How do they determine the ages when children should receive each vaccine? Is it okay to delay vaccines?

MARK SAWYER, MD: The ages at which people get vaccinated are determined by two things: it's when they're most at risk for disease and when their immune system is able to respond to the vaccine.

PAUL A. OFFIT, MD: For example, you want to make sure that you're protected against *Haemophilus Influenzae* Type b (Hib) and pneumococcus and rotavirus and whooping cough when you're a young child because that's when those diseases typically occur. You want to make sure that you're immunized very early against hepatitis B virus because if you get that disease as a young child, you're destined—90% of the time—to go on to develop liver cancer and chronic liver disease.

I think people who choose their own schedules, I think, don't really appreciate just how much goes into the current schedule.

ALISON SINGER: The CDC created the vaccine schedule for a reason. Children are given vaccines at the time when they are most susceptible to harm done from the disease itself.

PAUL A. OFFIT, MD: This is a very well tested schedule and there's no benefit in spreading things out because when you start to spread things out, you're only increasing the period of time during which children are susceptible to those diseases without benefit.