



AIRA
AMERICAN IMMUNIZATION
REGISTRY ASSOCIATION

INFORMATION REQUEST

Topic: Measles Outbreak Response

Request Date: May 28, 2019

Information Requested:

The Vermont Immunization Registry would like to ask the AIRA community how other states have used their IIS to respond to the measles outbreak.

1. If you provided MMR coverage rates, which age groups did you include?
2. How did you cope with the “inflated denominator” problem? (eg. Used census denominator, Olgive weighting, other weighting schemes from AIRA best practice guide?)
3. Did you provide providers with coverage rates?
4. Did you run any reminder recalls?
5. Did you focus on areas with lower coverage?
6. Other approaches?
7. Do you provide any specific limitation language, or exclude counties - for instance, if a large practice in it is temporarily off line due to EHR transition?
8. Does your state publish coverage rates from your IIS to describe the coverage picture in an outbreak scenario like the current measles situation, or do they use other rates - like NIS or school reporting?

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Responding Member(s): Miriam Muscoplat (MN), Danielle Sill (WI)

Results:

MN:

Minnesota’s responses to these questions are below. MIIC was used extensively during our 2017 measles outbreak.

1. MMR coverage rates are always available on Minnesota’s [Public Health Data Access Portal](#) for 2 year olds. We also run rates specific to our Somali population because of known depressed immunization rates. During the outbreak and after we also ran coverage rates by birth cohort up to age six for the Somali population.



2. For the 2 year old and adolescent populations, we use the IIS denominator. While there is some inflation, the rates information is still useful in this way and does not introduce the biases of using another denominator.
3. 2 year old rates can always be run for the assessment reports in MIIC. Catch-up MMR rates can be run for any population using the adolescent assessment report in MIIC. Upon request, we also worked with some providers to run rates specific to their populations. We ran a few queries for providers wanting to know about 2-dose coverage in older populations.
4. During the 2017, there were clinics that were administering MMR on a special outbreak vaccination recommendation. Several of these clinics reached out to get line lists of patients who had never received MMR and/or had met the earliest date to receive another dose of MMR. This allowed them to quickly follow-up with patients.

We also worked with some schools to help provide them with line lists of clients to determine MMR vaccination status after a potential exposure. The IIS was used extensively in the exclusion process. Using the IIS cut down on staff time dramatically and allowed us to work with schools and childcares to quickly exclude those with no documented doses of MMR.

5. Substantial work has been done to improve the MMR vaccination rate in our Somali community (where the 2017 outbreak was focused). More information on these efforts can be shared if needed.
6. We maintained coverage of our MIIC Immunization Record Request program during the outbreak. We sent out over 3,600 records during Q2 2017 (which represents most of the outbreak). This remains one of our highest volumes ever for record requests.

MIIC was used to monitor MMR vaccine uptake, comparing it to the previous year's uptake.



7. No, we do provide info on limitations to the data, but the only time we don't share jurisdiction level information is when the population is too small (usually less than 10) which happens rarely with small, rural ZIP codes.
8. School, childcare, and IIS rates were all used during the 2017 outbreak for various reasons. All of this data is published on our website.

WI:

1. Most of our MMR coverage rates have been looking at the 24 month old population and the school aged children (5-18). We created a map of each of these so that individuals can see where the low coverage areas are within the state.
 1. [24 month old map](#)
 2. [5-6 year old map](#)
 3. [5-18 year old map](#)
2. We just used the denominator within our IIS. For the 24 month old population, we know our denominator is very close to the census estimate. For the 5-18 year old age range it is farther off, but when we present our other coverage rates for 24 month olds, adolescents, and adults we use our denominator so wanted to keep it consistent. Likely, this means that the data provided is an underestimation of the coverage rate.
3. We did not provide providers with coverage rates as most of them have been getting that information from their EHR. However, we worked with our Division of Medicaid to provide Medicaid with all of the HMOs coverage rates. Medicaid also requested individual line-level data of all individuals 1-15 who were not up-to-date with their MMR vaccines for their age group and reached out to each HMO to let them know the individuals they serve that were under-vaccinated.
4. We have not run any reminder recalls from the state, but we know that local health departments have done this to send to individuals within their jurisdiction.
5. From our analysis of the 24 month benchmark we noticed area of hot spots. We actually drilled it down to zip codes within counties to share with our local health departments so they could do more targeted education. We partnered with our communications team and there are currently communication campaigns (youtube



videos, radio ads, etc) occurring in the zip codes with the lowest 4313314 rate. We have the document only for LHDs to view and not on our external website, but if you would like to see that, I can definitely send it along. It just provides an overview of our rates from 2018 and shows where there are pockets within the county since sometimes rates can be masked if you look at the entire county instead of smaller geographic areas.

6. We provide a weekly report to our secretary's office with MMR coverage rates (by quarter), number of MMR doses administered by week, number of public access look-ups in the IIS (number of people looking up their own record), number of MMR and MMRV doses ordered by our VFC providers, and the number of suspected/confirmed measles cases. We compare the numbers from this year to averages over the past few years to see if our communication campaigns, the news, etc. have helped to increase coverage and awareness.
7. Most of the communication campaigns and other data requests have come from our secretary's office and we have provided extensive language about the limitations of the data so they know that while it might be the best source to use for the information, there are still items to consider such as not all providers using the IIS, denominator inflation, etc.
8. We have not had an outbreak for measles, yet, but in other VPD outbreaks such as pertussis and mumps, we have published monthly reports online for individuals to view. Normally, we do not provide the rates for the entire area or state but include the vaccination rate of all of those who contracted the illnesses. So for pertussis, we will give the percent of individuals who were vaccinated appropriately for their age.
 1. [Mumps monthly report](#)
 2. [Pertussis monthly report](#)