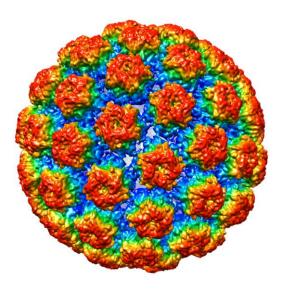
## Potential Benefits of HPV HPV Vaccines In Sexually Active Women



John Schiller Laboratory of Cellular Oncology National Cancer Institute schillej@mail.nih.gov

## Potential Benefits of HPV HPV Vaccines In Sexually Active Women

- Primary protection from types not yet encountered.
- Secondary protection of transmission to partners.
- Increase herd immunity in the population.
- Reduce risk of progression by preventing auto-inoculation leading to TZ or endocervical infection.
- Neutralize shed virus, reducing transmission from infected women.

## **Questions to Be Addressed**

- Primary protection from types not yet encountered.
  Influence of age on preexisting immunity, risk of acquisition, and risk of progression to cancer?
- Secondary protection of transmission to partners. Will sexual assortment patterns leave some unprotected? SMs?
- Increase herd immunity in the population. How large an effect? Is a single sweep enough?
- Reduce risk of progression by preventing auto-inoculation leading to TZ or endocervical infection.

Why hasn't this effect been seen in clinical trials?

• Neutralize shed virus, reducing transmission. Can this benefit be experimentally verified?