



Massachusetts Department of Public Health

Massachusetts HPV Vaccination Uptake

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Disclosure

I, Elizabeth Russo, have been asked to disclose any relevant financial relationships with ACCME-defined commercial entities that are either providing financial support for this program or whose products or services are mentioned during this presentation.

I have no relevant financial relationships to disclose.

Overview of HPV Vaccination Data

- National Immunization Survey (NIS) - CDC-sponsored survey available on <https://www.cdc.gov/vaccines/imz-managers/coverage/teenvaxview/data-reports/index.html>
- Massachusetts Immunization Information System (MIIS) - DPH state-wide immunization registry includes vaccination data for Massachusetts residents who received vaccines in Rhode Island

Adolescent (13-17 Years of Age) HPV Vaccination Coverage – NIS, 2022

| | 1+ Dose | | UTD* | |
|----------------|---------|-----|------|-----|
| | MA | US | MA | US |
| Male | 85% | 74% | 78% | 61% |
| Female | 87% | 78% | 76% | 65% |
| Overall | 86% | 76% | 77% | 67% |

MA rates higher than US rates

Male and female rates are similar

*HPV-UTD – 2 doses if the first dose was given before the 15th birthday and doses were separated by five months; otherwise, 3 doses

MA Adolescent (13-17 Years of Age) HPV Vaccination Coverage – MIIS, 2022

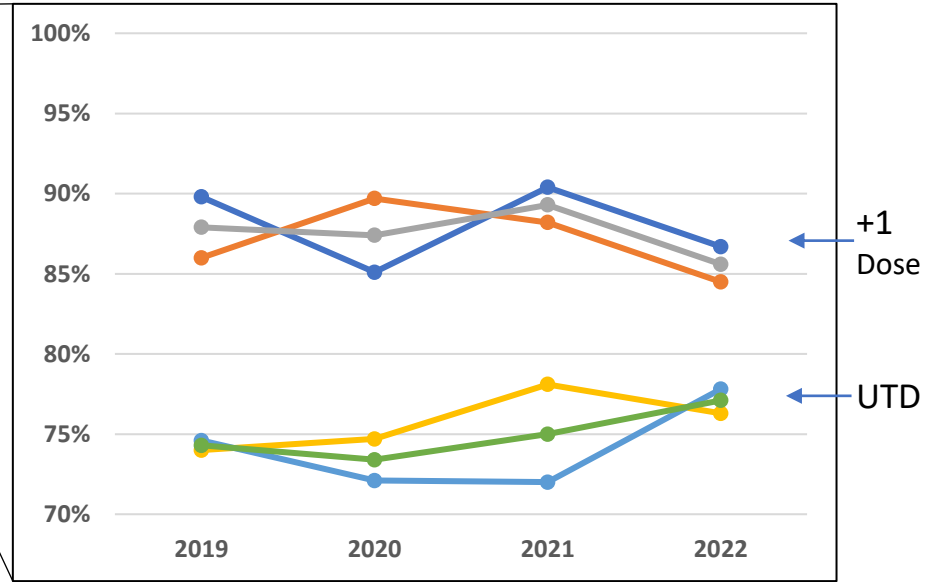
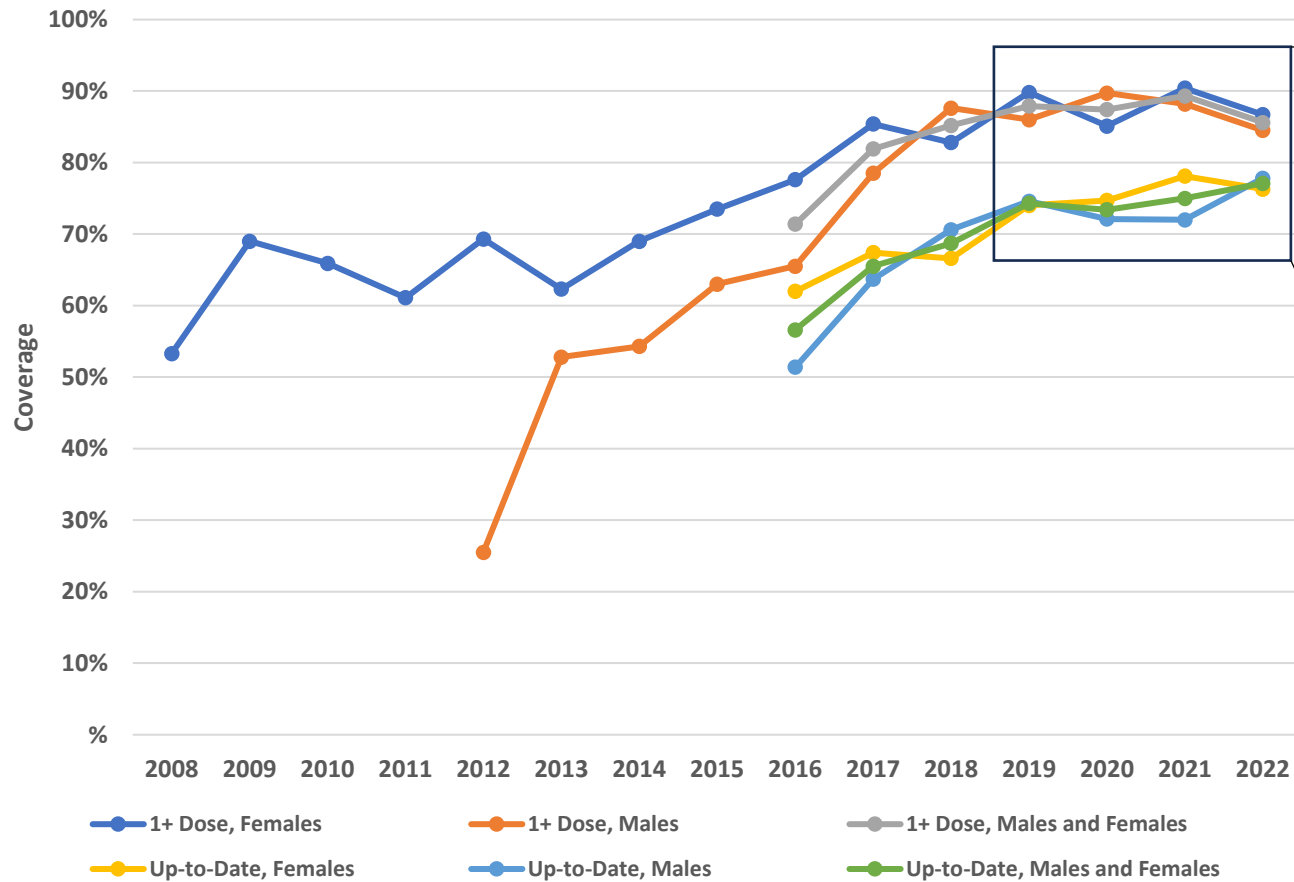
| | 1+ Dose | UTD |
|----------------|----------------|------------|
| | MA | MA |
| Male | 87% | 71% |
| Female | 87% | 72% |
| Overall | 87% | 71% |

Overall, MIIS rates similar to NIS rates

Male and female rates are also similar

Denominator Source: UMass Donahue Institute 2020 Population Estimates

Trends in MA Adolescent (13-17 Years of Age) HPV Vaccination Coverage over Time – NIS, 2008-22



*Overall, rates have increased over time
In recent years, these gains have plateaued*

MA Adolescent (13-17 Years of Age) HPV Vaccination Coverage by Race – MIIS, 2022

| | 1+ Dose | | UTD | |
|--|---------|------|--------|------|
| | Female | Male | Female | Male |
| American Indian or Alaskan Native | 40% | 45% | 25% | 28% |
| Asian | 70% | 74% | 58% | 61% |
| Black or African American | 106% | 105% | 84% | 82% |
| Multiracial | 49% | 45% | 43% | 39% |
| Native Hawaiian/Pacific Islander | 230% | 312% | 162% | 220% |
| White | 77% | 77% | 65% | 65% |

HPV coverage differs by race

Denominator Source: UMass Donahue Institute 2020 Population Estimates

MA Adolescent (13-17 Years of Age) HPV Vaccination Coverage by County – MIIS, 2022

| | 1+ Dose | | UTD | |
|-------------------|---------|------|--------|------|
| | Female | Male | Female | Male |
| Barnstable | 78% | 76% | 63% | 61% |
| Berkshire | 70% | 69% | 52% | 50% |
| Bristol | 82% | 82% | 67% | 66% |
| Dukes | 103% | 86% | 86% | 67% |
| Essex | 91% | 90% | 75% | 73% |
| Franklin | 71% | 75% | 53% | 55% |
| Hampden | 78% | 79% | 59% | 59% |
| Hampshire | 73% | 77% | 62% | 65% |
| Middlesex | 90% | 89% | 75% | 74% |
| Nantucket | 88% | 96% | 63% | 65% |
| Norfolk | 86% | 82% | 73% | 71% |
| Plymouth | 80% | 81% | 67% | 67% |
| Suffolk | 101% | 103% | 83% | 84% |
| Worcester | 82% | 83% | 67% | 67% |

HPV coverage differs by county

Denominator Source: UMass Donahue Institute 2020 Population Estimates

Age of Initial HPV Vaccination over Time – MIIS, 2016-23

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|-----------------|------|------|------|------|------|------|------|------|
| 9 Years | 2% | 2% | 3% | 4% | 5% | 8% | 10% | 12% |
| 10 Years | 2% | 3% | 4% | 6% | 7% | 10% | 10% | 12% |
| 11 Years | 18% | 21% | 27% | 32% | 37% | 36% | 36% | 35% |
| 12 Years | 19% | 20% | 22% | 22% | 22% | 19% | 19% | 18% |
| 13 Years | 16% | 16% | 15% | 13% | 11% | 10% | 10% | 8% |
| 14 Years | 13% | 13% | 11% | 9% | 7% | 6% | 6% | 5% |
| 15 Years | 10% | 8% | 6% | 4% | 3% | 3% | 3% | 3% |
| 16 Years | 8% | 6% | 5% | 4% | 3% | 3% | 2% | 2% |
| 17 Years | 6% | 5% | 4% | 4% | 2% | 2% | 2% | 2% |
| 18 Years | 5% | 4% | 3% | 3% | 2% | 2% | 2% | 2% |

HPV initiation shifting to younger ages over time