A stylized, colorful illustration of a landscape. The foreground features rolling green hills with a dark brown path. On the left, there are several trees and flowers: a large green tree, a purple flower, and an orange flower. A small orange bird is flying in the sky above the trees. The background consists of wavy blue and white bands representing a sky or water.

HPV Vaccination Rates in Idaho

*Christine Hahn, MD
Idaho Division of Public Health
IDHW*

State-Level HPV Vaccination Rates

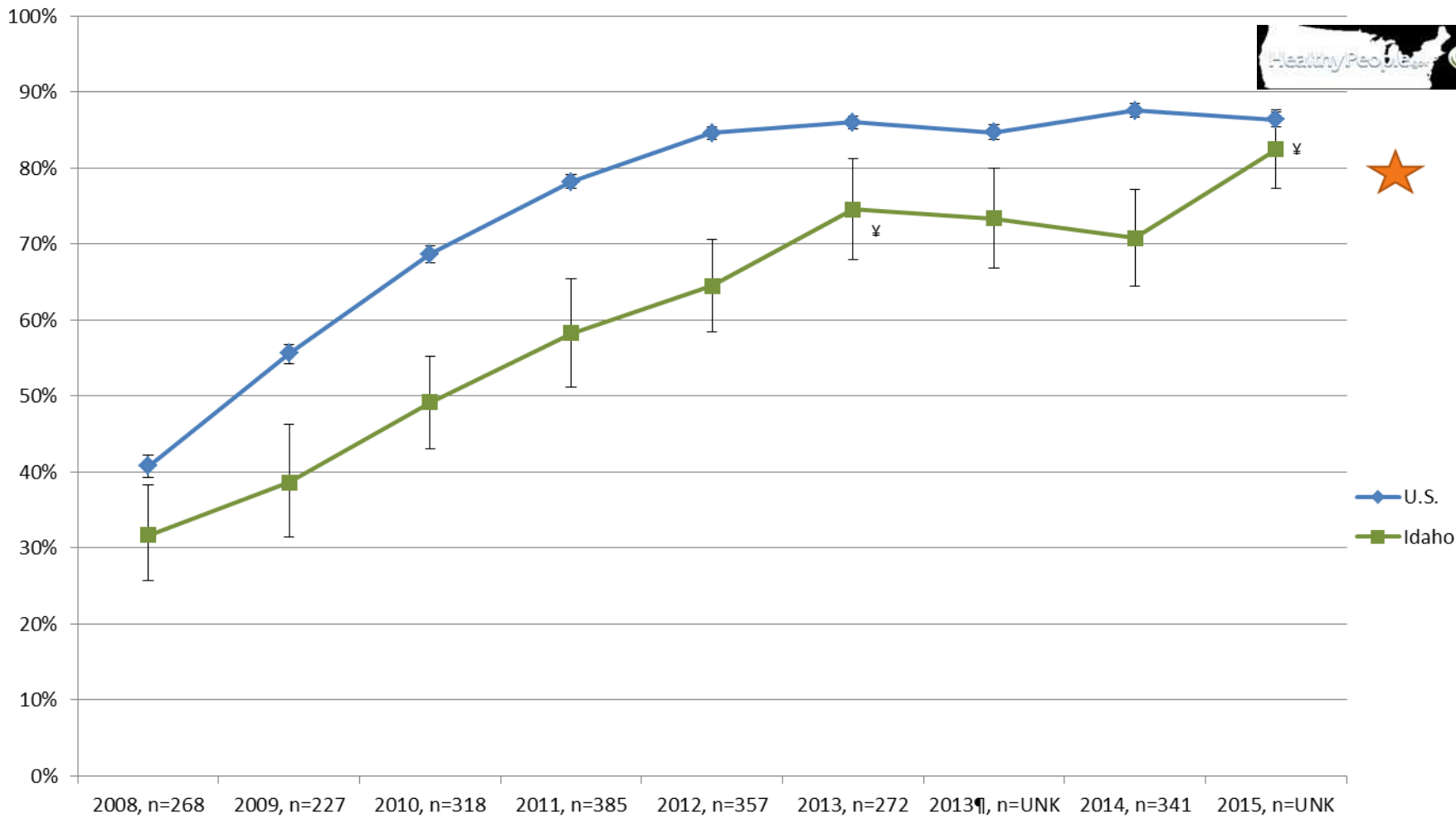
- CDC's Teen National Immunization Survey (NIS) determines rates for all states
- NIS allows national estimates, and some state-to-state comparisons
- Sample size is too small in Idaho to look at local rates (In 2013, for example, only 512 teens included with household interviews and only 272 with adequate provider data)

Idaho State Law

Seventh Grade Immunization Requirements

- *Effective with the 2011-2012 school year, and each year thereafter ... a child must meet the following minimum immunization requirements prior to admission into the seventh (7th) grade for these vaccines:*
 - *one (1) dose of Tetanus, Diphtheria, Pertussis Booster (Tdap), and*
 - *one (1) dose of Meningococcal.*

≥1 Tdap* Vaccination Coverage 2008–2015†



* Refers to ≥1 dose of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) since the age of ten years

† From the National Immunization Survey (NIS)-Teen, adolescents aged 13 through 17 years

‡ Refers to a statistically significant change compared to the previous year, $p=0.05$

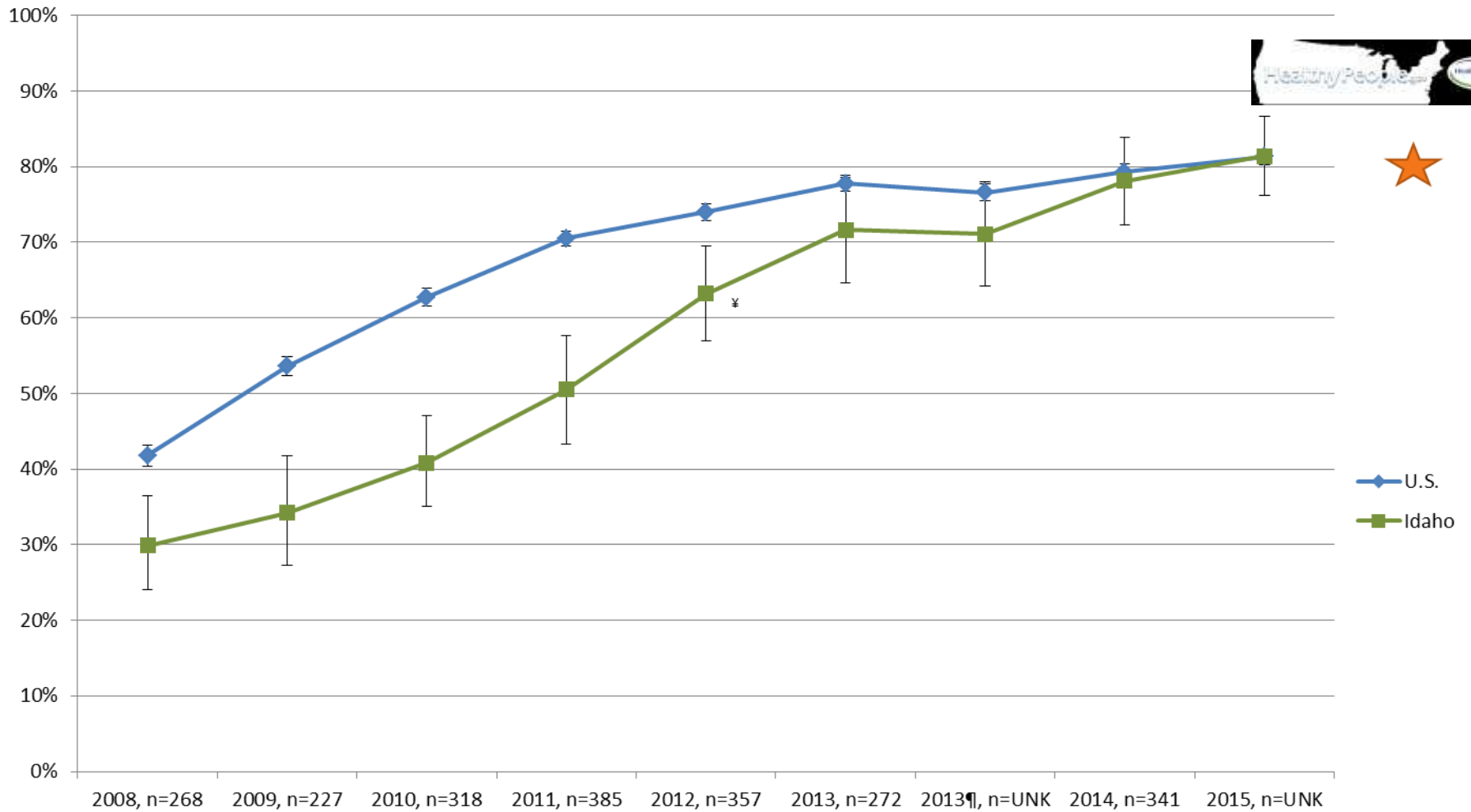
n = number of adolescents sampled for each survey year in Idaho

Vertical bars above and below each point estimate indicate the 95% confidence interval

¶ 2013 data was revised by NIS in 2014 to have a more inclusive definition of adequate provider data

UNK=Unknown

≥1 MenACWY* Vaccination Coverage 2008–2015†



* Refers to ≥1 dose of meningococcal conjugate vaccine or meningococcal vaccine of unknown type

† From the National Immunization Survey (NIS)-Teen, adolescents aged 13 through 17 years

‡ Refers to a statistically significant change compared to the previous year, $p=0.05$

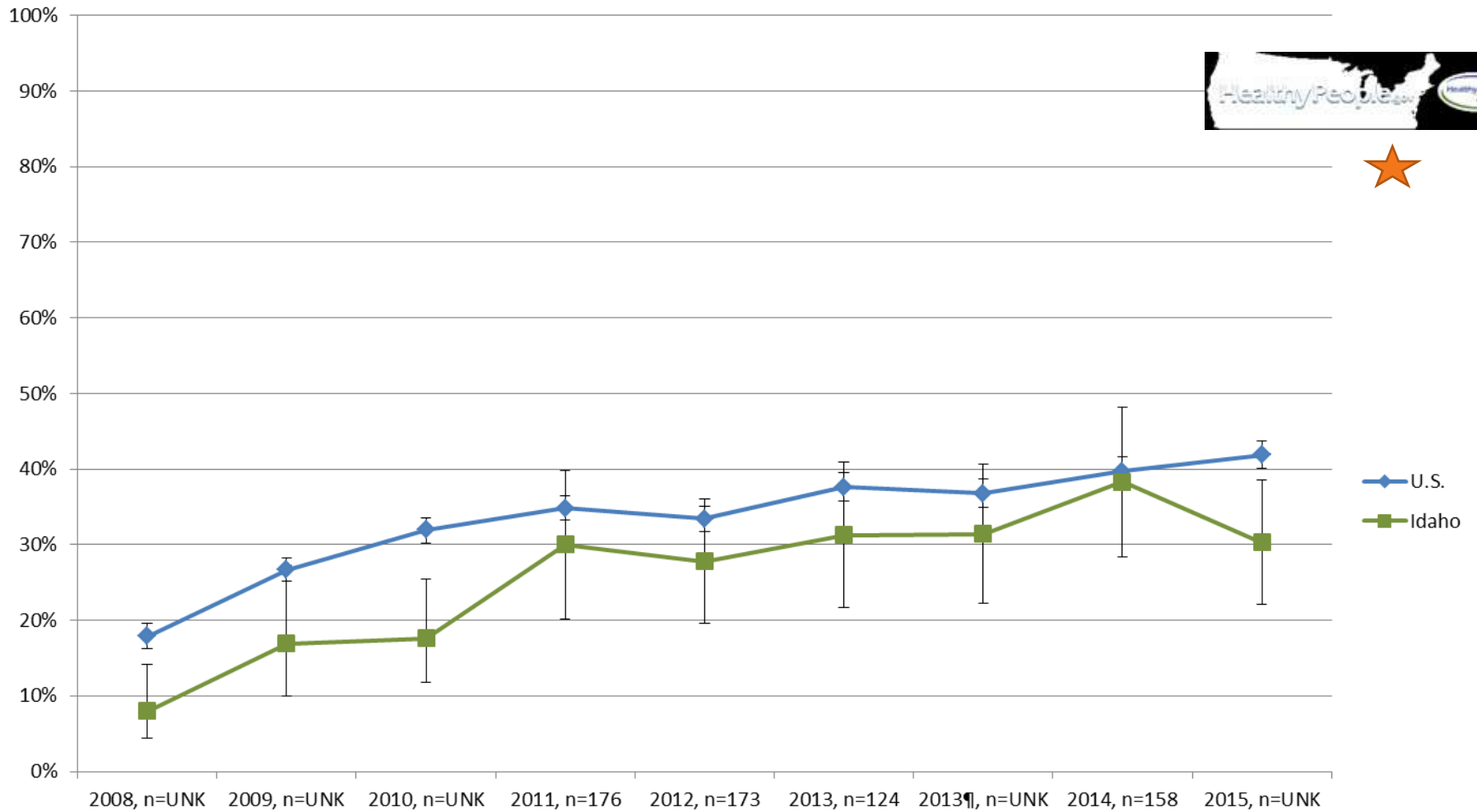
n = number of adolescents sampled for each survey year in Idaho

Vertical bars above and below each point estimate indicate the 95% confidence interval

¶ 2013 data was revised by NIS in 2014 to have a more inclusive definition of adequate provider data

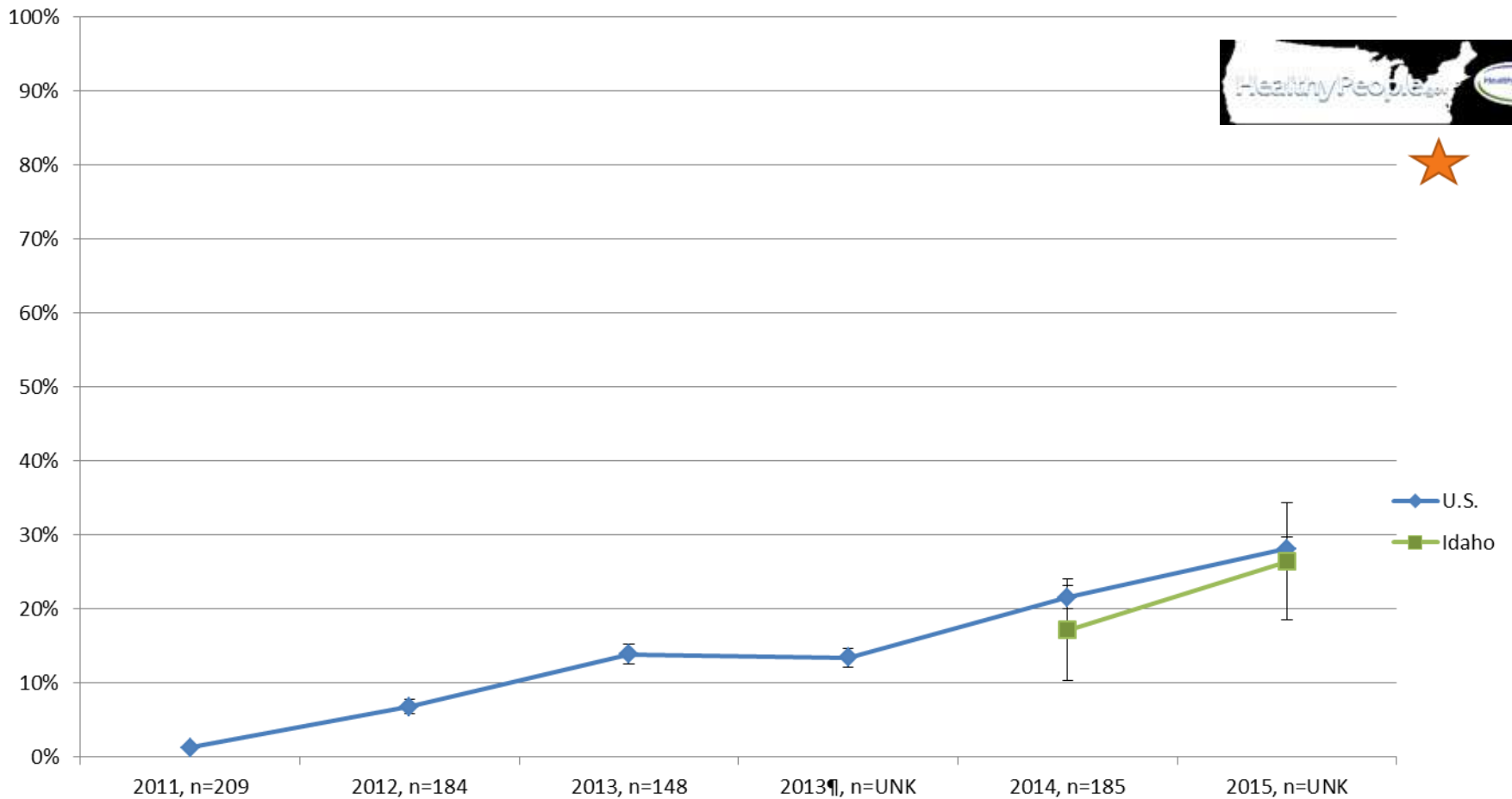
UNK=Unknown

≥3 HPV* Female Vaccination Coverage 2008–2015†



* Refers to 3 doses of human papillomavirus vaccine, either quadrivalent or bivalent, females only
 † From the National Immunization Survey (NIS)-Teen, adolescents aged 13 through 17 years
 n = number of adolescents sampled for each survey year in Idaho
 Vertical bars above and below each point estimate indicate the 95% confidence interval
 ¶ 2013 data was revised by NIS in 2014 to have a more inclusive definition of adequate provider data
 UNK=Unknown

≥3 HPV* Male Vaccination Coverage 2011–2015^{†§}



* Refers to ≥3 dose of human papillomavirus vaccine, either quadrivalent or bivalent, males only

[†] From the National Immunization Survey (NIS)-Teen, adolescents aged 13 through 17 years

[§] This series began national sampling in 2011, data collected for Idaho was insufficient to determine point estimate prior to 2014

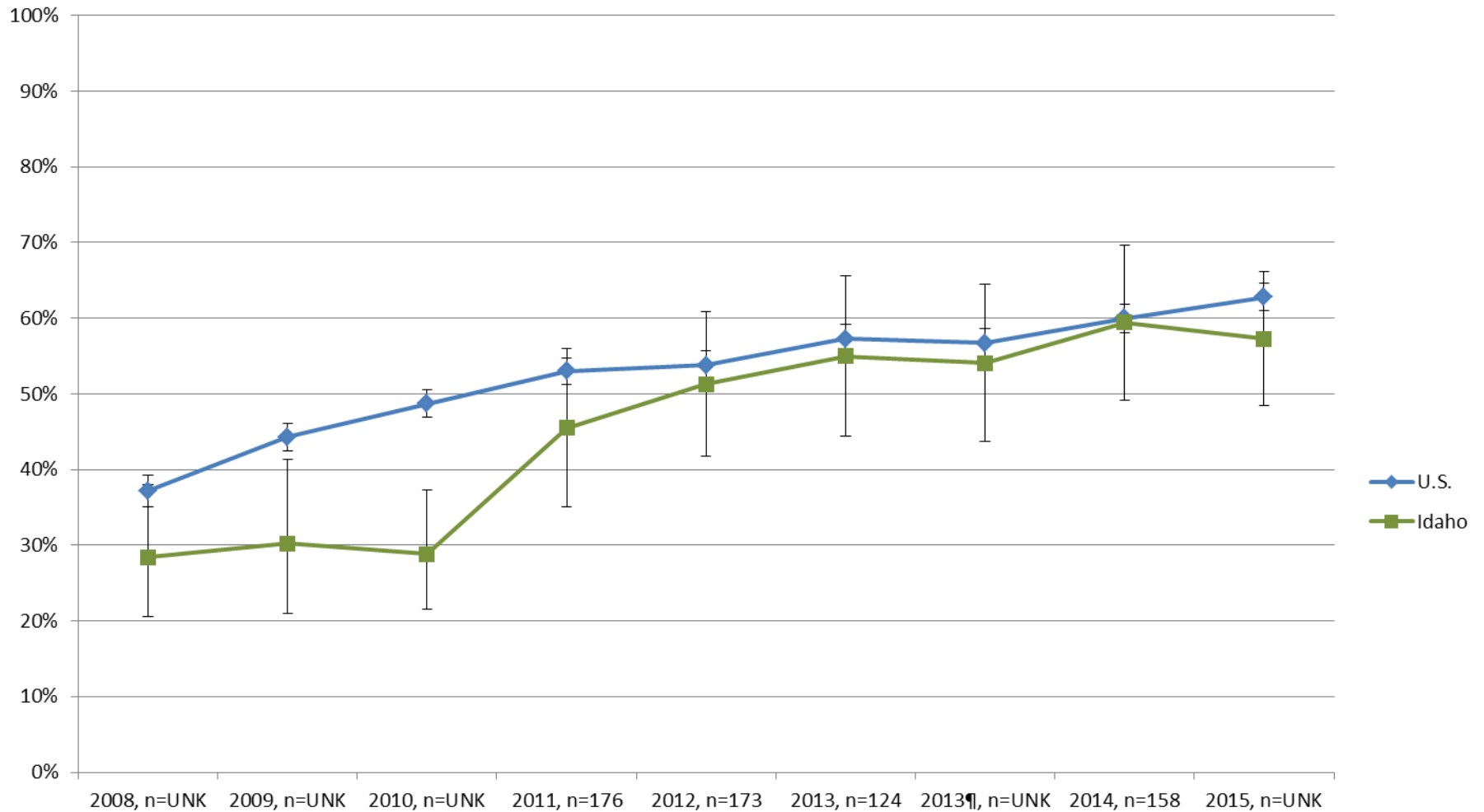
n = number of adolescents sampled for each survey year in Idaho

Vertical bars above and below each point estimate indicate the 95% confidence interval

¶ 2013 data was revised by NIS in 2014 to have a more inclusive definition of adequate provider data

UNK=Unknown

≥1 HPV* Female Vaccination Coverage 2008–2015†



* Refers to ≥1 dose of human papillomavirus vaccine, either quadrivalent or bivalent, females only

† From the National Immunization Survey (NIS)-Teen, adolescents aged 13 through 17 years

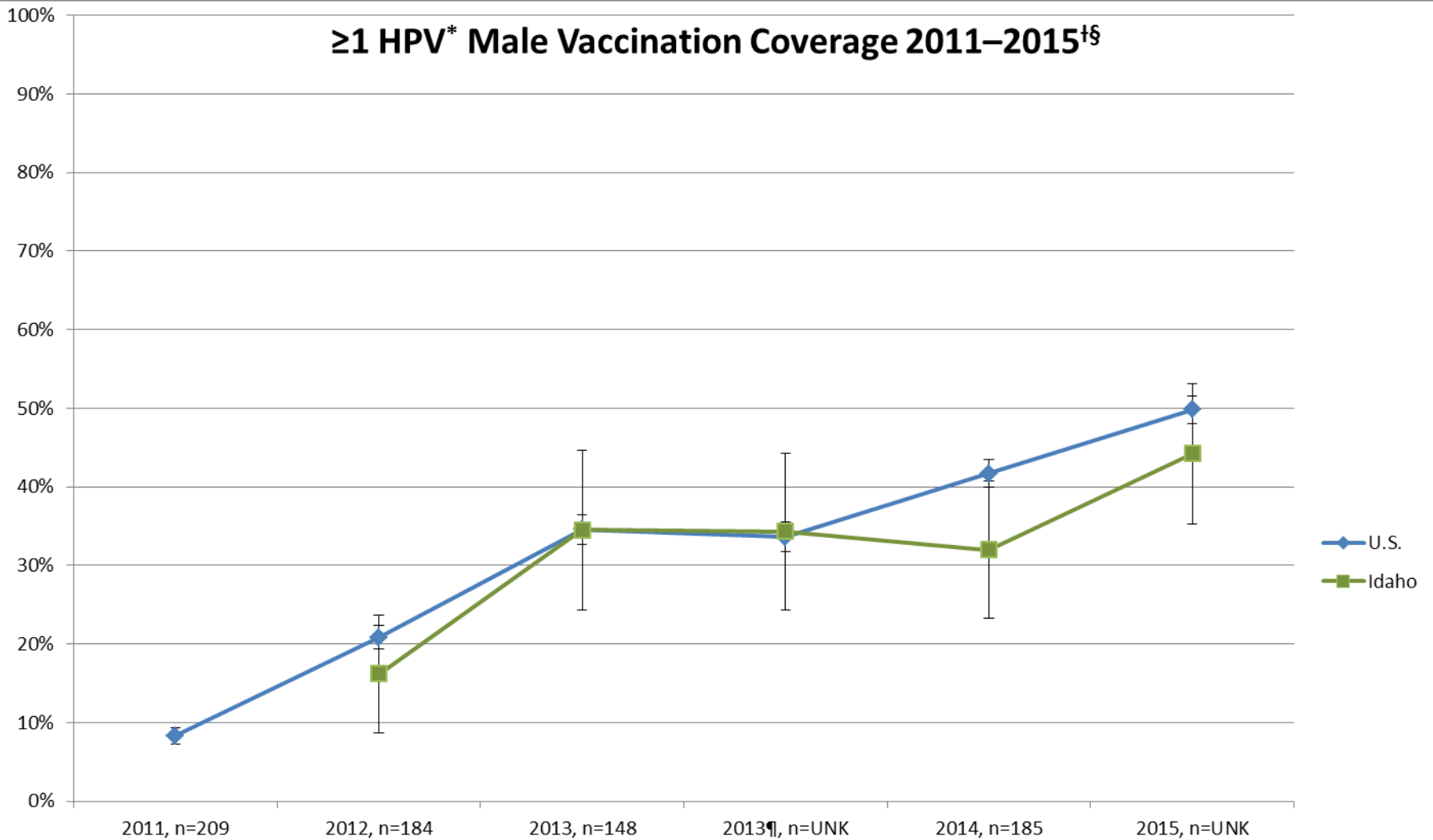
n = number of adolescents sampled for each survey year in Idaho

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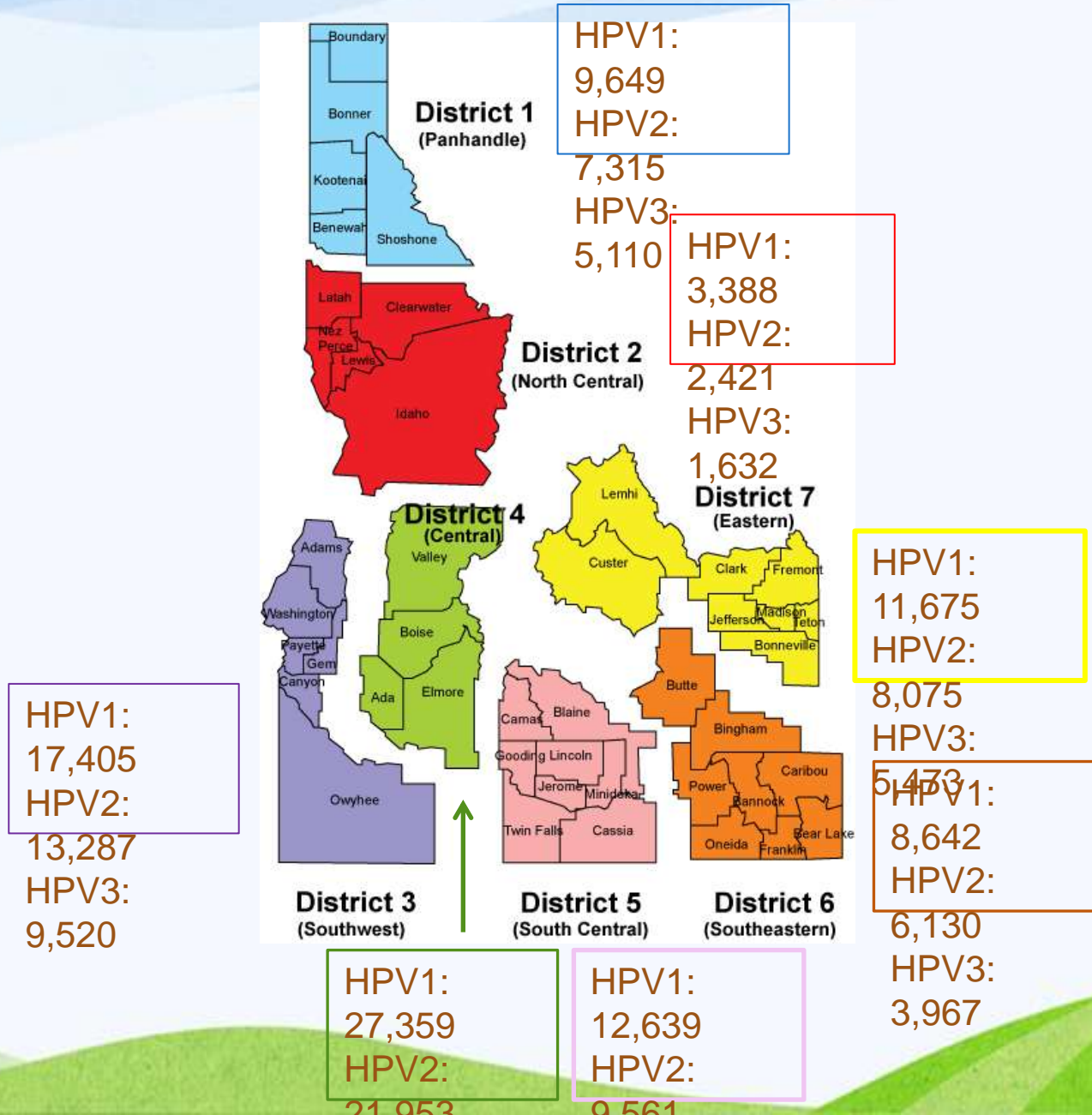
*Are there areas in
the state where we
are doing better
than others?*

Initial Analysis of Idaho's Immunization Reminder Information System (IRIS)

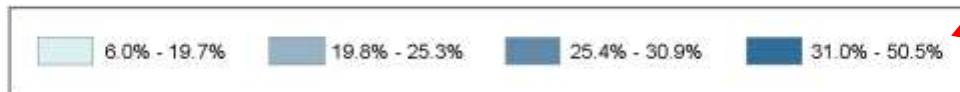
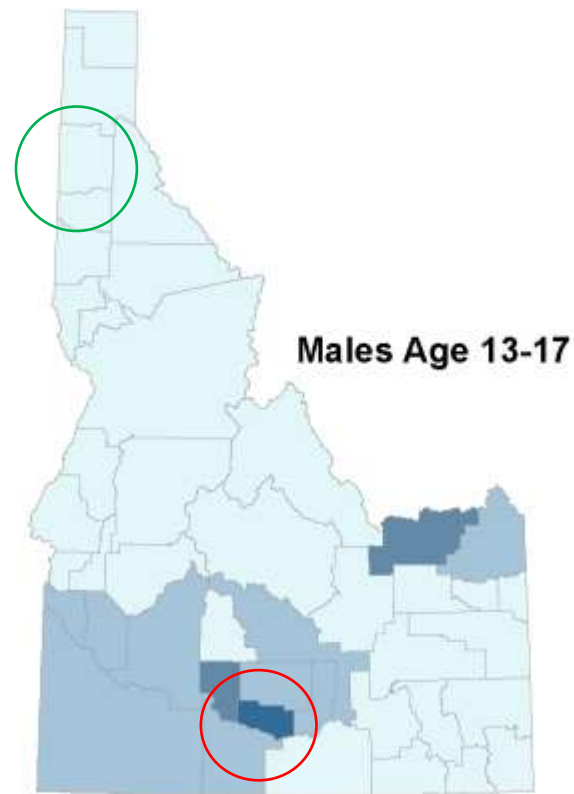
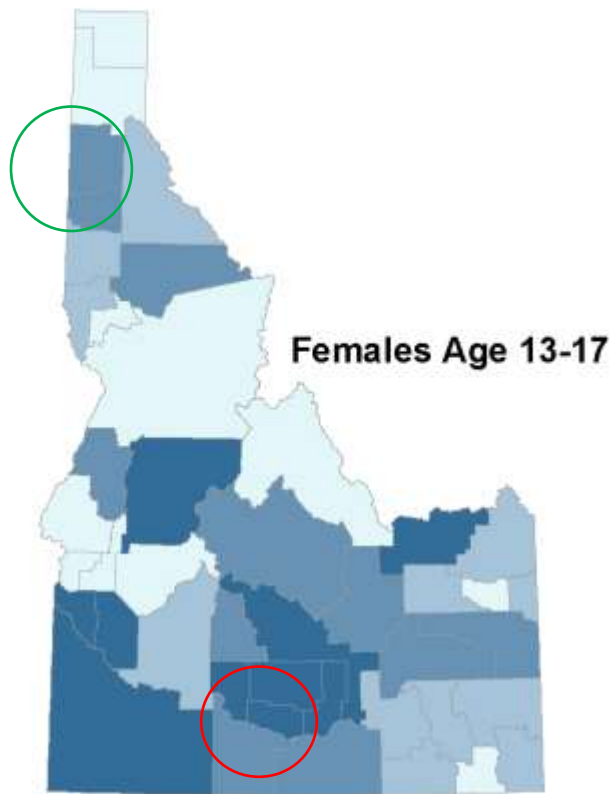
- IIP Staff pulled de-identified IRIS data:
 - Counts of 1+HPV, 2+HPV, and 3+HPV vaccine doses administered from 2014 - 2016
 - For each count, **calendar year, age, sex, city, zip code of residence** was included
 - Only 13, 14, 15, 16, and 17 year olds
- Chris Johnson used SAS software to read the data files and generate counts of HPV 1+, 2+ and 3+ by calendar year, age, sex, and city/ZIP Code of residence.
 - Assigned each vaccination event to a county and health district by using city and ZIP codes.
 - Linked county-level counts to population denominator estimates from the National Center for Health Statistics to generate estimates of HPV vaccination coverage by health district and county.
- Joe Pollard in the Division of Public Health managed the data files.



Number of doses in analysis, females

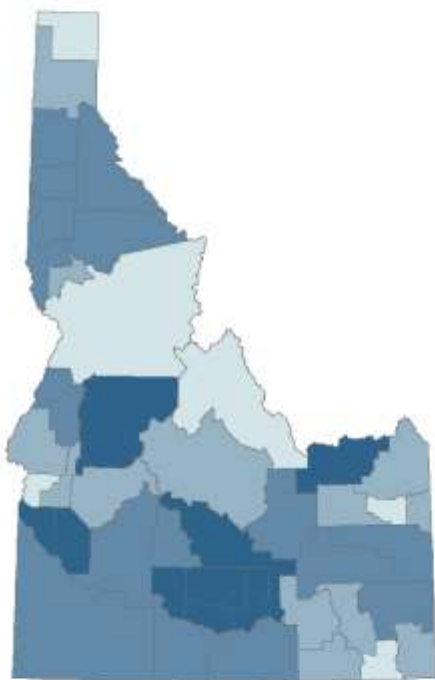


HPV Vaccination Coverage Among Idaho Adolescents Aged 13-17 2014-2016 Combined 3+ Doses

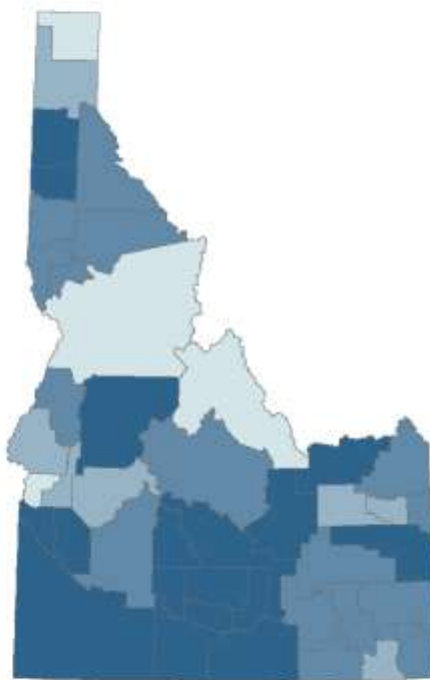


HPV Vaccination Coverage Among Idaho Females Aged 13-17 2014-2016 Trend 3+ Doses

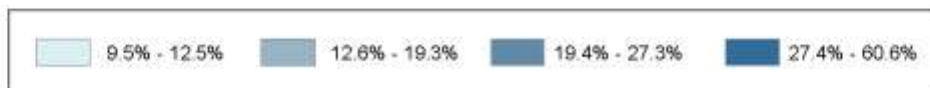
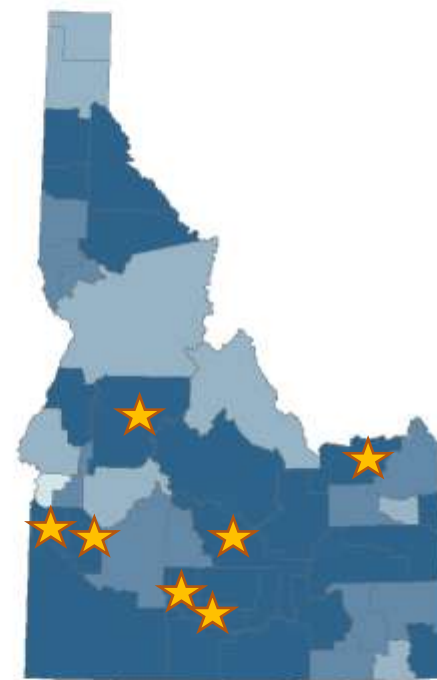
2014



2015

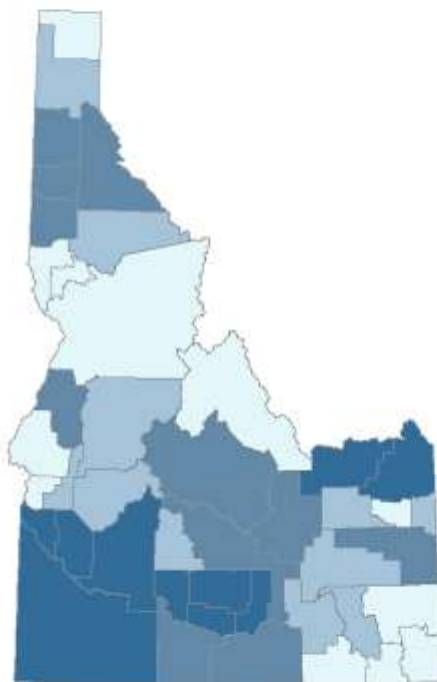


2016

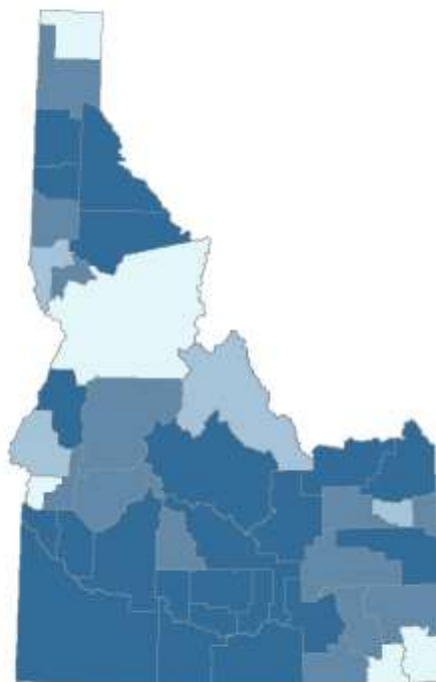


HPV Vaccination Coverage Among Idaho Males Aged 13-17 2014-2016 Trend 3+ Doses

2014



2015



2016

