Vaccines for a Resilient Immunization System – A Perspective

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25 September 2019



Forward Looking Statement

This presentation of Merck & Co., Inc., Kenilworth, N.J., USA (the "company") includes "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. These statements are based upon the current beliefs and expectations of the company's management and are subject to significant risks and uncertainties. There can be no guarantees with respect to pipeline products that the products will receive the necessary regulatory approvals or that they will prove to be commercially successful. If underlying assumptions prove inaccurate or risks or uncertainties materialize, actual results may differ materially from those set forth in the forward-looking statements.

Risks and uncertainties include but are not limited to, general industry conditions and competition; general economic factors, including interest rate and currency exchange rate fluctuations; the impact of pharmaceutical industry regulation and health care legislation in the United States and internationally; global trends toward health care cost containment; technological advances, new products and patents attained by competitors; challenges inherent in new product development, including obtaining regulatory approval; the company's ability to accurately predict future market conditions; manufacturing difficulties or delays; financial instability of international economies and sovereign risk; dependence on the effectiveness of the company's patents and other protections for innovative products; and the exposure to litigation, including patent litigation, and/or regulatory actions.

The company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise. Additional factors that could cause results to differ materially from those described in the forward-looking statements can be found in the company's 2018 Annual Report on Form 10-K and the company's other filings with the Securities and Exchange Commission (SEC) available at the SEC's Internet site (www.sec.gov).





EXAMPLES OF COVERAGE



"Amazon removes books promoting autism cures and vaccine misinformation" (NBC News)



"Facebook vows to quash anti-vaccine misinformation"

(NPR)



"[Instagram] will stop recommending content that includes vaccine misinformation on the app's Explorer page [and stop] displaying vaccination misinformation in hashtag search results" (Wired)

...BUT IN REALITY

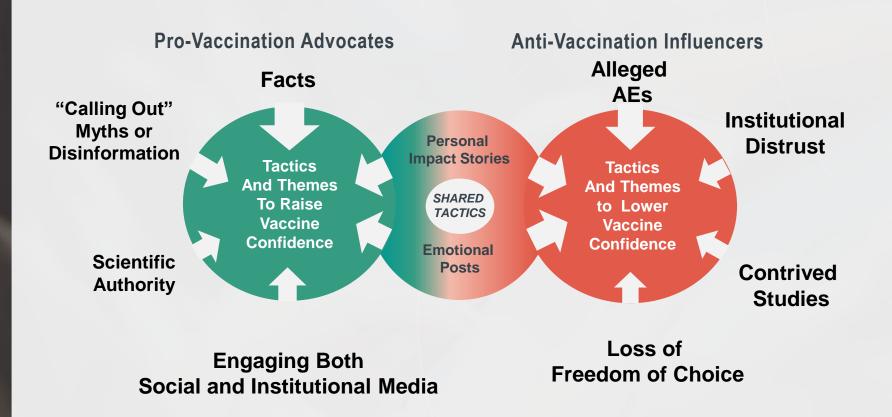
Books and movies with misinformation on Amazon as of September 2019

"Vaccine information flourishes on Facebook and Instagram weeks after promised crackdown"

(CNN Business)

"It Took Me 10 Seconds for Instagram to Push Me Into An Anti-Vaxx Rabbit Hole" (Motherboard)

Tactics Used by Positive and Negative Influencers



^{*}Note: Size of arrow indicates relative commonality of use of the specific tactic by influencers

KEY COGNITIVE BIASES IMPACTING VACCINE HESITANCY

AVAILABILITY BIAS



The more we can picture it, the more important it is.

OPTIMISM BIAS



We think we can beat the odds.

SOCIAL NORMS



We routinely conform to the prevailing social behavior.

FRAMING LOSS VS. GAIN



We value avoiding a loss more than winning a gain.

OMISSION BIAS



We prefer to take no action rather than risk being the cause.

CONFIRMATION BIAS



We only accept research or facts that support our view.

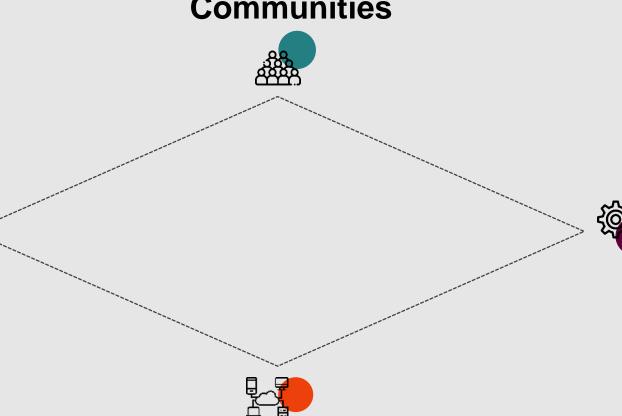
BUILDING RESILIENT IMMUNIZATION SYSTEMS

Policymakers &

Government

Authorities

Individuals & **Communities**



HCPs & Health Systems

Private Sector

Disease Re-emergence: **Measles on the Rise**



(d) World Health Organization

New measles surveillance data for 2019

New measles surveillance data is now available on the WHO website. This preliminary data is based on country reports submitted to WHO at ...



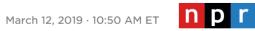


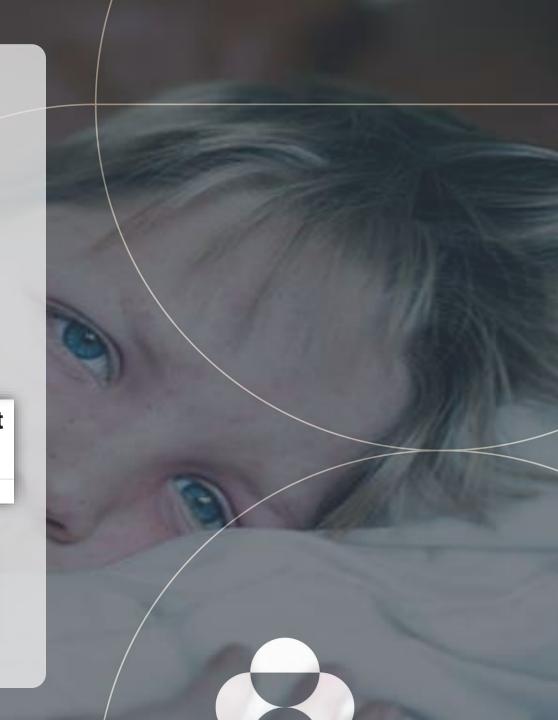
Four European countries lose measles-free status as anti-vax movement drives outbreaks

Philippines has third highest measles rate - WHO

Sheila Crisostomo (The Philippine Star) - August 27, 2019 - 12:00am

Measles Is Spiking Around The Globe. How Worried Should We Be?





Building Resilient HPV Vaccination Programs

- Generating data about burden of disease and safety and efficacy of vaccines
- Increasing manufacturing capacity
- Multi-sector engagement to anticipate and manage unique vaccine hesitancy challenges
- Supporting capacity building efforts and strengthening program implementation



Building Resilience during a Global Health Emergency

Unwavering support to help address the Ebola outbreak in Democratic Republic of the Congo

Commitment to initiate additional production and increase the stockpile of V920 investigational vaccine

More than 245,000 doses have been donated to date





BUILDING RESILIENT IMMUNIZATION SYSTEMS







Thank You

