



Serogroup B meningococcal vaccine: A first look at uptake and coverage

Nkenge Jones-Jack, PhD, MPH

Health Scientist

American Immunization Registry Association

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OBJECTIVES

- Describe the uptake of the MenB vaccine during the first two years of use
- Examine the benefit of IIS for monitoring vaccination coverage during outbreaks
- Explore strategies to facilitate MenB vaccine series completion for routine usage, as well as during outbreak scenarios



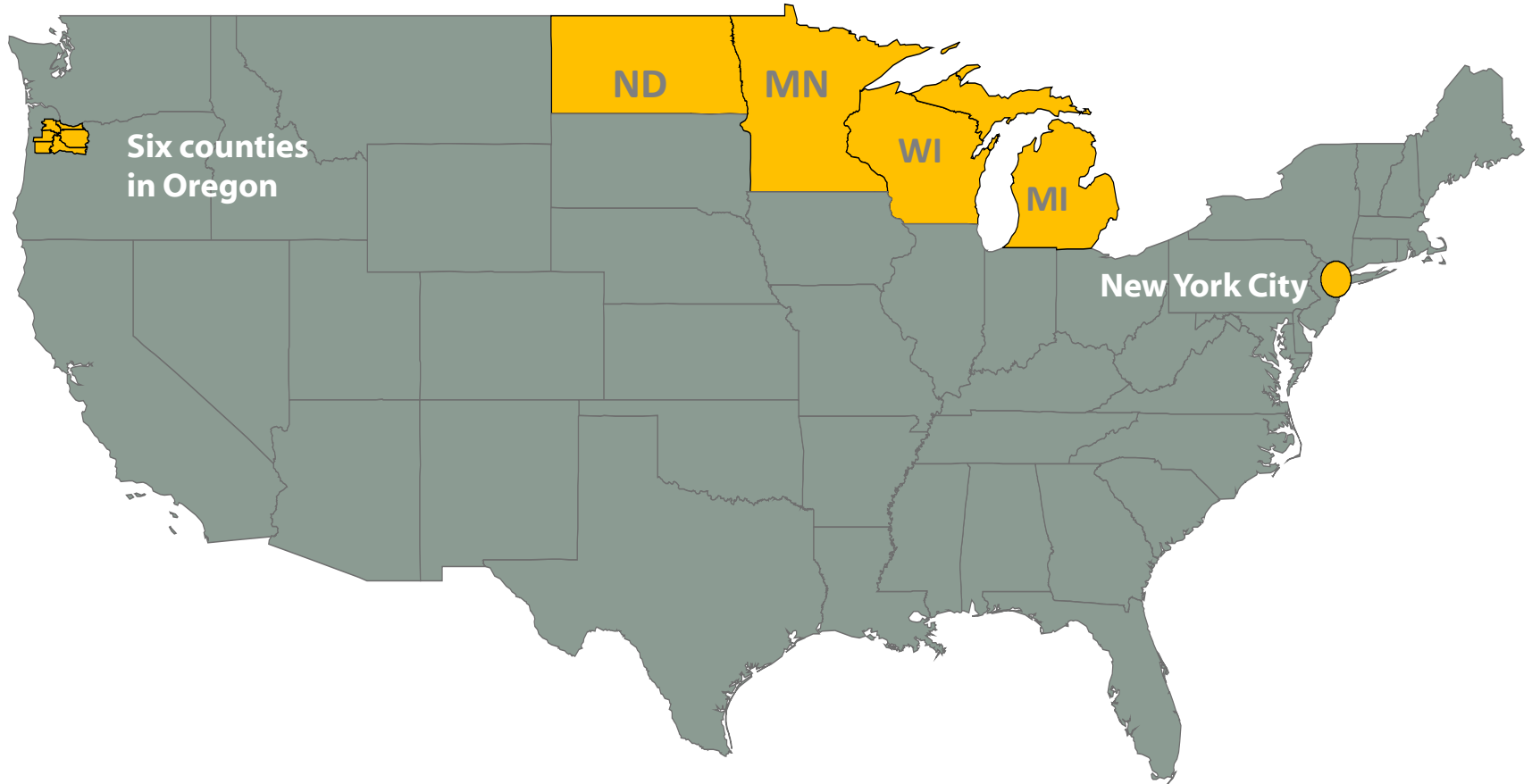
BACKGROUND

- Meningococcal disease is a serious illness
 - Can unexpectedly strike healthy individuals
 - Sometimes causes long-term or fatal outcomes
 - Adolescents and young adults at increased risk
- Serogroup B meningococcal (MenB) vaccine
 - Trumenba (MenB-FHbp)
 - Bexsero (MenB-4C)
- Advisory Committee on Immunization Practices (ACIP)
 - Recommended for adolescents and young adults aged 16 to 23 years
 - Licensed for use beginning in 2015

BACKGROUND

- Immunization information systems (IIS)
 - Confidential, computerized population-based systems that consolidated immunization data from vaccine providers
- IIS Sentinel Sites
 - Have robust, high quality, and timely data
 - Funded to evaluate vaccination coverage and uptake in pediatric and adolescent populations
 - Nearly 250M records submitted quarterly to monitor vaccine usage
 - Data represent approximately 10% of the US population

SIX IIS SENTINEL SITES

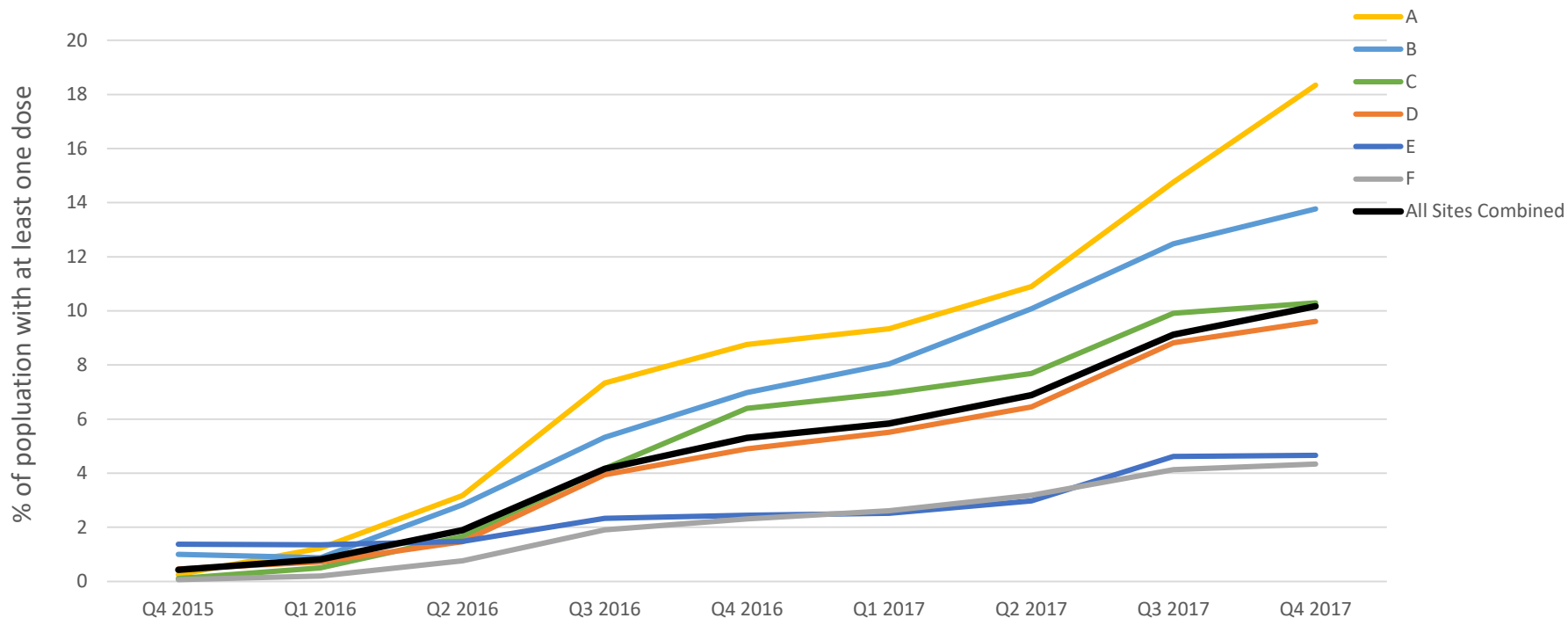


METHODS

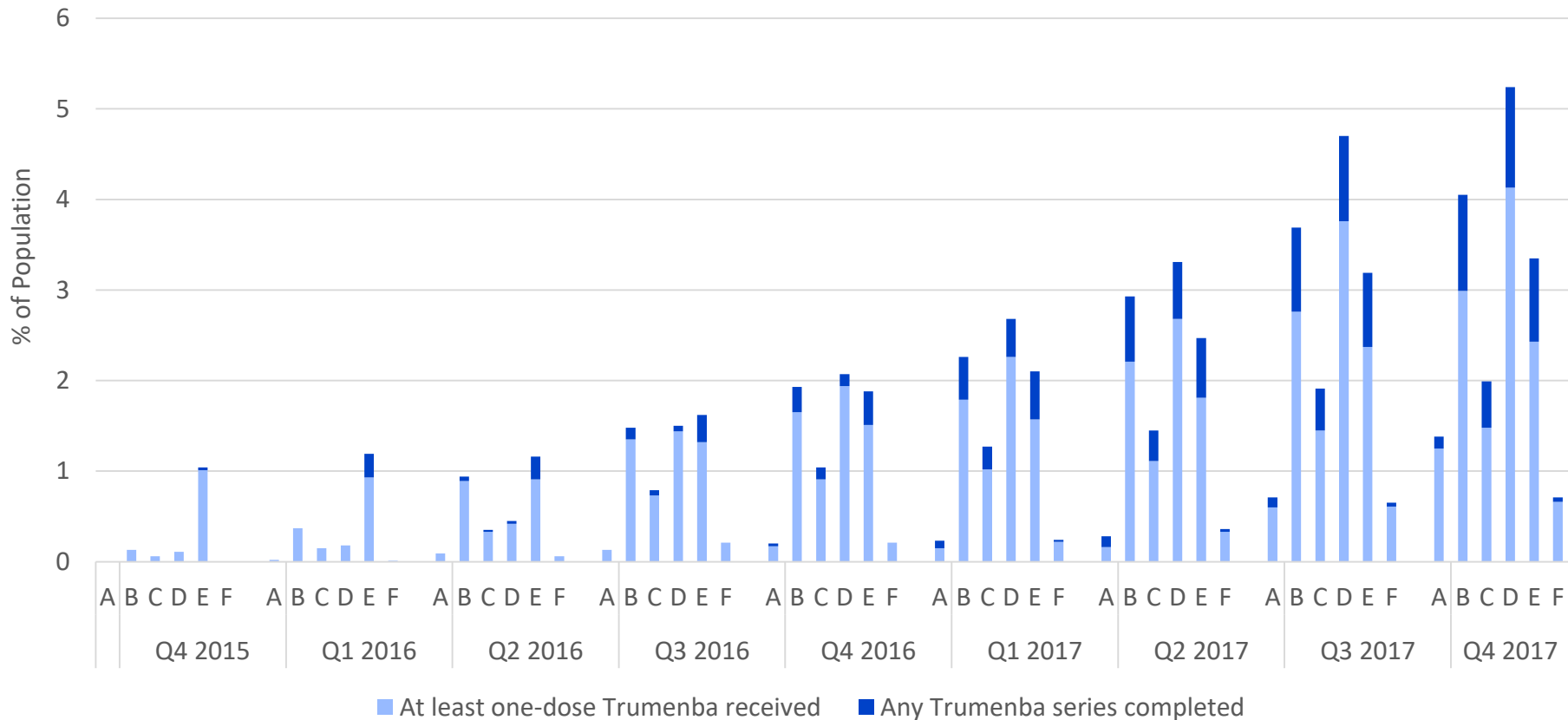
- Assessed MenB vaccine coverage and uptake between October 2015 and December 2017
- Analyzed >1.1 million records among adolescents age 16-18 years
- Data analyzed by quarter beginning with Q4 2015 to examine differences by IIS Sentinel Site
 - Adolescents who received at least one dose of any MenB vaccine
 - Series completion of MenB-FHbp or MenB-4C
- Web-based survey conducted
 - Conducted among Sentinel Site staff
 - Further understand factors that might impact differences in vaccine uptake
 - Survey consisted of four questions (communication messages, forecasting strategies, factors determining use of forecasting, additional factors)

UPTAKE OF AT LEAST ONE DOSE OF MENB VACCINE BY SENTINEL SITE OVER TIME

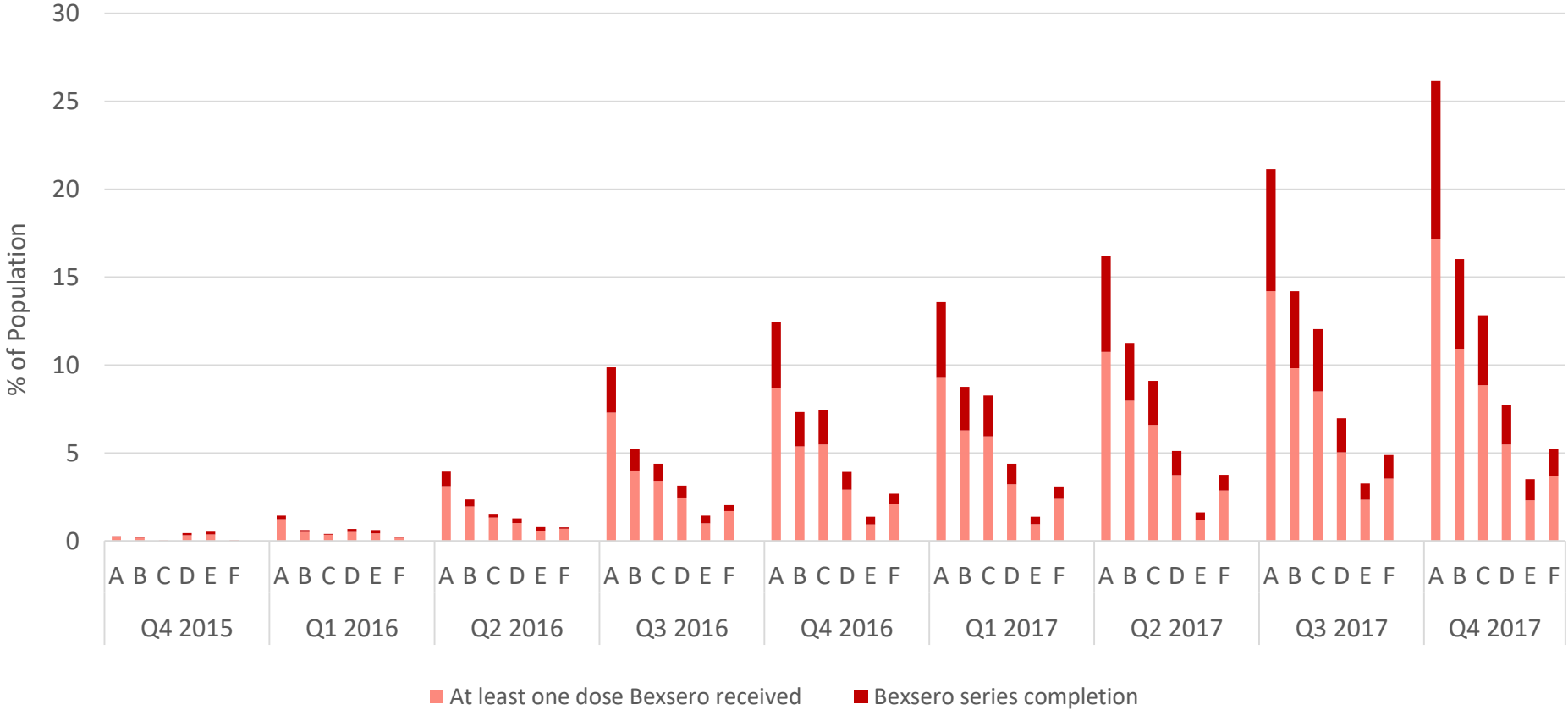
AMONG ADOLESCENTS (AGE 16-18)



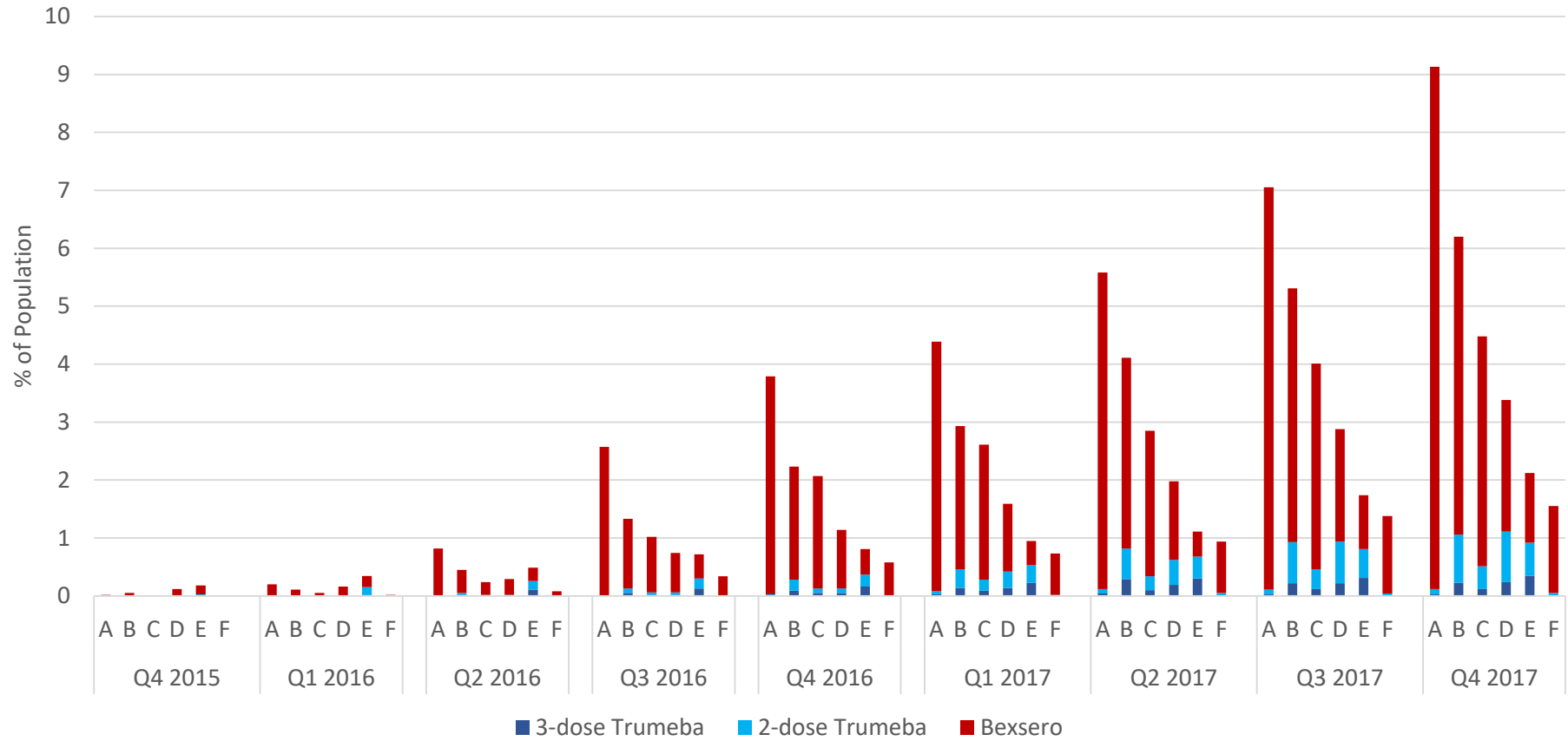
VACCINE COVERAGE FOR AT LEAST ONE DOSE OF MENB-FHBP (TRUMEBA) VS. ANY SERIES COMPLETION FROM OCTOBER 2015 THROUGH DECEMBER 2017



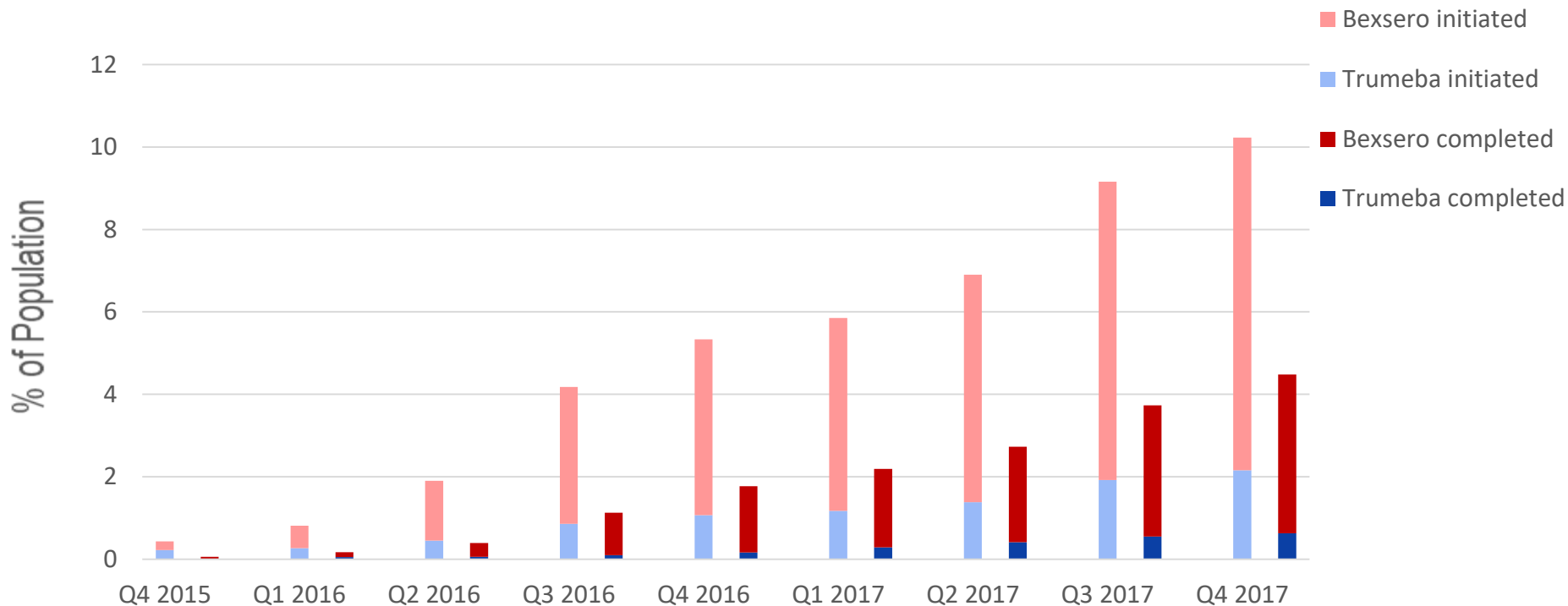
VACCINE COVERAGE FOR AT LEAST ONE DOSE OF MENB-4C (BEXSERO) VS. SERIES COMPLETION FROM OCTOBER 2015 THROUGH DECEMBER 2017



VACCINE COVERAGE FOR SERIES COMPLETION OF ANY MENB VACCINE BY SENTINEL SITE FROM OCTOBER 2015 THROUGH DECEMBER 2017



COMPARISON OF MENB DOSE INITIATATION VS. MENB SERIES COMPLETION BY QUARTER



COMPARISON OF FORECASTING AND COMMUNICATION STRATEGIES BY SENTINEL SITE AMONG ADOLESCENTS 16-18 YEARS

Site Code	Cumulative Vaccine coverage	Forecasting Strategy	Promotional Communication Messages
A	18.34	IIS forecasted MenB for all age-eligible persons, regardless of risk factors.	ACIP recommendations disseminated via email to providers, at provider meetings, immunization nurse educator modules
B	13.77	Site did not forecast. A small percent of HL7 querying providers use a new forecaster, but recommendations are only for high-risk individuals.	Informational letters disseminated
C	10.30	Forecasted for persons who initiated the vaccine to encourage completion of the dose series.	Articles in monthly immunization newsletters, phone calls with local public health and advisory committee
D	9.61	Site did not forecast MenB administration for any persons.	None
E	4.66	Forecasted for persons who initiated the vaccine to encourage completion of the dose series.	Email communications, lunch & learn presentations
F	4.34	Forecasted for persons who initiated the vaccine to encourage completion of the dose series.	Bi-weekly messaging to health providers, jurisdiction committee on Immunization Practices, pharmacists

LESSONS LEARNED

- Generally, vaccination coverage for MenB vaccine is low, but increasing over time
- There are wide variations in the uptake of the MenB vaccine by Sentinel Site
- Highest rates of uptake were observed at sites where no outbreak occurred
- MenB vaccine promotion during the presence of an outbreak may increase uptake
- Support for the administration of the vaccine seems to indicate increased uptake
- IIS data is a useful tool for understanding vaccination coverage, particularly during an outbreak
- Forecasting for series vaccines is likely to increase the series completion
- Vaccine is still relatively new – additional awareness and information about the MenB vaccine may be needed

CONCLUSIONS

- Study includes a subset of the recommended age cohort for MenB vaccine
- Rates of MenB-FHbp (Trumeba) vaccine uptake and coverage are likely underestimated
- Findings are not generalizable – implementation practices vary widely by site
- Further study is warranted to understand factors that influence uptake of MenB vaccine



THANK YOU

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For more information, contact CDC
1-800-CDC-INFO (232-4636)
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