Cancer, Simian Virus 40 (SV40), and Polio Vaccine Fact Sheet

- SV40 is a virus found in some species of monkey.

  - SV40 was discovered in 1960. Soon afterward, the virus was found in polio vaccine.

  - More than 98 million Americans received one or more doses of polio vaccine from 1955 to 1963 when a proportion of vaccine was contaminated with SV40; it has been estimated that 10–30 million Americans could have received an SV40 contaminated dose of vaccine.

  - SV40 virus has been found in certain types of cancer in humans, but it has not been determined that SV40 causes these cancers.

    - The majority of scientific evidence suggests that SV40-contaminated vaccine did not cause cancer, however, some research results are conflicting and more studies are needed.

    - Polio vaccines being used today do not contain SV40. All of the current evidence indicates that polio vaccines have been free of SV40 since 1963.

Additional Facts

- In the 1950s, rhesus monkey kidney cells, which contain SV40 if the animal is infected, were used in preparing polio vaccines. Because SV40 was not discovered until 1960, no one was aware in the 1950s that polio vaccine could be contaminated.

  - SV40 was found in the injected form of the polio vaccine (IPV), not the kind given by mouth (OPV).

  - Not all doses of IPV were contaminated. It has been estimated that 10–30 million people actually received a vaccine that contained SV40.

  - Some evidence suggests that receipt of SV40-contaminated polio vaccine may increase risk of cancer. However, the majority of studies done in the U.S. and Europe which compare persons who received SV40-contaminated polio vaccine with those who did not have shown no causal relationship between receipt of SV40-contaminated polio vaccine and cancer.

More Information

- For in-depth information about SV40, polio vaccine, and cancer, see our frequently asked questions.

  - National Immunization Hotline:
    - English 1 (800) 232-2522
    - Spanish 1 (800) 232-0233

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