

The purpose of this document is to explain and show how the burden estimates in Table A12A were calculated.

The document includes four tabs: **Defintions, Summary, Diseases, and Data Elements.**

Definitions: The Definitions tab includes defintions for concepts used throughout the document including modes of notification, conditions, respondent type, and form description.

Summary: The summary tab is divided into two sections. The first section includes the mode and frequency of case notifications by type of condition for each respondent type and the second section section includes the average burden per response by mode and frequency of case notification for each respondent type.

Diseases: The Diseases tab is divided into two sections. The first section includes the burden per response for the one-time addition of each disease (core data elements only) and the second section includes the burden per response for the one-time addition of all 7 diseases. The burden in hours is noted in each row for the addition of each of the 7 diseases for each respondent (except for states where the burden is indicated for all 50 states). The average burden in hours for the one-time addition of all diseases is noted for each respondent type in column I. The average burden in hours for the annualized one-time addition of all diseases is noted for each respondent type in column J (average burden in hours divided by 3).

Total Diseases: The Total Diseases Tab includes two tables. The first table shows the one time burden to add 7 diseases to NNDSS and the second table shows the annualized one time burden (one time burden divided by three) to add 7 diseases to NNDSS.

Data Elements: The Data Elements tab is divided into two sections. The first section includes the burden per response for the one-time addition of each data element by disease and the second section includes the burden per response for the one-time addition of all 451 data elements. The burden in hours is noted in each row for the addition of each of the 451 data elements by disease for each respondent (except for states where the burden is indicated for all 50 states). The average burden in hours for the one-time addition of all 451 data elements is noted for each respondent type in column X. The average burden in hours for the annualized one-time addition of all 451 data elements is noted for each respondent type in column Y (average burden in hours divided by 3).

Total Data Elements: The Total Data Elements Tab includes two tables. The first table shows the one time burden to add 451 data elements to NNDSS and the second table shows the annualized one time burden (one time burden divided by three) to add 451 data elements to NNDSS. The annualized burden of all states combined to add the 451 data elements is 950 hours. Of the 451 data elements, 158 (35%) are from new nationally notifiable conditions and new conditions under standardized surveillance (8 data elements for CP-CRE, 4 data elements for CO poisoning, 95 data elements for TB Disease, and 51 data elements for TB infection). Therefore, 35% of the 950 burden hours (333 hours) are from new nationally notifiable conditions and new conditions under standardized surveillance and 65% of these burden hours (617 hours) are from conditions currently submitted through NNDSS.

Total Diseases + Data Elements: The Total Diseases + Data Elements Tab includes two tables. The first table shows the one-time burden to add 7 diseases and 451 data elements to NNDSS and the second table shows the annualized one-time burden (one time burden divided by three) to add 7 diseases and 451 data elements to NNDSS. The total annualized one-time burden (in hours) for each respondent type corresponds to the each line on Table A12A for the one-time addition of diseases and data elements.

| Mode of Notification | Definition |
|------------------------------------|---|
| Automated | |
| HL7 | Electronic case notification messages that use Health Level 7 (HL7) messaging standards |
| NETSS | Electronic case notification messages that use the National Electronic Telecommunications System for Surveillance (NETSS) flat file format. These messages are not based on industry standards like HL7 messages. |
| Non Automated | |
| Aggregate data upload through SAMS | Aggregate case counts are manually uploaded through Secure Access Management Services (SAMS) which provides users who are outside the CDC firewall with secure access to external-facing CDC applications. |
| Aggregate data email report | Aggregate case counts are manually emailed to CDC as a PDF report. |
| XML upload to ArboNET | Case notification data are manually uploaded online using eXtensible Markup Language (XML) into ArboNET, a national electronic surveillance system for arboviral diseases in the US. |
| Keyed into Arbonet | Case notification data are manually keyed into ArboNET, a national electronic surveillance system for arboviral diseases in the US, using a secure website. |
| Conditions | |
| STD | Sexually Transmitted Diseases |
| TB | Tuberculosis |
| Arboviral | Arboviral Diseases |
| Respondent Type | |
| States | 50 states |
| Territories | American Samoa, Northern Mariana Islands, Guam, U.S. Virgin Islands, and Puerto Rico |
| Freely Associated States | Micronesia, Marshall Islands, Palau |
| Cities | NYC and DC |
| Form Description | |
| Weekly Automated | Includes the burden incurred by the respondent for sending case notification data to CDC on a weekly basis. Includes automated transmission through National Electronic Telecommunications System for Surveillance (NETSS) messages or Health Level 7 (HL7) electronic messages |

| Mode of Notification | Definition |
|---|---|
| Weekly Non-automated | Includes the burden incurred by the respondent for sending case counts to CDC on a weekly basis. Includes electronic non-automated transmission (aggregate data uploads, XML uploads, data entry) and non-electronic, non-automated transmission (aggregate email reports) |
| Weekly NMI Implementation | Includes the burden incurred by the respondents to implement the guidelines set forth in message mapping guides (MMGs) to standardize the data content needed for automated HL7 electronic case notification messages. |
| Annual | Includes the burden incurred by the respondent to reconcile the annual case counts and send the reconciled case notification data (automated or non-automated) once per year to CDC. |
| One time Addition of Diseases and Data Elements | Applicable only to automated and electronic, non-automated case notifications. This burden is not applicable to non-electronic, non-automated case notifications. Includes the one-time burden incurred by the respondents to add the data elements to their surveillance system and modify their case notification message. In general, a one-time average burden of 30 minutes is incurred for respondents to add up to 10 additional data elements to their surveillance system and a one-time average burden of 30 minutes is incurred for respondents to modify their electronic case notification message to accommodate up to 10 additional data elements. A one-time average burden of 15 minutes is incurred for respondents to incorporate data for one new disease/condition (with core only and no disease-specific data elements) into their electronic case notification message. |

| | Mode and Frequency of Case Notifications by Type of Condition for Each Respondent Type | | | | | | |
|--------------------------|--|--|---------------------------------------|-----------------------------|---|-----------------------------|---|
| | STD | STD | TB | TB | Arboviral | Arboviral | Other Conditions |
| | Mode of Notification: (1) Automated (HL7 or NETSS); (2) Non-automated (aggregate data upload through SAMS) | Frequency: Weekly, Quarterly, Annually | Mode of Notification: Automated (HL7) | Frequency; Weekly, Annually | Mode of Notification: (1) Automated (HL7); (2) Non-automated (XML upload to ArboNET, or keyed into ArboNET) | Frequency: Weekly, Annually | Mode of Notification: (1) Automated (HL7 or NETSS); (2) Non-automated aggregate data email report |
| States (50) | Automated (HL7 or NETSS) | Weekly, Annually | Automated (HL7) | Weekly, Annually | 15 Automated HL7 35 Non-automated (8 XML upload to ArboNET, 27 keyed into ArboNET) | Weekly, Annually | Automated HL7 |
| Territories (5) | Non-automated (aggregate data upload through SAMS) | Weekly, Quarterly, Annually | Automated (HL7) | Weekly, Annually | Non-automated (XML upload to ArboNET, keyed into ArboNET) | Weekly, Annually | Non-automated aggregate data email report |
| American Samoa | Non automated (aggregate data upload through SAMS) | Quarterly, Annually | Automated (HL7) | Weekly, Annually | keyed into ArboNET | Weekly, Annually | N/A |
| Northern Mariana Islands | Non automated (aggregate data upload through SAMS) | Quarterly, Annually | Automated (HL7) | Weekly, Annually | N/A | N/A | N/A |

| | Mode and Frequency of Case Notifications by Type of Condition for Each Respondent Type | | | | | | |
|-------------------------------------|--|---------------------|-----------------|-------------------------|--|-------------------------|---|
| | STD | STD | TB | TB | Arboviral | Arboviral | Other Conditions |
| Guam | Non automated (aggregate data upload through SAMS) | Quarterly, Annually | Automated (HL7) | Weekly, Annually | keyed into ArboNET | Weekly, Annually | Non automated aggregate data email report |
| U.S. Virgin Islands | Non automated (aggregate data upload through SAMS) | Quarterly, Annually | Automated (HL7) | Weekly, Annually | XML upload to ArboNET | Weekly, Annually | N/A |
| Puerto Rico | automated (NETSS) | Weekly, Annually | Automated (HL7) | Weekly, Annually | XML upload to ArboNET | Weekly, Annually | automated (NETSS) |
| Freely Associated States (3) | | | | Weekly, Annually | Non-automated (XML upload to ArboNET, keyed into ArboNET) | Weekly, Annually | N/A |
| Micronesia | Non automated (aggregate data upload through SAMS) | quarterly, annually | Automated (HL7) | Weekly, Annually | XML upload to ArboNET | Weekly, Annually | N/A |
| Marshall Islands | Non automated (aggregate data upload through SAMS) | quarterly, annually | Automated (HL7) | Weekly, Annually | keyed into ArboNET | Weekly, Annually | N/A |
| Palau | Non automated (aggregate data upload through SAMS) | quarterly, annually | Automated (HL7) | Weekly, Annually | keyed into ArboNET | Weekly, Annually | N/A |
| Cities* (2) | | | | Weekly, Annually | keyed into ArboNET | Weekly, Annually | Automated (HL7) |
| NYC | Automated HL7 | Weekly, Annually | Automated (HL7) | Weekly, Annually | keyed into ArboNET | Weekly, Annually | Automated (HL7) |

| | Mode and Frequency of Case Notifications by Type of Condition | | | Condition for Each Respondent Type | | | |
|----|---|------------------|-----------------|------------------------------------|--------------------|------------------|------------------|
| | STD | STD | TB | TB | Arboviral | Arboviral | Other Conditions |
| DC | Automated HL7 | Weekly, Annually | Automated (HL7) | Weekly, Annually | keyed into ArboNET | Weekly, Annually | Automated (HL7) |
| | | | | | | | |

| | Other Conditions | Average Burden Per Response (in hours): Weekly (Automated) | Average Burden Per Response (in hours): Weekly, Quarterly (Non-automated) | Average Burden Per Response (in hours): Weekly (NMI Implementation) | Average Burden Per Response (in hours): Annual | Average Burden Per Response (in hours): One-time Addition of Diseases and Data Elements |
|--------------------------|------------------|--|---|---|--|---|
| States (50) | Weekly, Annually | 20/60 | 2 | 4 | 75 | 20 |
| Territories (5) | Weekly, Annually | 20/60 | 20/60 | 4 | 5 | 9 |
| American Samoa | N/A | | | | | |
| Northern Mariana Islands | N/A | | | | | |

| | | Average Burden Per Response by Mode and Frequency of Case Notification for each Respondent Type | | | | |
|------------------------------|-------------------------|---|-------|-----|---|----|
| | Other Conditions | | | | | |
| Guam | Weekly, Annually | | | | | |
| U.S. Virgin Islands | N/A | | | | | |
| Puerto Rico | Weekly, Annually | | | | | |
| Freely Associated States (3) | N/A | 20/60 | 20/60 | N/A | 5 | 6 |
| Micronesia | N/A | | | | | |
| Marshall Islands | N/A | | | | | |
| Palau | N/A | | | | | |
| Cities* (2) | Weekly, Annually | 20/60 | | 2 | 4 | 75 |
| NYC | Weekly, Annually | | | | | 20 |

| | | Average Burden Per Response by Mode and Frequency of Case Notification for each Respondent Type | | | | |
|----|-------------------------|---|--|--|--|--|
| | Other Conditions | | | | | |
| DC | Weekly, Annually | | | | | |
| | | | | | | |

| | Burden Per Response for the One-time Addition of Each Disease | | | | | |
|-------------------------------------|---|--------|--------------|------------|--------------|--------------|
| | C. auris | CP-CRE | CO Poisoning | TB Disease | TB Infection | S. Paratyphi |
| States (50) | 15/60 | 15/60 | 15/60 | 15/60 | 15/60 | 15/60 |
| Territories (5) | | | | | | |
| American Samoa | 0 | 0 | 0 | 15/60 | 15/60 | 0 |
| Northern Mariana Islands | 0 | 0 | 0 | 15/60 | 15/60 | 0 |
| Guam | 0 | 0 | 0 | 15/60 | 15/60 | 0 |
| U.S. Virgin Islands | 0 | 0 | 0 | 15/60 | 15/60 | 0 |
| Puerto Rico | 15/60 | 15/60 | 15/60 | 15/60 | 15/60 | 15/60 |
| Freely Associated States (3) | | | | | | |
| Micronesia | 0 | 0 | 0 | 15/60 | 15/60 | 0 |
| Marshall Islands | 0 | 0 | 0 | 15/60 | 15/60 | 0 |
| Palau | 0 | 0 | 0 | 15/60 | 15/60 | 0 |
| Cities* (2) | | | | | | |
| NYC | 15/60 | 15/60 | 15/60 | 15/60 | 15/60 | 15/60 |
| DC | 15/60 | 15/60 | 15/60 | 15/60 | 15/60 | 15/60 |

| | | Burden Per Response for the One-time Addition of Diseases (7) | |
|-------------------------------------|--------------------------|---|--|
| | RSV-Associated Mortality | Average Burden Per Response (in hours): One-time Addition of All Diseases | Average Burden Per Response (in hours): Annualized One-time Addition of All Diseases |
| States (50) | 15/60 | 105/60 | 35/60 |
| Territories (5) | | 45/60 | 15/60 |
| American Samoa | 0 | 30/60 | |
| Northern Mariana Islands | 0 | 30/60 | |
| Guam | 0 | 30/60 | |
| U.S. Virgin Islands | 0 | 30/60 | |
| Puerto Rico | 15/60 | 105/60 | |
| Freely Associated States (3) | | 30/60 | 10/60 |
| Micronesia | 0 | 30/60 | |
| Marshall Islands | 0 | 30/60 | |
| Palau | 0 | 30/60 | |
| Cities* (2) | | 105/60 | 35/60 |
| NYC | 15/60 | 105/60 | |
| DC | 15/60 | 105/60 | |

One Time Burden to Add 7 Diseases to NNDSS (Core data elements only)

| Respondents | Number of Respondents | Number of Responses per Respondent | Average Burden Per Response (in hours): One-time Addition of All Diseases | |
|--------------------------|-----------------------|------------------------------------|---|--|
| States | 50 | 1 | 105/60 | |
| Territories | 5 | 1 | 45/60 | |
| Freely Associated States | 3 | 1 | 30/60 | |
| Cities | 2 | 1 | 105/60 | |
| | | | | |

Annualized One Time Burden to Add 7 Diseases to NNDSS (Core data elements only)

| Respondents | Number of Respondents | Number of Responses per Respondent | Average Burden Per Response (in hours): Annualized One-time Addition of All Diseases | Total Annualized One-Time Burden (in hours) |
|--------------------------|-----------------------|------------------------------------|--|---|
| States | 50 | 1 | 35/60 | 29 |
| Territories | 5 | 1 | 15/60 | 2 |
| Freely Associated States | 3 | 1 | 10/60 | 1 |
| Cities | 2 | 1 | 35/60 | 2 |
| Total | | | | 34 |

| | Burden Per Response for the One Time Addition of Data Elements (451) | | | | | |
|-------------------------------------|--|---|--|--|-----------------------|-------------------------------|
| | CP-CRE: 8 Data Elements (New Nationally Notifiable Condition) | CO Poisoning: 4 Data Elements (New Nationally Notifiable Condition) | TB Disease: 95 Data Elements (New Nationally Notifiable Condition) | TB Infection: 51 Data Elements (New Condition Under Standardized Surveillance) | STEC: 2 Data Elements | Salmonellosis: 1 Data Element |
| States (50) | 1 | 1 | 10 | 5 | 1 | 1 |
| Territories (5) | | | | | | |
| American Samoa | 0 | 0 | 10 | 5 | 0 | 0 |
| Northern Mariana Islands | 0 | 0 | 10 | 5 | 0 | 0 |
| Guam | 0 | 0 | 10 | 5 | 0 | 0 |
| U.S. Virgin Islands | 0 | 0 | 10 | 5 | 0 | 0 |
| Puerto Rico | 1 | 1 | 10 | 5 | 1 | 1 |
| Freely Associated States (3) | | | | | | |
| Micronesia | 0 | 0 | 10 | 5 | 0 | 0 |
| Marshall Islands | 0 | 0 | 10 | 5 | 0 | 0 |
| Palau | 0 | 0 | 10 | 5 | 0 | 0 |
| Cities* (2) | | | | | | |
| NYC | 1 | 1 | 10 | 5 | 1 | 1 |
| DC | 1 | 1 | 10 | 5 | 1 | 1 |
| | | | | | | |

| | Shigellosis: 4 Data Elements | Campylobacteriosis: 2 Data Elements | Cryptosporidiosis: 1 Data Element | Cyclosporiasis: 3 Data Elements | Cholera: 1 Data Element | Vibriosis: 1 Data Element |
|-------------------------------------|-------------------------------------|--|--|--|--------------------------------|----------------------------------|
| States (50) | 1 | 1 | 1 | 1 | 1 | 1 |
| Territories (5) | | | | | | |
| American Samoa | 0 | 0 | 0 | 0 | 0 | 0 |
| Northern Mariana Islands | 0 | 0 | 0 | 0 | 0 | 0 |
| Guam | 0 | 0 | 0 | 0 | 0 | 0 |
| U.S. Virgin Islands | 0 | 0 | 0 | 0 | 0 | 0 |
| Puerto Rico | 1 | 1 | 1 | 1 | 1 | 1 |
| Freely Associated States (3) | | | | | | |
| Micronesia | 0 | 0 | 0 | 0 | 0 | 0 |
| Marshall Islands | 0 | 0 | 0 | 0 | 0 | 0 |
| Palau | 0 | 0 | 0 | 0 | 0 | 0 |
| Cities* (2) | | | | | | |
| NYC | 1 | 1 | 1 | 1 | 1 | 1 |
| DC | 1 | 1 | 1 | 1 | 1 | 1 |
| | | | | | | |

| | S. Typhi Infection: 4 Data Elements | S. Paratyphi Infection: 60 Data Elements | Lyme disease: 7 Data Elements | Invasive Haemophilus influenzae Disease: 33 Data Elements | Meningococcal Disease: 37 Data Elements | Invasive Pneumococcal Disease: 32 Data Elements |
|-------------------------------------|--|---|--|--|--|--|
| States (50) | 1 | 6 | 1 | 4 | 4 | 4 |
| Territories (5) | | 0 | | | | |
| American Samoa | 0 | 0 | 0 | 0 | 0 | 0 |
| Northern Mariana Islands | 0 | 0 | 0 | 0 | 0 | 0 |
| Guam | 0 | 0 | 0 | 0 | 0 | 0 |
| U.S. Virgin Islands | 0 | 0 | 0 | 0 | 0 | 0 |
| Puerto Rico | 1 | 6 | 1 | 4 | 4 | 4 |
| Freely Associated States (3) | | | | | | |
| Micronesia | 0 | 0 | 0 | 0 | 0 | 0 |
| Marshall Islands | 0 | 0 | 0 | 0 | 0 | 0 |
| Palau | 0 | 0 | 0 | 0 | 0 | 0 |
| Cities* (2) | | | | | | |
| NYC | 1 | 6 | 1 | 4 | 4 | 4 |
| DC | 1 | 6 | 1 | 4 | 4 | 4 |
| | | | | | | |

| | | | | | Burden Per Response for the One-time Addition of Data Elements (451) by Disease | |
|-------------------------------------|-----------------------------------|---------------------------------|------------------------|----------------------------|---|--|
| | Psittacosis: 27 new data elements | Legionellosis: 38 Data Elements | TBRD: 35 Data Elements | Hepatitis: 5 Data Elements | Average Burden Per Response (in hours): One-time Addition of All Data Elements | Average Burden Per Response (in hours): <u>Annualized</u> One-time Addition of All Data Elements |
| States (50) | 3 | 4 | 4 | | 157 | 19 |
| Territories (5) | | | | | 24 | 8 |
| American Samoa | 0 | 0 | 0 | | 015 | |
| Northern Mariana Islands | 0 | 0 | 0 | | 015 | |
| Guam | 0 | 0 | 0 | | 015 | |
| U.S. Virgin Islands | 0 | 0 | 0 | | 015 | |
| Puerto Rico | 3 | 4 | 4 | | 157 | |
| Freely Associated States (3) | | | | | 15 | 7 |
| Micronesia | 0 | 0 | 0 | | 015 | |
| Marshall Islands | 0 | 0 | 0 | | 015 | |
| Palau | 0 | 0 | 0 | | 015 | |
| Cities* (2) | | | | | 57 | 19 |
| NYC | 3 | 4 | 4 | | 157 | |
| DC | 3 | 4 | 4 | | 157 | |
| | | | | | | |

One-Time Burden to Add 451 Data Elements to NNDSS

| Respondents | Number of Respondents | Number of Responses per Respondent | Average Burden Per Response (in hours): One-time Addition of All Data Elements | |
|--------------------------|------------------------------|---|---|--|
| States | 50 | 1 | 57 | |
| Territories | 5 | 1 | 24 | |
| Freely Associated States | 3 | 1 | 15 | |
| Cities | 2 | 1 | 57 | |
| Total | | | | |

Annualized One-Time Burden to Add 451 Data Elements to NNDSS

| Respondents | Number of Respondents | Number of Responses per Respondent | Average Burden Per Response (in hours): Annualized One-time Addition of All Data Elements | Total Annualized One-Time Burden (in hours) |
|--------------------------|------------------------------|---|--|--|
| States | 50 | 1 | 19 | 950 |
| Territories | 5 | 1 | 8 | 40 |
| Freely Associated States | 3 | 1 | 5 | 15 |
| Cities | 2 | 1 | 19 | 38 |
| Total | | | | 1,043 |

One Time Burden to Add 7 Diseases and 451 Data Elements to NNDSS

| Respondents | Number of Respondents | Number of Responses per Respondent | Average Burden Per Response (in hours): Annualized One-time Addition of All Data Elements | Total One-Time Burden (in hours) |
|--------------------------|-----------------------|------------------------------------|--|----------------------------------|
| States | 50 | 1 | $105/60 + 57 = 59$ | 2950 |
| Territories | 5 | 1 | $45/60 + 24 = 25$ | 125 |
| Freely Associated States | 3 | 1 | $15/60 + 15 = 16$ | 48 |
| Cities | 2 | 1 | $105/60 + 57 = 59$ | 118 |
| Total | | | | |

Annualized One Time Burden to Add 7 Diseases and 451 Data Elements to NNDSS

| Respondents | Number of Respondents | Number of Responses per Respondent | Average Burden Per Response (in hours): Annualized One-time Addition of All Data Elements | Total Annualized One-Time Burden (in hours) |
|--------------------------|-----------------------|------------------------------------|--|---|
| States | 50 | 1 | $35/60 + 19 = 20$ | 1,000 |
| Territories | 5 | 1 | $15/60 + 8 = 9$ | 45 |
| Freely Associated States | 3 | 1 | $5/60 + 5 = 6$ | 18 |
| Cities | 2 | 1 | $35/60 + 19 = 20$ | 40 |
| Total | | | | |