental professional	1,171	2.2	1,180	2.3	1,022	1.8	652	1.2	743	1.4
Other non-clinical professional	4,383	8.2	4,327	8.5	5,846	10.4	5,304	10.0	4,432	8.5
Other public health professional	5,101	9.5	5,858	11.5	7,193	12.8	7,185	13.5	6,219	12.0
<b>Number of participants</b>	<b>53,420</b>	<b>—</b>	<b>50,996</b>	<b>—</b>	<b>56,150</b>	<b>—</b>	<b>53,087</b>	<b>—</b>	<b>51,994</b>	<b>—</b>
<b>Role in their organization</b>										
Administrator	4,366	8.2	4,599	9.9	5,786	10.6	5,175	9.9	4,810	9.3
Agency board member	105	0.2	76	0.2	105	0.2	97	0.2	88	0.2
Care provider/clinician—can or does prescribe HIV treatment	6,082	11.4	4,977	10.7	5,306	9.7	5,274	10.1	4,855	9.4
Care provider/clinician—cannot or does not prescribe HIV treatment	9,802	18.4	7,650	16.4	7,842	14.3	7,454	14.3	7,387	14.3
Case manager	6,795	12.8	6,038	12.9	7,919	14.4	7,151	13.7	6,846	13.2
City, local, state government employee	—	—	—	—	—	—	—	—	222	0.4
Client/patient educator (includes navigator)	2,567	4.8	2,248	4.8	2,851	5.2	2,928	5.6	2,719	5.3
Clinical/medical assistant	1,977	3.7	1,510	3.2	1,556	2.8	1,628	3.1	1,756	3.4
Federal government employee	—	—	—	—	—	—	—	—	8,070	15.6
Health care organization non-clinical staff	1,339	2.5	1,303	2.8	1,875	3.4	1,803	3.5	1,882	3.6
HIV tester	1,836	3.4	1,491	3.2	1,892	3.5	1,852	3.5	1,822	3.5
Intern/resident	1,952	3.7	1,746	3.7	1,469	2.7	1,326	2.5	1,354	2.6
Researcher/evaluator	1,370	2.6	1,530	3.3	1,575	2.9	1,417	2.7	1,233	2.4
Student/graduate student	7,122	13.4	5,617	12.0	5,727	10.4	5,714	10.9	5,412	10.5
Teacher/faculty	1,650	3.1	1,474	3.2	1,506	2.7	1,462	2.8	1,188	2.3
Other	8,423	15.8	6,986	15.0	9,395	17.1	9,869	18.9	3,077	6.0
<b>Number of participants</b>	<b>53,271</b>	<b>—</b>	<b>46,627</b>	<b>—</b>	<b>54,804</b>	<b>—</b>	<b>52,245</b>	<b>—</b>	<b>51,672</b>	<b>—</b>

*Notes:* Participants reporting for July 2018–June 2019 and July 2019–June 2020 selected all professional disciplines and roles that apply. Participants reporting for July 2020–June 2021, July 2021–June 2022, and July 2022–June 2023 could report more than one professional discipline and/or role if they participated in more than one training during the year and their discipline and/or role changed. Professional discipline and role data for all years are not mutually exclusive; numbers may not sum to the number of participants, and percentages may not sum to 100.0%.

<sup>a</sup> Hispanics/Latinos can be of any race.



**Table 4. RWHAP AIDS Education and Training Center (AETC) Program participants by year, selected service delivery characteristics, and employment setting, July 2018–June 2023—United States and 3 territories**

	July 2018– June 2019		July 2019– June 2020		July 2020– June 2021		July 2021– June 2022		July 2022– June 2023	
	N	%	N	%	N	%	N	%	N	%
<b>Number of years providing direct services to people with HIV</b>										
≤1	5,061	23.5	4,631	21.8	5,774	24.0	6,059	27.6	5,613	27.6
2–4	5,120	23.8	5,050	23.7	5,237	21.7	4,538	20.6	4,291	21.1
5–9	3,741	17.4	3,825	18.0	4,373	18.2	3,994	18.2	3,794	18.7
10–19	4,298	20.0	4,324	20.3	4,774	19.8	4,076	18.5	3,681	18.1
≥20	3,293	15.3	3,442	16.2	3,935	16.3	3,315	15.1	2,927	14.4
<b>Total</b>	<b>21,513</b>	<b>100.0</b>	<b>21,272</b>	<b>100.0</b>	<b>24,093</b>	<b>100.0</b>	<b>21,982</b>	<b>100.0</b>	<b>20,306</b>	<b>100.0</b>
<b>Estimated number of clients with HIV per year</b>										
None per year	1,240	6.2	1,617	8.0	2,603	11.1	2,883	13.3	1,258	6.5
1–9 per year	4,573	22.8	4,400	21.7	4,650	19.8	4,484	20.7	4,720	24.3
10–19 per year	2,172	10.8	2,363	11.7	2,289	9.8	2,040	9.4	1,859	9.6
20–49 per year	3,326	16.6	3,142	15.5	3,603	15.4	3,307	15.2	3,027	15.6
≥50 per year	8,753	43.6	8,724	43.1	10,323	44.0	8,983	41.4	8,533	44.0
<b>Total</b>	<b>20,064</b>	<b>100.0</b>	<b>20,246</b>	<b>100.0</b>	<b>23,468</b>	<b>100.0</b>	<b>21,697</b>	<b>100.0</b>	<b>19,397</b>	<b>100.0</b>
<b>Employment setting</b>										
Academic health center	8,425	16.8	6,813	14.1	6,375	11.3	6,600	12.6	6,816	13.5
Correctional facility	1,761	3.5	1,307	2.7	1,063	1.9	934	1.8	1,887	3.7
Dental health facility	—	—	—	—	—	—	—	—	2,168	4.3
Emergency department	1,044	2.1	538	1.1	338	0.6	444	0.8	446	0.9
Federally Qualified Health Center	6,730	13.4	5,137	10.6	6,078	10.8	6,090	11.6	6,196	12.3
HIV or infectious diseases clinic	8,222	16.4	5,385	11.1	6,977	12.4	6,719	12.8	6,718	13.3
HMO/managed care organization	803	1.6	663	1.4	587	1.0	658	1.3	671	1.3
Hospital-based clinic	4,529	9.0	2,758	5.7	2,823	5.0	2,897	5.5	2,726	5.4
Indian health services/tribal clinic	611	1.2	291	0.6	268	0.5	359	0.7	434	0.9
Long-term nursing facility	439	0.9	246	0.5	261	0.5	203	0.4	166	0.3
Maternal/child health clinic	907	1.8	166	0.3	198	0.4	230	0.4	226	0.4
Mental health clinic	1,912	3.8	835	1.7	922	1.6	837	1.6	651	1.3
Military or veteran's health facility	412	0.8	333	0.7	262	0.5	212	0.4	152	0.3
Pharmacy	2,693	5.4	1,679	3.5	1,636	2.9	1,216	2.3	1,186	2.4
Private practice	1,897	3.8	1,383	2.9	1,660	2.9	929	1.8	805	1.6
State or local health department	5,632	11.2	5,029	10.4	6,146	10.9	6,460	12.3	6,226	12.3
STD clinic	3,426	6.8	848	1.8	1,138	2.0	1,101	2.1	1,113	2.2
Student health clinic	1,095	2.2	683	1.4	756	1.3	706	1.3	602	1.2
Substance abuse treatment center	1,958	3.9	876	1.8	1,085	1.9	1,117	2.1	743	1.5
Other community-based organization	7,983	15.9	6,126	12.6	7,536	13.4	6,970	13.3	6,428	12.7
Other federal health facility	515	1.0	355	0.7	428	0.8	478	0.9	322	0.6
Other primary care setting	3,411	6.8	1,972	4.1	1,864	3.3	1,705	3.2	770	1.5
Employment setting does not involve the provision of care or services to patients/clients	—	—	2,150	4.4	4,390	7.8	3,073	5.8	1,976	3.9
Not working	3,144	6.3	3,556	7.3	3,638	6.4	3,438	6.5	1,889	3.7
<b>Number of participants</b>	<b>50,175</b>	<b>—</b>	<b>48,442</b>	<b>—</b>	<b>56,429</b>	<b>—</b>	<b>52,557</b>	<b>—</b>	<b>50,421</b>	<b>—</b>
<b>Rural and suburban/urban employment settings</b>										
Rural settings only	4,015	9.0	3,041	7.2	4,471	9.0	4,577	9.5	4,007	9.0
Both rural and suburban/urban settings <sup>a</sup>	1,101	2.5	604	1.4	636	1.3	625	1.3	537	1.2
Suburban/urban settings only	39,350	88.5	38,470	91.3	44,358	89.7	43,020	89.2	40,037	89.8
<b>Total</b>	<b>44,466</b>	<b>100.0</b>	<b>42,115</b>	<b>100.0</b>	<b>49,465</b>	<b>100.0</b>	<b>48,222</b>	<b>100.0</b>	<b>44,581</b>	<b>100.0</b>
<b>RWHAP-funded employment setting</b>										
Yes	23,211	43.3	18,914	43.7	22,106	41.4	20,101	39.1	20,104	42.2
No	15,192	28.4	12,412	28.7	18,800	35.2	17,091	33.3	15,516	32.5
Don't know/not sure	15,173	28.3	11,990	27.7	12,445	23.3	14,156	27.6	12,054	25.3
<b>Total</b>	<b>53,576</b>	<b>100.0</b>	<b>43,316</b>	<b>100.0</b>	<b>53,351</b>	<b>100.0</b>	<b>51,348</b>	<b>100.0</b>	<b>47,674</b>	<b>100.0</b>
<b>EHE jurisdiction employment setting<sup>b</sup></b>										
Yes	—	—	22,014	51.3	26,676	52.8	25,014	50.7	24,558	52.9
No	—	—	20,928	48.7	23,876	47.2	24,343	49.3	21,906	47.1
<b>Total</b>	<b>—</b>	<b>—</b>	<b>42,942</b>	<b>100.0</b>	<b>50,552</b>	<b>100.0</b>	<b>49,357</b>	<b>100.0</b>	<b>46,464</b>	<b>100.0</b>

Abbreviations: HMO, health maintenance organization; STD, sexually transmitted disease

Notes: Participants reporting for July 2018–June 2019 and July 2019–June 2020 selected all employment settings that apply. Participants reporting for July 2020–June 2021, July 2021–June 2022, and July 2022–June 2023 could report more than one employment setting if they participated in more than one training during the year and their employment setting changed. Employment setting data for all years are not mutually exclusive; numbers may not sum to the number of participants, and percentages may not sum to 100.0%.

<sup>a</sup> Participants who reported more than one employment setting and reported both rural and suburban/urban settings.

<sup>b</sup> The Ending the HIV Epidemic in the U.S. (EHE) initiative aims to reduce new HIV infections to less than 3,000 per year by 2030. Any portion of a participant's employment ZIP code within an EHE jurisdiction is considered within an EHE jurisdiction.