

Benchmark Report

Purpose of this document

Background: Benchmark reports allow Wisconsin Immunization Registry (WIR) users to generate a list and count of clients who have met an immunization benchmark or predefined series of benchmarks. City and county public health departments may include in their reports clients associated with their departments or those living within the same city or county.

The following user roles have access to the **Reports** panel and can run benchmark reports.:

- IR Administrator

Topics Covered:

- Benchmark report overview
- Benchmark report example
- Additional notes for city and county public health departments
- Include/exclude client examples

After reviewing this document, you should be able to:

- Understand the purpose and information included in the benchmark report.
- Run a benchmark report.

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ACIP

The schedules input into WIR are based on recommended schedules put in place by the Advisory Committee on Immunization Practices (ACIP). The ACIP comprises medical and public health experts who develop recommendations on the use of vaccines in the civilian population of the United States. The recommendations stand as public health guidance for safe use of vaccines and related biological products.

Benefits

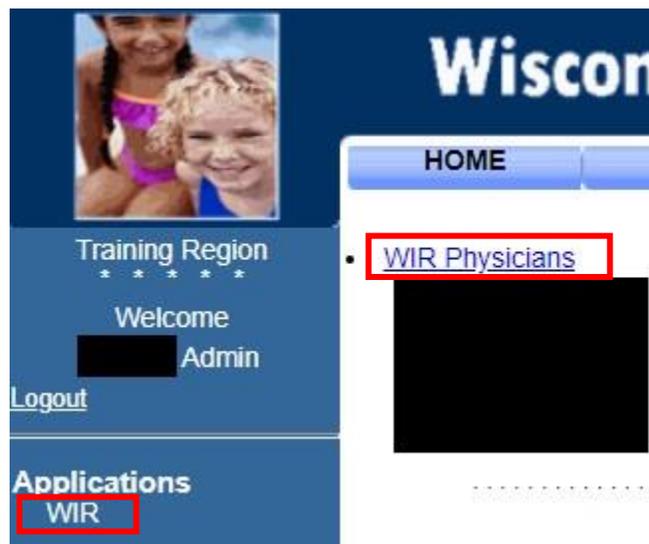
Benchmark reports are standardized population-based reports that can be used as a tool to provide information about vaccine coverage for ACIP recommended vaccines. The benchmark report allows you to compare your jurisdiction over time and compare your jurisdiction's vaccine rates to state and national goals. Benchmark reports produce a roster of clients with each report containing names, dates of birth, address, contact information, and immunizations received/not received depending on the report criteria you have chosen. Benchmark reports can potentially be used to support quality improvement projects.

Age Cohorts

- The most frequently used age cohorts for immunization benchmark reports are:
 - 24 months
 - Adolescent (typically 11-12 years or 13-17 years)
 - Adult (18+ years)

The reports panel

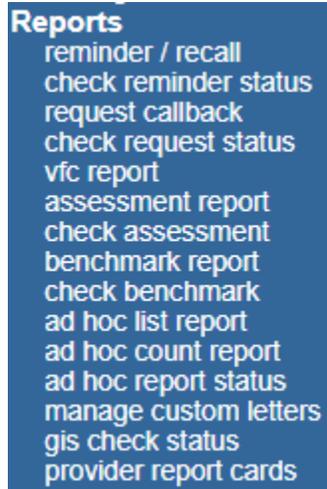
- Select the WIR application and then select your organization name from the list at the top of the screen.



- You should see the screen shown below.



Once there, you should see the **Reports** section on the left menu panel.



Benchmark report

Important

Clients whose information is added or changed on the day the report is run will **not** appear in the results until the following day.

WIR will retain one benchmark report at a time for up to 72 hours.

If a new benchmark report is generated, the new report will replace the existing report.

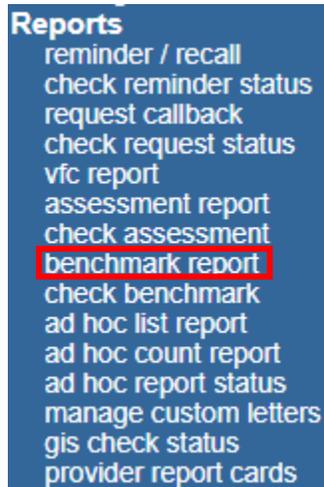
Only valid immunizations are considered.

Clients with a status "Permanently Inactive – Deceased" will be excluded.

Export options: text (.txt), spreadsheet (.xls), or Display as a PDF (.pdf) file.

Age-specific benchmark is considered "met" by WIR if client received at least the correct number of immunizations on or before the exact number of months elapsed since their date of birth.

- 1) To begin, select **Benchmark Report** under the **Reports** section on the left menu panel.



2) On the **Benchmark Report** screen, select the criteria that best fits the report you would like to generate. Below are the default criteria that appear.

Benchmark Report

Select Client Population

Clients Associated with Selected Site ▼

Clients Associated with KCW TEST

Clients who did NOT meet the benchmark

Clients who DID meet the benchmark

All Clients, regardless of whether they met the benchmark or not

Select Age or Birth Date Range

Less than or equal to 72 months old

Birth date range Earliest Birth date: [calendar] Latest Birth date: [calendar]

Age range Youngest Age: Days ▼ Oldest Age: Days ▼

Options for Benchmarking

Standard Assessment

Assess Clients with Sufficient Refusal History/Contraindications as Covered

Adolescent gender to count for the HPV benchmark: All Genders Female/Unknown Male

Select Evaluation Date

[calendar]

Select Benchmark

Age Specific Immunization Benchmarks									
@ Age	DTaP	Hep A	Hep B	Hib	MMR	Pneumo	Polio	Rotavirus	Varicella
3 months	1			1				1	
5 months	2		2	2			2	2	
7 months	3		2	2			2	2	3
9 months	3		2	2			2	2	3
12 months	3		2	2			2	2	3
16 months	4	1	3	3	1	3	3	3	1
19 months	4	1	3	3	1	3	3	3	1
21 months	4	1	3	3	1	3	3	3	1
24 months	4	2	3	3	1	4	3	3	1
72 months	5	2	3	4	2	4	4	3	2

Or select one of these aggregate outcomes:

19 months		431	43133	431331	
36 months		431	43133	431331	4313314

Adolescent/Adult Benchmarks

	Hep B	HPV	Meningo	MMR	Td	Tdap	Varicella
Adolescent	COMPLETE	1	1	2	UTD	1	2
Adolescent Complete	COMPLETE	COMPLETE	2	2	UTD	1	2

	Hep B	Influenza	Pneumo-Poly	Td	Tdap	Zoster
Adult	COMPLETE	UTD	COMPLETE	UTD	1	COMPLETE

COVID Only

All Ages Selected	COMPLETE
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Influenza Only

All Ages Selected	UTD
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Select an Evaluation Date to see the corresponding influenza season start and end dates

- 3) Select the client population to be assessed by selecting the appropriate radio button:
 - a. Clients associated with selected site: choose this option to view immunization data on all clients associated with the site selected from the dropdown list.
 - b. Clients associated with [your organization]: choose this option to view immunization data on all clients with an active association to your organization.
 - c. City and county public health departments have additional options when selecting client populations. See the [Additional Notes for City and County Public Health Departments](#) later in this guide.
- 4) Select the clients you want listed by selecting the appropriate radio button:
 - a. Clients who did **not** meet the benchmark.
 - b. Clients who **did** meet the benchmark.
 - c. All clients, regardless of whether they met the benchmark or not: choose this option to return a list of all clients meeting the other criteria defined on this screen, regardless of whether they met the benchmark or not.

Benchmark Report

Select Client Population

Clients Associated with Selected Site ▼

Clients Associated with KCW TEST

Clients who did NOT meet the benchmark

Clients who DID meet the benchmark

All Clients, regardless of whether they met the benchmark or not

- 5) Select the age, birth date range, or age range of the clients by selecting the appropriate radio button:
 - a. Less than or equal to 72 months old.
 - b. Birth date range: enter the earliest birth date in the first field and the latest birth date in the second field or use the calendar icon beside each field to enter the date.
 - c. Age range: enter the youngest age in the first field, then use the dropdown list to specify days, months, or years. Enter the oldest age in the second field, then use the dropdown list to specify days, months, or years.
 - d. Note: The age range below will assess the two-year-old age cohort.

Select Age or Birth Date Range

Less than or equal to 72 months old

Birth date range Earliest Birth date:  Latest Birth date: 

Age range Youngest Age: Months ▼ Oldest Age: Months ▼

- 6) Select either the **Standard Assessment** or the **Assess Clients with Sufficient Refusal History/Contraindications as Covered** option for the report by choosing the appropriate radio button.
 - a. Selecting the second option will return a benchmark that counts clients with sufficient refusal comments or a contraindication as being up to date.

- b. Most reports should run as a Standard Assessment. It is very rare to see a Benchmark Report assess clients with sufficient refusal history or contradictions as covered.
- 7) Select a specific gender.
- a. Adolescent benchmark defaults to All Genders.
 - b. Assessing for Male or Female/Unknown are also options.
 - c. Option to assess individually by gender is only applicable to HPV vaccinations; all other benchmarks are assessed for all genders.
 - d. The male and female/unknown HPV ACIP schedules were harmonized in December 2016. After this date, there should be no reason to choose either male or female/unknown as they are forecasted the same now.

Options for Benchmarking

Standard Assessment

Assess Clients with Sufficient Refusal History/Contraindications as Covered

Adolescent gender to count for the HPV benchmark: All Genders Female/Unknown Male

- 8) Select the report evaluation date by entering the date in the field provided or by using the calendar icon to enter the date. No immunizations administered after the evaluation date will be included in the report.

Select Evaluation Date

01/25/2024 

- a. The 'deliverable' benchmark report for 24-month-old clients runs January 1-December 31 of any given year.
 - b. The 'mid-year' benchmark report for 24-month-old clients runs January 1-June 30 of any given year.
- 9) Select the benchmark(s) to be used on the report.
- a. To select one or more single vaccine benchmarks within a single row, select the box where the vaccine and the number of months intersect.
 - i. You may select more than one benchmark within a row.
 - ii. You do not need to hold down the shift button to select multiple benchmarks.
 - iii. The selected benchmarks will have a black background with white text.
 - b. To select all benchmarks in a row, select the first box in the row that indicates "@ Age" expressed in months.
 - c. The aggregate outcome groups refer to the number of doses within a vaccine group.
 - i. The 431 aggregate outcome refers to diphtheria, tetanus and pertussis (DTaP; 4), Polio (3), and measles, mumps and rubella (MMR; 1).
 - ii. The 43133 aggregate outcome refers to DTaP (4), Polio (3), MMR (1), Haemophilus influenzae type B (Hib; 3), and hepatitis B (Hep B; 3).
 - iii. The 431331 aggregate outcome adds Varicella (1).
 - iv. The 4313314 aggregate outcome adds Pneumococcal (4).

- v. To select benchmarks in a predefined series, select one of the 431, 43133, or 431331 combinations at the bottom of the table.
- d. Some adolescent/adult benchmarks use **UTD** or **COMPLETE** instead of a specific number of immunizations.
 - i. UTD: client is up to date for this vaccine group.
 - ii. COMPLETE: client has completed the series.
- e. To clear your selection and select new benchmarks, select the **Clear Selection** button at the bottom of **Select Benchmark** section.
- f. Select the **Generate** button at the bottom of the screen to generate the report.

Select Evaluation Date 

Select Benchmark

Age Specific Immunization Benchmarks									
@ Age	DTaP	Hep A	Hep B	Hib	MMR	Pneumo	Polio	Rotavirus	Varicella
3 months	1		1	1		1	1	1	
5 months	2		2	2		2	2	2	
7 months	3		2	2		2	2	3	
9 months	3		2	2		2	2	3	
12 months	3		2	2		2	2	3	
16 months	4	1	3	3	1	3	3	3	1
19 months	4	1	3	3	1	3	3	3	1
21 months	4	1	3	3	1	3	3	3	1
24 months	4	2	3	3	1	4	3	3	1
72 months	5	2	3	4	2	4	4	3	2

Or select one of these aggregate outcomes:

19 months		431	43133	431331		
36 months		431	43133	431331	4313314	

Adolescent/Adult Benchmarks							
	Hep B	HPV	Meningo	MMR	Td	Tdap	Varicella
Adolescent	COMPLETE	1	1	2	UTD	1	2
Adolescent Complete	COMPLETE	COMPLETE	2	2	UTD	1	2
	Hep B	Influenza		Pneumo-Poly	Td	Tdap	Zoster
Adult	COMPLETE	UTD		COMPLETE	UTD	1	COMPLETE

COVID Only	
All Ages Selected	COMPLETE

Influenza Only	
All Ages Selected	UTD

Selected Evaluation Date 01/25/2024; Influenza Season Dates From 7/1/2023 To 6/30/2024

- 10) The **Benchmark Report Status** screen will display.
- a. Select the **Refresh** button periodically to check on the progress of the report. You may work in other areas of WIR or log out of WIR while waiting for the benchmark report to complete.
 - b. You may go back to check the status of the report by selecting **Check Benchmark** under the **Reports** section.

Benchmark Report Status				
Report Type	Started	Completed	Status	Row Count
BENCHMARK	01/25/2024 08:17 AM	01/25/2024 08:17 AM	DONE	28

- c. When the report is ready, select **BENCHMARK** which is a blue underlined link.
- d. The report results will be displayed, as well as options to export the report as a text (.txt), spreadsheet (.xls), or Display as a PDF (.pdf) file.

Interpreting the Benchmark Report

- 1) Once the benchmark link is selected, the top of the screen looks as follows. Across the top are the links to export the file either as text, a spreadsheet, or Display as a PDF.
- 2) The top of the filter conditions used for this report box shows the specific filters used for this report.
- 3) Beneath the filters are the aggregate results of the benchmark report.
 - a. It shows the total clients assessed, and then the number of clients who met/did not meet benchmark criteria.
 - b. Late up-to-date (UTD) indicates has received an ACIP recommended vaccine, but did not receive it by the recommended age.
 - c. It also lists each individual vaccine and if it met its individual benchmark.

Benchmark Report Results

What would you like to do with this report?

[Export as Text](#) [Export as a Spreadsheet](#) [Display as a PDF](#)

Report 136456

Wisconsin Immunization Registry
 Report generated on 01/26/2024
 Report generated by Kristin Weber
 KCW TEST

Filter conditions used for this report:

Clients Associated with Provider: KCW TEST
 Clients who did NOT meet the selected benchmark(s)
 Just consider immunizations as meeting the benchmark
 Age between 24 Months and 35 Months
 Evaluation date: 01/26/2024
 Benchmark age @ 24 months

Total clients: 28. 0 clients (0%) met all benchmark criteria, 28 clients did not
 Late up-to-date: 0 clients (0%) met all benchmark criteria as of report generated date, 28 clients did not
 Selected benchmarks: DTaP (4%), Hep A (2%), HepB (3%), Hib (3%), MMR (1%), Pneumo (4%), Polio (3%), Rotavirus (3%), Varicella (1%)
 Met Benchmark: DTaP (4%), Hep A (11%), HepB (4%), Hib (4%), MMR (43%), Pneumo (4%), Polio (4%), Rotavirus (0%), Varicella (14%)
 Late UTD: DTaP (4%), Hep A (11%), HepB (4%), Hib (4%), MMR (43%), Pneumo (4%), Polio (4%), Rotavirus (0%), Varicella (14%)

Report 136456; Results 1 - 28 of 28

- d. In the example above, the 24-month benchmark for DTaP is (4). This means that the client should have received the fourth dose of DTaP prior to 24 months. In this clinic the benchmark is 4%.
- e. On the other hand, the 24-benchmark for MMR is (1), and 43% of clients have met this benchmark by 24 months.

- 4) Beneath the filter conditions used box is the list of total clients. The list includes patient demographics including first name, last name, DOB, primary phone number, and address.
- 5) Next there is a column for each vaccine assessed in the report. The number beneath the vaccine name indicates the number of doses needed to complete the benchmark.
 - a. N: Client did NOT meet the benchmark
 - b. N 1: Client did NOT meet the benchmark, but has received 1 vaccine towards series (may also show N 2, N 3 depending upon client history)
 - c. N C: Client is late up to date (did not meet benchmark by required age, but series is now complete)
 - d. Y: Client MET benchmark
- 6) Select the blue link of a client's last name to drill down to the client record.

No	First Name	Last Name	Birth Date	Primary Phone Number	Street City	State Zipcode	DTaP (4)	Hep A (2)	HepB (3)	Hib (3)	MMR (1)	Pneumo (4)	Polio (3)	Rotavirus (3)	Varicella (1)
1	CLIENT A	FLUTEST	12/01/2021		MADISON	WI	N	N	N	N	N	N	N	N	N
2	CLIENT B	FLUTEST	10/01/2021		MADISON	WI	N	N	N	N	N	N	N	N	N
3	TESTB	HEPA	08/03/2021		MILWAUKEE	WI	N	Y	N	N	N	N	N	N	N
4	TESTG	HEPA	10/08/2021		MILWAUKEE	WI	N	N	1	N	N	N	N	N	N
5	TESTI	HEPA	10/03/2021		MADISON	WI	N	Y	N	N	N	N	N	N	N
6	TESTJ	HEPA	08/03/2021		MADISON	WI	N	N	1	N	N	N	N	N	N
7	TESTK	HEPA	08/03/2021		MADISON	WI	N	Y	N	N	N	N	N	N	N
8	TESTQ	HEPA	10/03/2021		MILWAUKEE	WI	N	N	1	N	N	N	N	N	N
9	TESTTT	HEPB	10/16/2021		MILWAUKEE	WI	Y	N	Y	N	N	N	Y	N	N
10	TEST	HIB	07/28/2021		MILWAUKEE	WI	N	1	N	N	1	Y	N	N	1
11	CLIENT M	INFBVLNT	09/16/2021		MADISON	WI	N	N	N	N	N	N	N	N	N
12	CLIENT B	MMRTEST	10/23/2021		MADISON	WI	N	N	N	N	Y	N	N	N	N
13	CLIENT C	MMRTEST	10/19/2021		MADSON	WI	N	N	N	N	Y	N	N	N	N
14	CLIENT F	MMRTEST	10/19/2021		MADISON	WI	N	N	N	N	Y	N	N	N	Y
15	CLIENT G	MMRTEST	09/19/2021		MADISON	WI	N	N	N	N	Y	N	N	N	Y
16	CLIENT H	MMRTEST	08/25/2021		MADISON	WI	N	N	N	N	Y	N	N	N	Y

Note: Client turned 24 months 9/19/23. Both MMR and Varicella series completed prior to 24 months. Therefore, benchmark was met (Y). No other vaccines administered, so remaining benchmarks not met (N).

Client Information VFC Eligible: No

Client Name (First - MI - Last)	DOB	Gender	Mother's Maiden	Tracking Schedule	Chart #
CLIENT G MMRTEST	09/19/2021	F	HI	Priorix	
Address		MADISON, WI			
Comments					

History Close

Vaccine Group	Date Administered	Series	Trade Name (Vaccine)	Dose	Owned?	Reaction	Hist?	Edit
MMR	09/19/2022	1 of 2	Priorix®				Yes	
	10/19/2022	2 of 2	Priorix®				Yes	
Varicella	09/19/2022	1 of 2	Varivax®				Yes	
	10/19/2022	2 of 2	Varivax®				Yes	

Current Age: 2 years, 4 months, 7 days

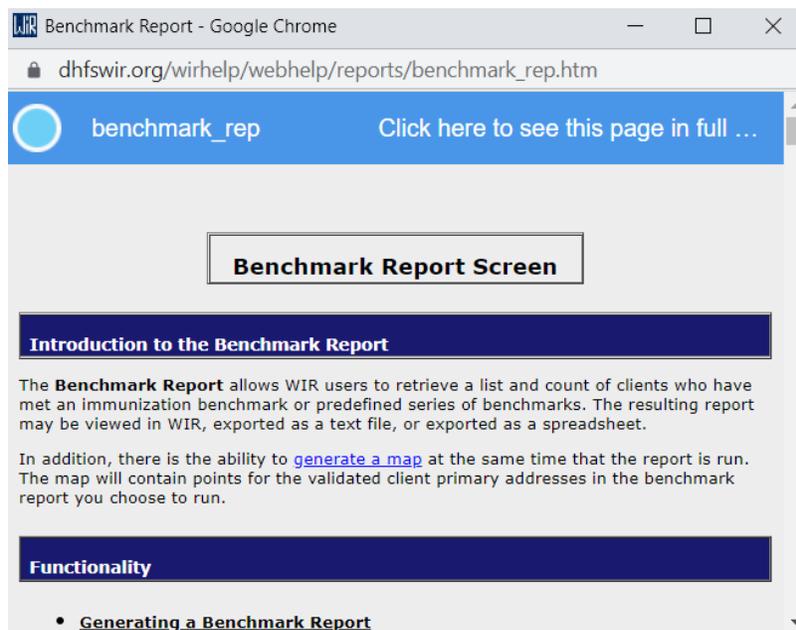
Detailed notes on generating benchmark reports

To view more information about the specific fields in the Benchmark report, go to the **Benchmark Report** screen and select the lightbulb icon on the top menu to open the WIR Help Screen for the Benchmark report. The help screen will open in a separate window.



The URL for this WIR Help Screen is:

https://www.dhfswir.org/wirhelp/webhelp/reports/benchmark_rep.htm and should be accessible for users logged into WIR.



Additional notes for city and county public health departments

City and county public health departments have additional options within the **Select Client Population** section in their benchmark reports.

Benchmark Report

Select Client Population

Clients Associated with Selected Site [Dropdown]

Clients Associated with Outagamie County Public Health

Clients Residing in OUTAGAMIE County

Clients Associated with Outagamie County Public Health AND Clients Residing in OUTAGAMIE County

Include or Exclude Clients residing in the following (county is a match or does not exist):

N/A
 Cities
 Census Tracts
 Zip Codes

Include
 Exclude

Add >

< Remove

Clients who did NOT meet the benchmark

Clients who DID meet the benchmark

All Clients, regardless of whether they met the benchmark or not

- The population section is used to determine the initial client base to use for the benchmark report. These additional options are **only** available for city or county health departments:
 - Clients Associated with Selected Site – Choose site from dropdown.
 - To be associated with a site, a client must have received a vaccination from the site at some point in the past, not just reside in the jurisdiction.
 - Clients Associated with [ORG]
 - Clients residing in [City or County Name].
 - Clients associated with [your organization] AND clients residing in [City or County Name].
 - In this example, a client would have received vaccine from this organization in the past and live in the jurisdiction.
 - Include *or* exclude clients from the report by cities, census tracts, or ZIP codes. This function can be used on its own by selecting the last option, or in conjunction with the “Associated With” or “Residing in” options. Select **one** of the following:
 - **N/A** allows you to bypass the include/exclude function.
 - **Cities** allows you to include or exclude one or more cities from the list provided.
 - If this option is chosen, highlight a city to include or exclude, then select the **Add** button. Repeat for each city to include or exclude.

- **Census Tracts** allows you to include or exclude one or more census tracts from the list provided.
 - If this option is chosen, highlight a census tract to include or exclude, then select the **Add** button. Repeat for each census tract to include or exclude.
- **ZIP codes** will allow you to include or exclude one or more ZIP codes from the list provided.
 - If this option is chosen, highlight a ZIP code to include or exclude, then select the **Add** button. Repeat for each ZIP code to include or exclude.
- Use the **Include/Exclude** radio buttons to toggle between including or excluding the selected cities, census tracts, or ZIP codes. When you choose to exclude selected cities, census tracts, or ZIP codes, the selections in the box on the right will appear in red text.

Include or Exclude Clients residing in the following (county is a match or does not exist):

N/A Cities Census Tracts Zip Codes

Include Exclude

APPLETON BLACK CREEK (TOWN) BLACK CREEK (VILLAGE)	Add > < Remove	BEAR CREEK DEER CREEK
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Include/exclude client examples

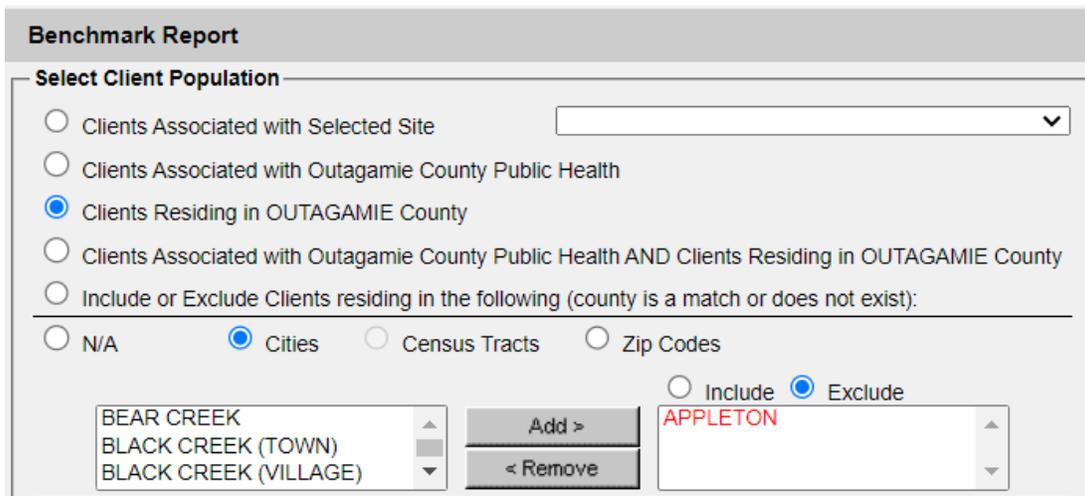
The county on your organization's **Edit Organization** screen will be used to match with the county that displays on the client's **Manage Client** screen. The city, census tract, and ZIP code are matched to the client's primary address.

Example 1

You may want to allow a county health department with an embedded city health department to exclude the city when reporting on clients for which the county is responsible.

In this example, the city of Appleton has their own health department specifically for those who reside in Appleton, separate from Outagamie County's health department. Outagamie County's jurisdiction includes everyone except those who reside in the city of Appleton. Therefore, when running benchmark reports, Outagamie County would need to *exclude* the city of Appleton.

- 1) Select **Clients Residing in [County Name]**.
- 2) Select **Cities** and **Exclude** in the Include/Exclude section.
- 3) Choose a city and select the **Add** button.



Benchmark Report

Select Client Population

Clients Associated with Selected Site ▼

Clients Associated with Outagamie County Public Health

Clients Residing in OUTAGAMIE County

Clients Associated with Outagamie County Public Health AND Clients Residing in OUTAGAMIE County

Include or Exclude Clients residing in the following (county is a match or does not exist):

N/A Cities Census Tracts Zip Codes

Include Exclude

BEAR CREEK Add >

BLACK CREEK (TOWN) < Remove

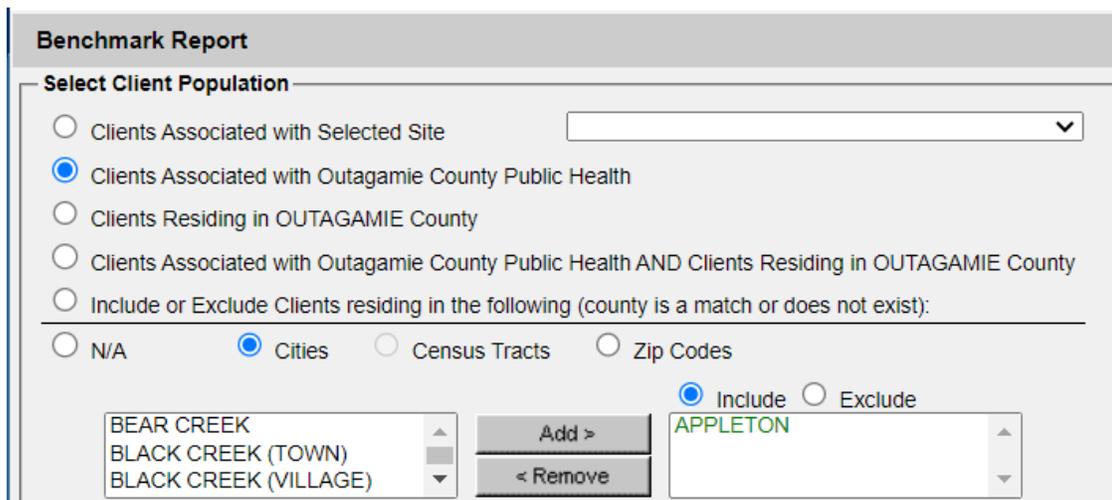
BLACK CREEK (VILLAGE)

APPLETON

Example 2

A county health department with an embedded city health department may wish to report on all the clients it has served that reside in the city health department's area. The resulting data would provide the county organization with the clients it has served that belong to the city organization.

- 1) Select **Clients Associated with [Your Organization]**.
- 2) Then select **Cities** and **Include** in the Include/Exclude section.
- 3) Choose the city and select the **Add** button.



Benchmark Report

Select Client Population

Clients Associated with Selected Site

Clients Associated with Outagamie County Public Health

Clients Residing in OUTAGAMIE County

Clients Associated with Outagamie County Public Health AND Clients Residing in OUTAGAMIE County

Include or Exclude Clients residing in the following (county is a match or does not exist):

N/A Cities Census Tracts Zip Codes

Include Exclude

BEAR CREEK Add >

BLACK CREEK (TOWN) < Remove

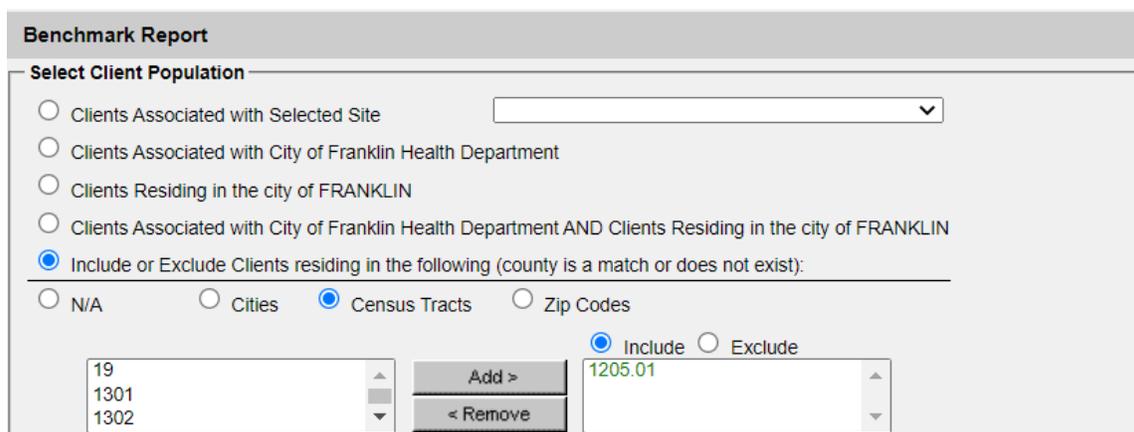
BLACK CREEK (VILLAGE)

APPLETON

Example 3

A city organization may wish to focus on a single census tract.

- 1) Select **Include or Exclude Clients Residing in the Following**.
- 2) Then select **Census Tracts** and **Include** in the Include/Exclude section.
- 3) Choose a census tract and select the **Add** button.



Benchmark Report

Select Client Population

Clients Associated with Selected Site

Clients Associated with City of Franklin Health Department

Clients Residing in the city of FRANKLIN

Clients Associated with City of Franklin Health Department AND Clients Residing in the city of FRANKLIN

Include or Exclude Clients residing in the following (county is a match or does not exist):

N/A Cities Census Tracts Zip Codes

Include Exclude

19 Add >

1301 < Remove

1302

1205.01

Example 4

A county organization may wish to report on all but one ZIP code.

- 1) Select **Include or Exclude clients residing in the following.**
- 2) Select **ZIP Codes** and **Exclude** in the Include/Exclude section.
- 3) Choose the one ZIP code to be excluded, then select the **Add** button.

Benchmark Report

Select Client Population

Clients Associated with Selected Site ▼

Clients Associated with Outagamie County Public Health

Clients Residing in OUTAGAMIE County

Clients Associated with Outagamie County Public Health AND Clients Residing in OUTAGAMIE County

Include or Exclude Clients residing in the following (county is a match or does not exist):

N/A Cities Census Tracts Zip Codes

Include Exclude

<input type="text" value="54107"/> <input type="text" value="54113"/> <input type="text" value="54115"/>	<input type="button" value="Add >"/> <input type="button" value="< Remove"/>	<input type="text" value="54106"/>
--	---	------------------------------------