

# Measles Part II:

## *Cause and Effect of Vaccine Misinformation: A Case Study in Minnesota*

Presentation to Washington Vaccine Update

October 27, 2017

Twitter: InfectiousPS



# Disclosures

This activity is coprovided by WithinReach and Cardea Services.

Successful completion of this continuing education activity includes the following:

- Attend the entire conference
- Complete an online evaluation at <http://www.surveygizmo.com/s3/3840875/WA-Vaccine-Update-Learner-Evaluation>
- Complete an online certificate request at the link above

If you have any questions about this CE activity, contact Margaret Stahl at [seattle@cardeaservices.org](mailto:seattle@cardeaservices.org) or (206) 447-9538



# Disclosures

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# Disclosures

Richard Fischer, MD is a member of an Organon speaker's bureau.

Dr. Fischer does not participate in planning in which he has a conflict of interest, and he ensures that any content or speakers he suggests will be free of commercial bias.

None of the other planners and presenters of this CE activity have disclosed any conflict of interest including no relevant financial relationships with any commercial companies pertaining to this CE activity.

There is no commercial support for this presentation



# Acknowledgement

The Washington Vaccine Update is hosted by WithinReach and the Immunization Action Coalition of Washington in partnership with the Washington State Department of Health and generously supported by the Community Fund of Group Health Foundation



# Learning Objectives

By the end of this session, you should be able to:

1. Describe the role of activists in disseminating vaccine information in an immigrant community
2. Discuss ways to effectively communicate with similar communities in Washington State.

## *Minnesota Sees Largest Outbreak of Measles in Almost 30 Years*

By CHRISTOPHER MELE MAY 5, 2017



Amira Hassan of Burnsville, Minn., and her father, Mohamud, at the Children's Minnesota specialty clinic in Minneapolis on Tuesday.

Health officials are grappling with the largest outbreak of [measles](#) in Minnesota in almost 30 years, which is mainly sickening young children of Somali immigrants who fell under the sway of anti-vaccination activists.

# MEASLES



is **highly contagious** and spreads through the air when an infected person **coughs or sneezes**.



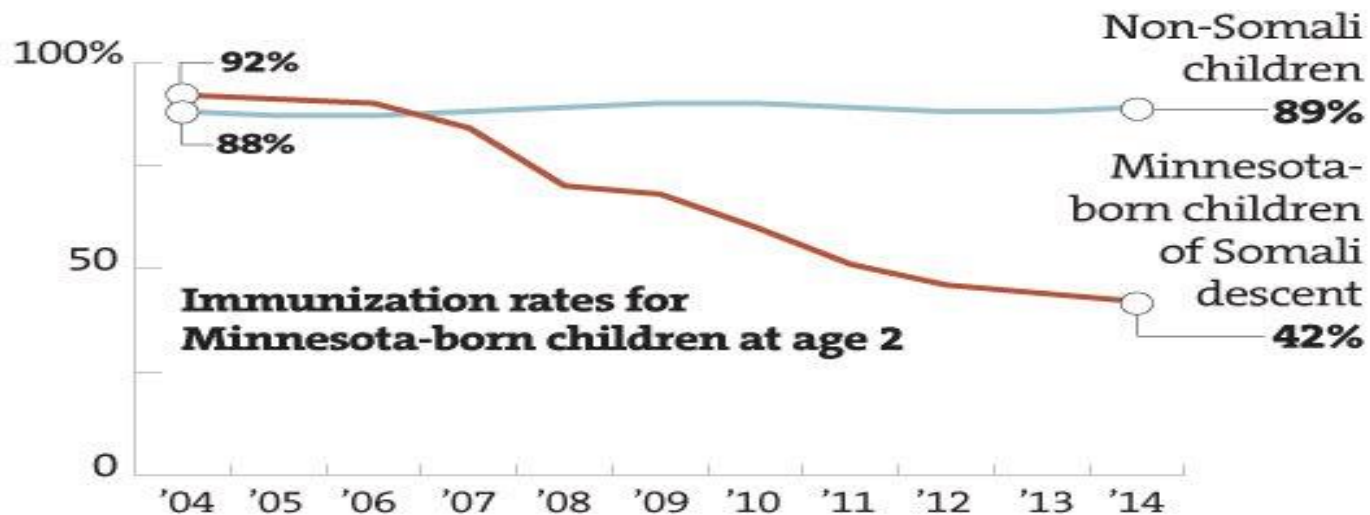
It is so contagious that if one person has it, **9 out of 10 people** of all ages around him or her will also become infected if they are not protected.



# *“The Somali Community was Targeted”*

## **SOMALI VACCINATION RATES FALL**

The Somali backlash against the measles vaccine is new; their kids' vaccination rates matched the general population until 2008, when fears of a link between the vaccine and autism sparked a reaction among Somali parents.



Source: Minn. Dept. of Health

MARK BOSWELL • Star Tribune

MMR uptake among Somali immigrants in Minnesota: This is the effect of nearly a decade of antivaccine propaganda.

Source: MN Department of Health

# Effects of Misinformation



# World Health Organization States:

Accessed 10.16.17

- Measles is one of the leading causes of death among young children even though a safe and cost-effective vaccine is available.
- In 2015, there were 134,200 measles deaths globally – about 367 deaths every day or **15 deaths every hour**.
- Measles vaccination resulted in a 79% drop in measles deaths between 2000 and 2015 worldwide.
- In 2016, about 85% of the world's children received one dose of measles vaccine by their first birthday through routine health services – up from 73% in 2000.
- During 2000-2015, measles vaccination prevented an estimated 20.3 million deaths making measles vaccine one of the best buys in public health.

# WHO : *Unacceptable tragedy*



INDEPENDENT

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## Measles kills 35 people in Europe as disease spreads through un-vaccinated children, warns WHO

Majority of fatalities in Romania, which has seen a 'substantial drop in immunisation coverage'

[Katie Forster](#) Health Correspondent | [@katieforster](#) | Wednesday 12 July 2017 07:30 BST | [0 comments](#)



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# Measles

IT ISN'T JUST A LITTLE RASH



About 1 out of 4 people who get measles will be hospitalized.



1 out of every 1,000 people with measles will develop brain swelling (encephalitis), which may lead to brain damage.



1 or 2 out of 1,000 people with measles will die, even with the best care.



[WWW.CDC.GOV/MEASLES](http://WWW.CDC.GOV/MEASLES)

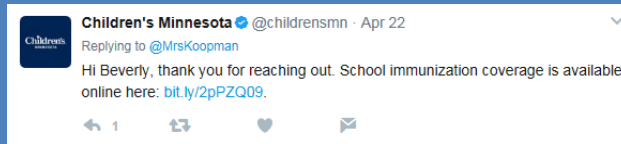
# Voices from our parents

- *Had I known the “M” in MMR was for measles, I never would have skipped it. Measles is what my sister died of in Somalia!*
- *All I knew was that when I came to America, don’t take “the triple shot.” I didn’t know why but now I have evidence of how dangerous it is to not protect your children.*
- *I didn’t think there was measles in the US. So I was more afraid of autism than measles so I didn’t get MMR. I am telling all of my family and friends now to get the MMR because my child could have died from measles here like her cousin did in Somalia.*

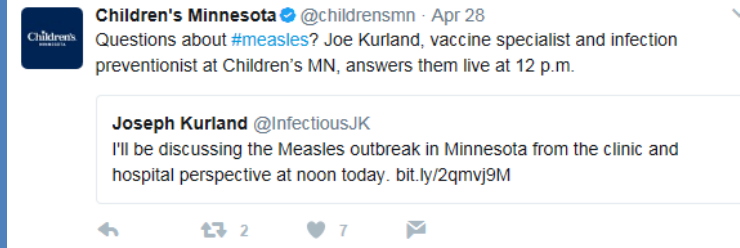


# Ways to Combat Misinformation: Social Media Outreach

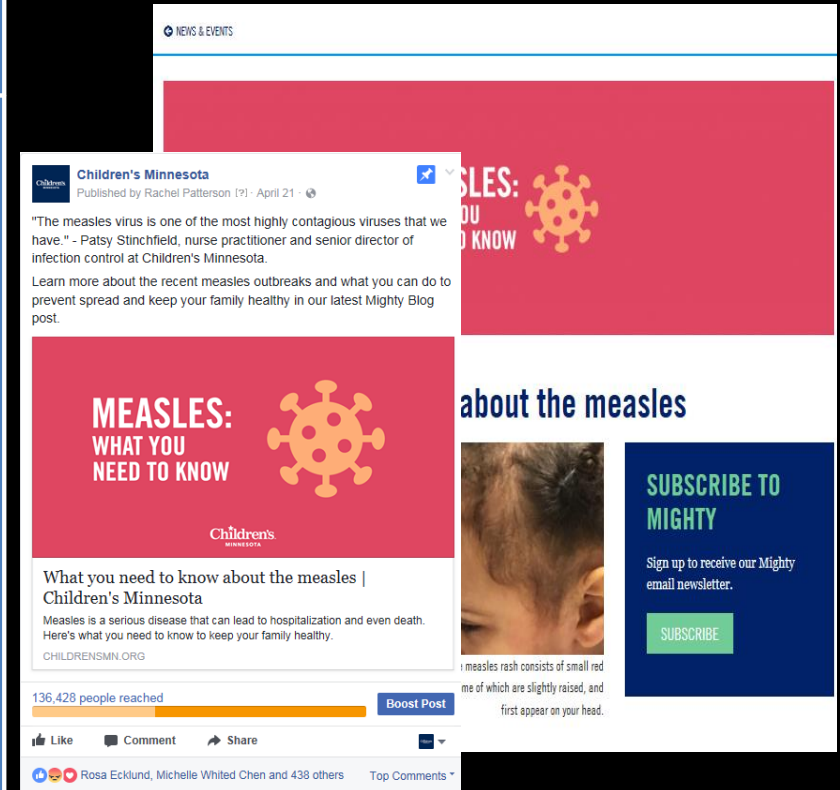
## COMMUNITY MANAGEMENT AND RESPONSE



## SOCIAL MEDIA ORGANIC



## BLOG PROMOTED ACROSS SOCIAL MEDIA



TOTAL IMPRESSIONS

390,458

TOTAL ENGAGEMENTS

1,197

# Digital Media

Children's  
MINNESOTA


MYCHILDREN'S LOGINEMPLOYEE & PHYSICIAN LOGINTRANSLATE

How can we help you today?

YOUR VISITCARE & SERVICESFOR HEALTH PROFESSIONALSUPPORT CHILDREN'S


NEWS & EVENTS

HOT TOPICS



Measles


Measles is an extremely contagious respiratory disease caused by a virus. It spreads in the air through coughing and sneezing and can live for up to two hours on surfaces or in an airspace where an infected person has coughed or sneezed. While no longer common in the U.S., it is still common in many other countries and may be brought into the U.S. by unvaccinated travelers. The best way to prevent measles is to be fully vaccinated.



Our Experts

Patsy Stinchfield, MS, RN, CPNP, is an infectious disease nurse practitioner and Director of Infection Prevention and Control and the Children's Immunization Project at Children's Minnesota. She is a widely-recognized infectious diseases specialist and expert on vaccinations and immunizations, and has served as a source for the Associated Press, The New York Times, USA Today and more.

[Contact our media relations team](#) to contact our experts.



NEWS & EVENTS

MIGHTY BLOG




The Mighty Blog features stories from around Children's, as well as health and wellness information for raising healthy kids.

What you need to know about the measles

While no longer common in the U.S., recent measles cases in Minnesota have prompted cause for concern. Measles is a serious disease that can lead to hospitalization and even death.

MEASLES: WHAT YOU NEED TO KNOW



Infectious DiseasesMighty Blog

## PARENT PAGE

### FOR HEALTH PROFESSIONALS

OVERVIEW | CHILDREN'S PHYSICIAN ACCESS | EDUCATION | RESOURCES FOR HEALTH PROFESSIONALS | HEALTH PROFESSIONAL NEWS

## Measles toolkit for health professionals

Children's Minnesota, in partnership with the Minnesota Department of Health, is currently managing a measles outbreak. In response, all usual safety and protective measures have been implemented to minimize spread in our hospitals and clinics. Measles is a highly contagious virus and therefore the number of confirmed cases and exposed people continue to increase. We believe we must work together as healthcare providers to stop the spread of the disease and educate the community on the importance of immunization.

Since this outbreak was first identified in a Children's patient, we have developed and implemented several key documents, processes, and procedures to help our clinicians manage the increasing needs for services. Because the situation continues to evolve and the number of exposed people in the community has extended beyond our walls, we are offering the following resources to providers in and out of our network in an effort to help others manage the situation within their own healthcare facilities.

Thank you for your commitment to the health and well-being of the communities we serve.



- Health provider landing page
- Provider letters
- Exposed patient letters
- Clinic patient letters

**Hospitals & clinics  
posters & signage**

## Educational resources

## Postcards

## Internal staff talking points

[illegible]



**BBC World News**



**NBC Nightly News**

**CBS NEWS**

## Behind Minnesota's worst measles outbreak in nearly 30 years



**CBS This Morning**

**CBS THIS MORNING**

MAY 9, 2017, 8:12 AM | Health officials in Minn. say the state has its worst measles outbreak in nearly 30 years. Most of those with the disease are unvaccinated Somali-American children. The state's health commissioner says the Somali community has been targeted with misinformation about vaccine risks. Jamie Weiss reports.

**wbur 90.9**

**h&N Here & Now**

**National Public Radio**

## 9 Cases Of Measles Confirmed In Minnesota

05:26



April 18, 2017

Health officials in Minnesota have confirmed nine cases of measles in the state, all in children who have not been vaccinated. There have also been recent cases of measles in Nebraska, Michigan and Texas. Experts say it could be a bad year for measles globally.

Here & Now's Meghna Chakrabarti speaks with [Patsy Stinchfield \(@InfectiousPS\)](#), senior director of infection prevention and control at Children's Hospitals and Clinics of Minnesota.



# The Washington Post

WASH. POST • MAY 5, 2017 • Edition: Metro • Thursday • Page: A1

Democracy Dies in Darkness

SAURDAY, MAY 5, 2017 • B2

## Md. clears immigrant teens in rape case

Inconsistencies are cited in dropping of charges that caused national stir

BY DAN MORRIS  
AND ANN E. MAXIMOW

Maryland prosecutors said they will drop rape and sex offense charges against two immigrant teens accused of attacking a 14-year-old classmate in a high school bathroom stall in a case that attracted international and White House attention and fueled the debate about illegal immigration into the United States. After a court hearing Friday morning, prosecutors said they will drop the two counts against the teens, who are from Somalia, and one count against the 16-year-old girl, who is from Somalia.

"The facts of this case do not support the original charges," said Montgomery County State Attorney John McCraw. "The evidence is not sufficient to prove the charges."

At the hearing, prosecutors said the rape case, they began pursuing, arose from a misunderstanding of the charges. During the course of the investigation, according to court records and documents, the charges were dropped.

Prosecutors did not describe the charges or the facts of the case. The charges were dropped by the state's attorney general, who is in charge of the state's legal affairs. The charges were dropped by the state's attorney general, who is in charge of the state's legal affairs.

## Trump transition officials warned Flynn about ties to Russian envoy

BY GREG MILLER  
AND ADAM ENGLISH

Former national security adviser Michael Flynn was warned by senior members of President Trump's transition team about the risks of his contacts with the Russian ambassador's aide before the December call that led to Flynn's forced resignation, U.S. officials said.

Officials were so concerned that Flynn did not fully understand the nature of the Russian ambassador's aide that Flynn's resignation was not a surprise, U.S. officials said.

## IN SUNDAY'S POST

**Spring Dining Guide:** Food critic Tom Scharoun surveyed the area to visit at 27 restaurants, both old and new. Here is what he found. [Magazine](#)

**Just being herself** A year after drama over her on-air husband's departure to another show, Kelly Ripa remains daytime television's master of spontaneity. [Arts & Style](#)



Somali father holds his son, Leeson, 9, at their apartment in Englewood, Minn., late last month. Leeson and his 15-month-old sister both contracted measles recently. Neither were vaccinated. Brother Abdulhadi, left, 8, did not get sick and has been vaccinated.

## Anti-vaccine rhetoric fuels scary reality

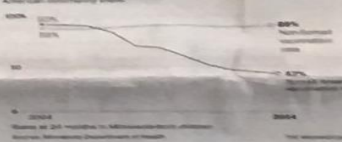
Minnesota faces major measles outbreak after groups sow autism fears in Somali American community

BY LARA M. SHIM  
IN MINNEAPOLIS

The young mother started getting sick early on from friends in the immigrant community here. Don't let your children get the vaccine for measles, mumps and rubella, it causes autism, they said. Abdulhadi, 8, said.

### A plummeting vaccination rate in Minnesota

The vaccination rate for measles, mumps and rubella (MMR) is falling sharply in Minnesota, according to a new survey. The survey found that the vaccination rate for MMR in Minnesota is 80%, down from 90% in 2014.



"I thought, 'You're in America, I'm in a safe place and my kids will never get sick,'" said Leeson's mother, who has lived in Minnesota for more than a decade. Growing up in Somalia, she had heard that it was a child's duty to get the vaccine at age 2.

MINNEAPOLIS (AP) — A Somali American community in Minnesota is facing a major measles outbreak after groups sowed fears about the vaccine's safety.



Wind's in the east; mist comin' in

A recent May Prognosis for the weather: a stormy night Friday, with a growing body of clouds moving in from the west. The clouds are expected to bring rain and snow Saturday but shouldn't bring quite so much precipitation. [Weather](#)

## Republican senators catch the health-care hot potato

Ask lawmakers among skeptics of House bill

BY BRUNO BUREAU

LETTER FROM — In one corner of the Capitol Hill, a group of lawmakers are gathered around a table, discussing the House bill to repeal and replace the Affordable Care Act.

SEN. LEE (R-OKLA.) — "I'm not a fan of the House bill," he said. "I'm not a fan of the House bill."

SEN. CANTWELL (R-ORE.) — "I'm not a fan of the House bill," he said. "I'm not a fan of the House bill."

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"I would disagree with the notion of even a transition, that it is not the House's job to pass the bill. It is the Senate's job to pass the bill."

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## INSIDE

REAL ESTATE

Update via a throwback

Update via a throwback

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JOB

Unemployment hits a low

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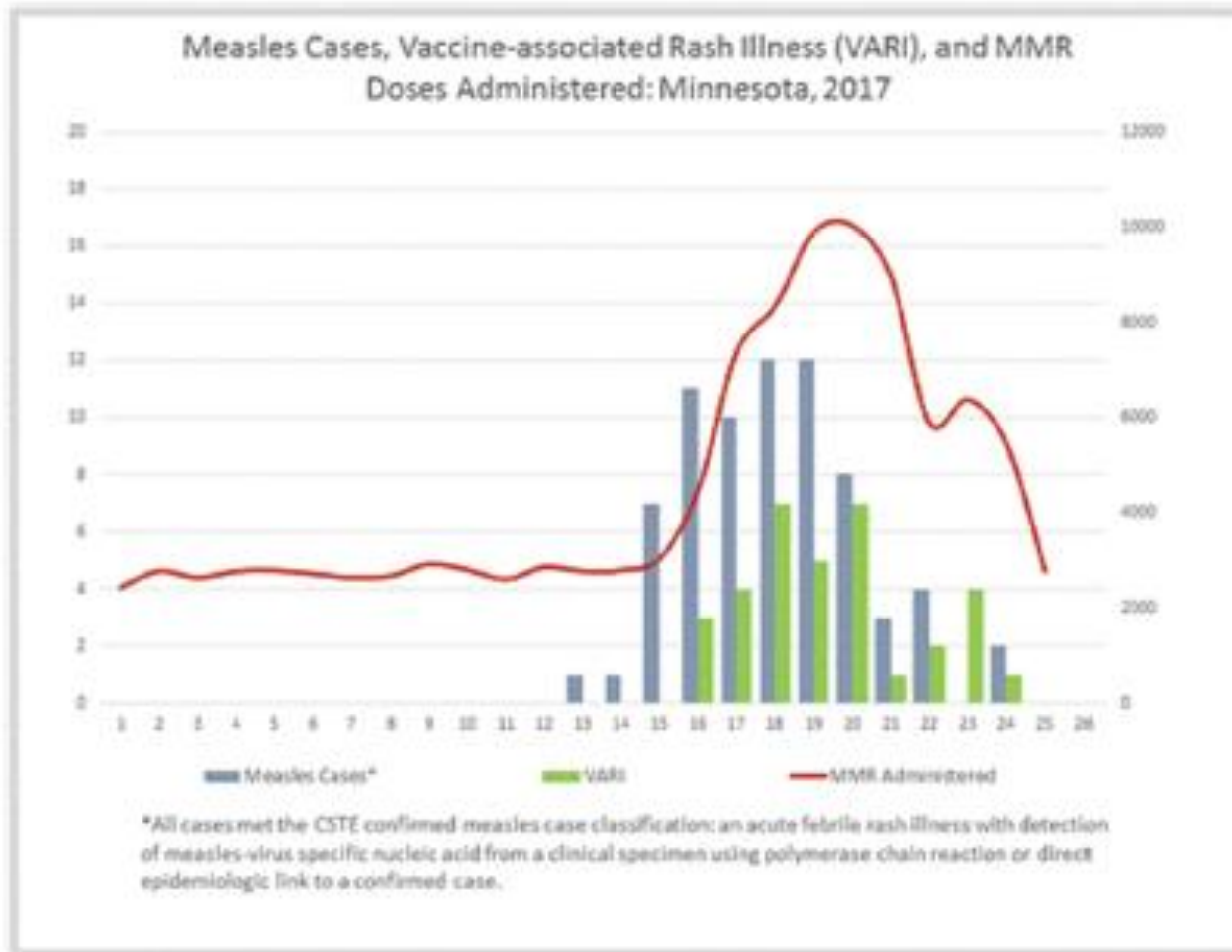
# Work directly with the Somali Community

- Somali Employee resource group
- Somali Clinicians Listening dinner
- Somali Imam meetings
- Ramadan Eid meeting and dinner
- Public Meetings
- Day to Day 1:1
- Phone conversations and really listening
- Translated materials



# Sorting the Wheat from the Chaff: Vaccine-Associated Rash Illness Occurring Amidst a Large Measles Outbreak—Minnesota, 2017

Karen Martin, MPH; Rajal Mody, MD, MPH;;p Malinini Desilva, MD, MPH et al OFID 2017:4 (Suppl 1)



# Sorting the Wheat from the Chaff: Vaccine-Associated Rash Illness Occurring Amidst a Large Measles Outbreak—Minnesota, 2017

Karen Martin, MPH; Rajal Mody, MD, MPH;;p Malinini Desilva, MD, MPH et al OFID 2017:4 (Suppl 1)

**Results.** Over **42,000 MMR doses above expected** were administered during the outbreak. We identified 71 measles cases and 30 VARI.

- The median age of VARI patients was 1.2 years (range 10 months–48 years) and for measles cases 2.8 years (range 3 months–57 years).
- VARI diagnosis increased with rising MMR administration (figure);
- rash onset occurred a median of 11 (range 7–18) days after MMR receipt.
- Most VARI (97%) occurred following first MMR dose.
- The presence of fever was similar among VARI and measles cases (97% of VARI vs. 100% of measles cases;  $P = 0.12$ ), but
- differences were seen in the proportion with
  - cough (30% vs. 96%;  $P < 0.001$ ),
  - coryza (47% vs. 85%;  $P < 0.001$ ),
  - conjunctivitis (23% vs. 68%;  $P < 0.001$ ), and
  - exposure to infectious measles cases (0% vs. 96%).

# Worst Case Effect of Misinformation: Fatal complications

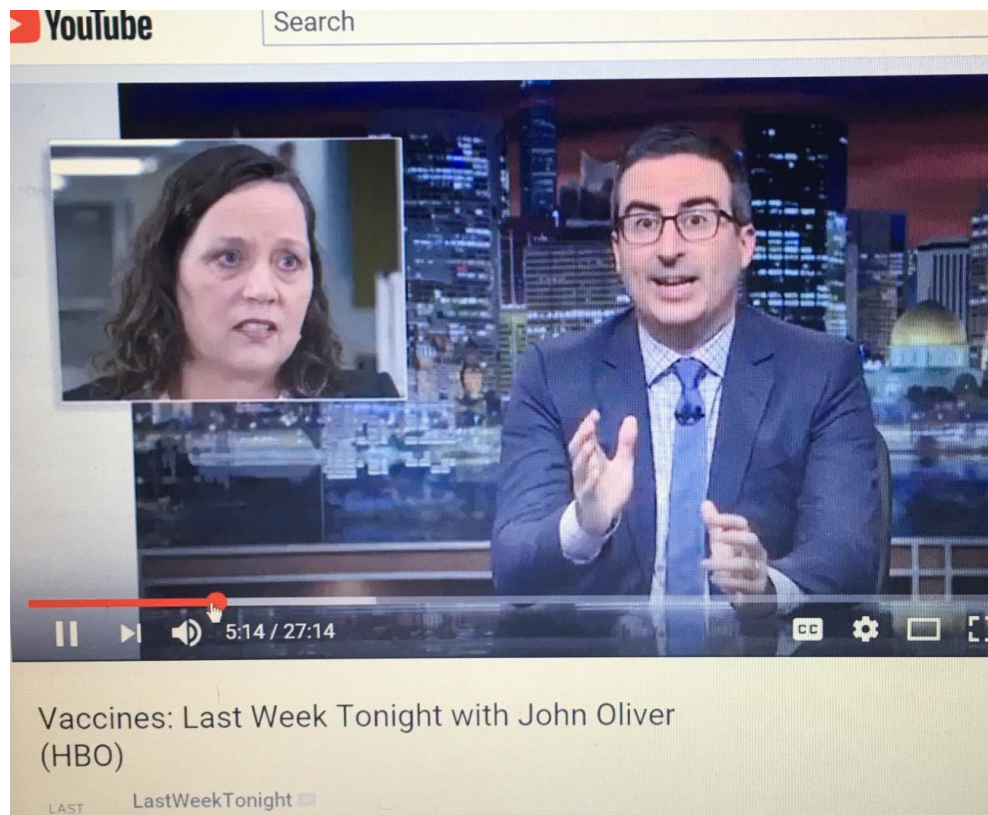
- **SSPE**—[cdc.gov/measles/complications](https://cdc.gov/measles/complications) Accessed 10.16.17
- *Subacute sclerosing panencephalitis (SSPE) is a very rare, but fatal disease of the central nervous system that results from a measles virus infection acquired earlier in life. SSPE generally develops 7 to 10 years after a person has measles, even though the person seems to have fully recovered from the illness. The risk of developing SSPE may be higher for a person who gets measles before they are two years of age. Death usually occurs 1-3 years after diagnosis.*



# Who do young parents trust?

## John Oliver *Last Week Tonight*

- Over 7 million YouTube views and 3.3 million on Facebook (29K likes and 2500 comments)





Thomas Edison



“The greatest  
medicine of all  
is to  
teach people  
how not  
to need it.”