

(How) Should We Fight Misinformation on Social Media?

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The Brookings Institution

What are Social Media Platforms?

It depends!

-Socrates

What are Social Media Platforms?

- Distributors of content created by others
 - A figurative blank piece of paper that anyone can write anything on it.
 - Do not bear any responsibility over the content they distribute.
- Publishers of content
 - Have editorial capabilities and privileges.
 - Users rely on them as their main source of news.
 - Sometimes they even convey credibility and prestige

Editorial Responsibility of Social Media Platforms

- Although social media companies are becoming eerily similar to traditional publishers, we cannot hold them to the same standards, yet.
- Sheer volume of content: **183 years** of NYT is published in **1 day** on Twitter.
- The use of AI is inevitable.

Can Machines Help?

- Not much, unless they are used selectively.
 - Type of content changes
 - Tone of content changes
 - Identifying misinformation, especially those that are crafted thoughtfully, requires human judgment, just like ransomware attacks.
 - Even if they could, they will be expensive, economically and politically.

Recommendation

- We do not want to win the battle and lose the war.
- Use human experts to choose the battles.
- Do not produce martyrs online who will be heroes offline.
- Provide information to fight the misinformation.

Thank you!

Let's stay in touch:

 @niamyaraghi



VACCINE SAFETY NET

Panel “Inoculating Misinformation on the Internet”
National Vaccine Advisory Committee
U.S. Department of Health and Human Services

- What is the Vaccine Safety Net and what are the goals
- Quick facts about the Network
- VSN evaluation process and VSN visual identity
- VSN contribution against vaccine misinformation on the internet
 - *VSN portal and VSN on social media*
 - *VSN web analytics*
 - *VSN - Vaccine Safety chatbot*



THE VACCINE SAFETY NET



Is a WHO verified worldwide network of websites that provide reliable information on vaccine safety on the web.

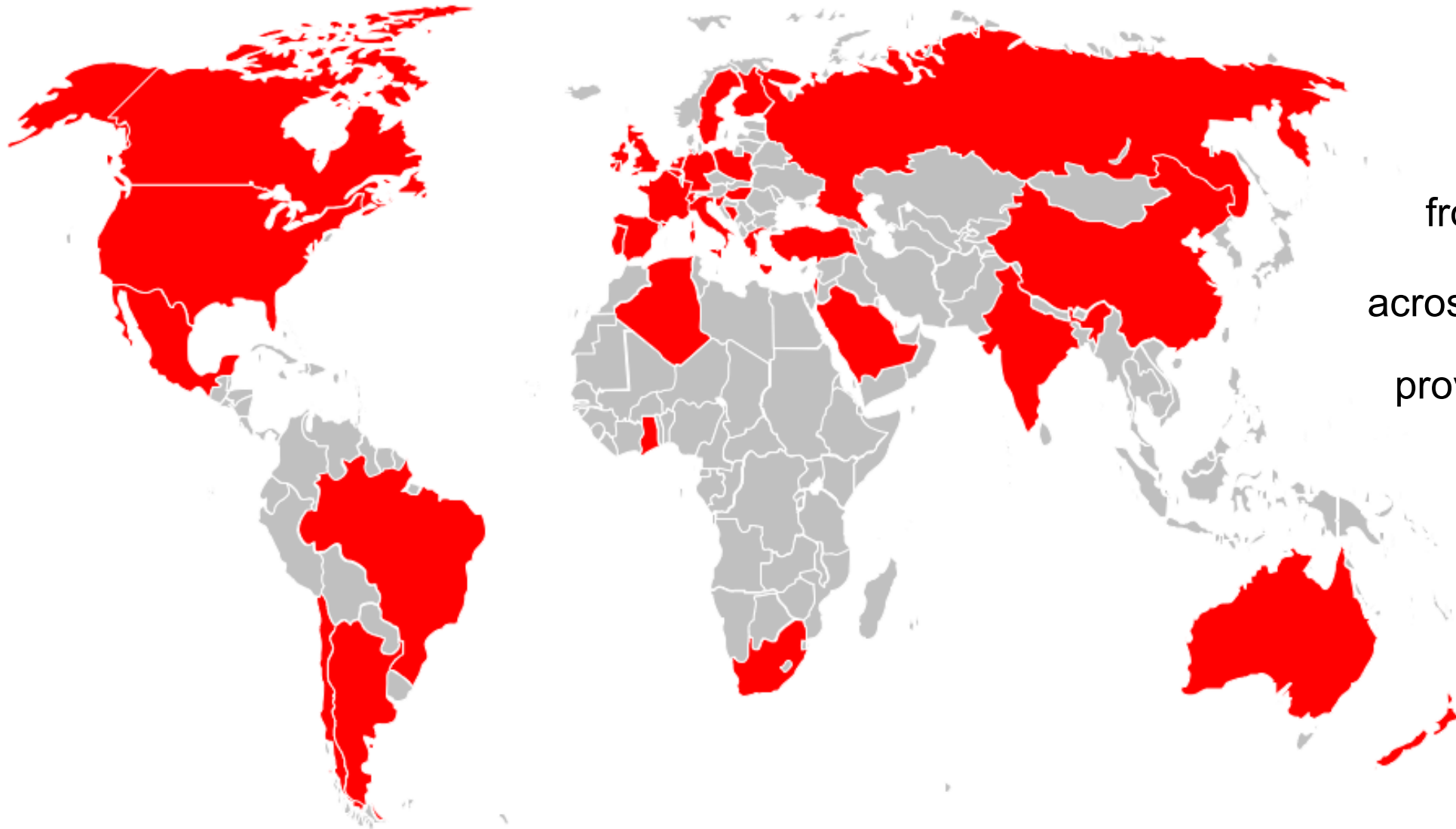


VSN BACKGROUND

- ❑ Established in 2003 to counterbalance groups using the internet to question the utility of vaccination and websites providing unbalanced, misleading and alarming vaccine safety information
- ❑ Key player: the [GACVS](#) defined criteria for good information practices (VSN [criteria](#)) against which each website is evaluated

VSN GOALS

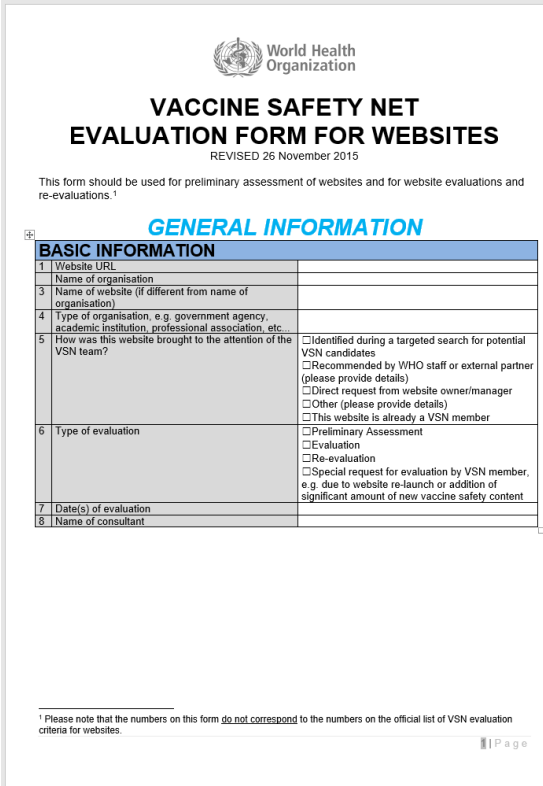
- ❑ To **facilitate** easy access to reliable, understandable, evidence-based information on the safety of vaccines for internet users, regardless of their geographic location and language
- ❑ To **collaborate** at an international level to increase awareness about vaccines, reduce vaccine hesitancy and strengthen confidence in vaccines by:
 - seeking to better understand internet users' needs, behaviours and preferences;
 - providing reliable information tailored to users' needs;
 - communicating vaccine safety information through a diversity of digital channels.



82 websites,
from 36 countries
across 6 WHO regions,
providing information in
26 languages

WEBSITES' EVALUATION PROCESS

- ❑ **PROCESS:** candidate organizations can self-nominate or be nominated
- ❑ **PRELIMINARY SCREENING:** inclusion versus exclusion criteria
- ❑ **FORMAL SCREENING:** Completed by experimented assessors and monitored by the VSN Secretariat
- ❑ Websites are evaluated based on established criteria related to
 - Website's **credibility** and **content** (mandatory)
 - Website's **accessibility** and **design** (desired)



World Health Organization

**VACCINE SAFETY NET
EVALUATION FORM FOR WEBSITES**
REVISED 26 November 2015

This form should be used for preliminary assessment of websites and for website evaluations and re-evaluations.¹

GENERAL INFORMATION

BASIC INFORMATION	
1 Website URL	
2 Name of organisation	
3 Name of website (if different from name of organisation)	
4 Type of organisation, e.g. government agency, academic institution, professional association, etc.	
5 How was this website brought to the attention of the VSN team?	<input type="checkbox"/> Identified during a targeted search for potential VSN candidates <input type="checkbox"/> Recommended by WHO staff or external partner (please provide details) <input type="checkbox"/> Direct request from website owner/manager <input type="checkbox"/> Other (please provide details) <input type="checkbox"/> This website is already a VSN member
6 Type of evaluation	<input type="checkbox"/> Preliminary Assessment <input type="checkbox"/> Evaluation <input type="checkbox"/> Re-evaluation <input type="checkbox"/> Special request for evaluation by VSN member, e.g. due to website re-launch or addition of significant amount of new vaccine safety content
7 Date(s) of evaluation	
8 Name of consultant	

¹ Please note that the numbers on this form do not correspond to the numbers on the official list of VSN evaluation criteria for websites.

Page

VSN VISUAL IDENTITY



Vaccine Safety Net Member

Immunize Canada is a proud member of the Vaccine Safety Net.

The Vaccine Safety Net is a global network of websites, evaluated by the World Health Organization, that provide reliable information on vaccine safety.

To learn more, visit [Vaccine Safety Net](#).



Vaccine Safety Net Member



Member of the Vaccine Safety Net



Il portale dell'epidemiologia per a cura del Centro nazionale per la prevenzione dell'Istituto superiore di sanità

Malattie e condizioni di salute ▾ Vivere in salute ▾ Governance sanità

Vaccini e vaccinazioni / Home

Informazioni generali

- cosa sono e come funzionano i vaccini
- come viene sviluppato e commercializzato un vaccino
- malattie prevenibili da vaccino
- perchè vaccinarsi?

News

- ultimi aggiornamenti
- archivio

Vaccinazioni in Italia

Coperture vaccinali

Vaccini e vaccinazioni

Sicurezza vaccinale e comunicazione: l'OMS

27 ottobre 2016 - EpiCentro è nel Vaccine Safety... della sanità (Oms). Il network, nato nell'ambito della mira a fornire a operatori sanitari, istituzioni di salute accesso a informazioni scientificamente corrette e affi dei diversi Paesi. Dopo un percorso di valutazione, inf poiché adempie a tutti i criteri di buona pratica in mal



Vsn EpiCentro e Vsn Siti del Network



murcia + salud
El portal sanitario de la Región de Murcia

Savjeti i novosti o zdravlju + Vakcinacija



Vakcinacija - imunizacija



- O značaju vakcinacije
- Mehanizam djelovanja vakcina
- Klasifikacija vakcina
- Kontraindikacije za vakcinaciju
- Nepoželjne reakcije na vakcinu
- Vakcinama preventabilne zarazne bolesti
 - Tuberkuloza (TBC)
 - Hepatitis B

- Savjeti i novosti o zdravlju
- » Trudnoća i bebe
 - » Djeca
 - » Mladi
 - » Žene
 - » Muškarci
 - » Treća dob
 - » Mentalno zdravlje
 - » Oralno zdravlje
 - » Zdravlje porodice
 - » Vakcinacija



IAP Advisory Committee On Vaccines & Immunization Practices.

Welcomes You

TO MOBILE APP ΤΟΥ ΚΛΙΝΙΚΟΥ ΦΑΡΜΑΚΟΠΟΙΟΥΣ.GR!



Manual de VACUNAS · AEP

en línea



Jornadas de Alicante, 13 y 14 de abril de 2016

Presentaciones descargables

Continuum. Curso básico online

Del 7 de febrero al 7 de junio de 2018



Web acreditada por la OMS



The portal serves as the VSN's hub on the Internet with the following characteristics:

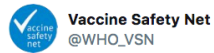
- A portal with a combined public and members-only area of the website.
- Present and promote VSN
- Present, promote and support the VSN members and their work
- Facilitate and encourage exchange and collaboration among VSN members and relevant stakeholders

□ VSN social media strategy

- ❖ communicating vaccines' risks and benefits
- ❖ engaging in support of public health campaign to raise awareness
- ❖ increase knowledge and vaccine safety literacy

□ Future plans

- ❖ expanding reach and diversifying platforms
- ❖ documenting learning and insights gained from interactions
- ❖ Facebook, Twitter, Google and influencers



Replying to @WHO_VSN @VaccinesToday and 29 others

Make sure you get your vaccine information from reputable sources.

Look for the VSN member logo to make informed decisions from reliable evidence-based information.

Get the facts, get the vaccine.

#VaccinesWork



Celebrating VSN Membership



The 15th Annual
African Vaccinology Course
4 - 8 November 2019

#FeatureFriday



The objective of this Network based international collaboration is to design data driven vaccine safety digital information and communication strategies based on VSN members' websites & social media analytics, social media listening and audience analysis.

VSN WEB ANALYTICS PROJECT

Define the audience

Find the audience that engages with a certain topic using keyword or content based queries



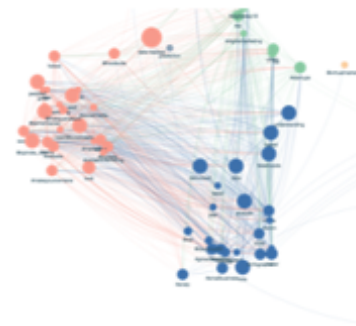
Segment the audience

Break down the audience in communities of taste and affinity profile



Cluster the conversation

Understand how different communities in the same audience talk about the same topic differently



Personalize the message

Tailor copy, creative, targeting and spend to articulate the message across your key audience personas

Spend
Phasing
Weighting

Targeting
Audiences
Influencers

Message
Attitudes
Language
Topics
Behaviours
Occasions
Mindsets



VACCINE SAFETY CHATBOT



World Health Organization

Hello and welcome to the Vaccine Safety Network personal assistant!



Say 'hello' and I will tell you what you can do!

- Sharing the chatbot
- Document users' information needs
- Grow the chatbot knowledge base
- Continuously improve the delivery of tailored response
- Broaden the audience outreach

THE VACCINE SAFETY NET

- **International health partnership**
- **Digital vaccine safety information and communication strategies**
- **Global good**

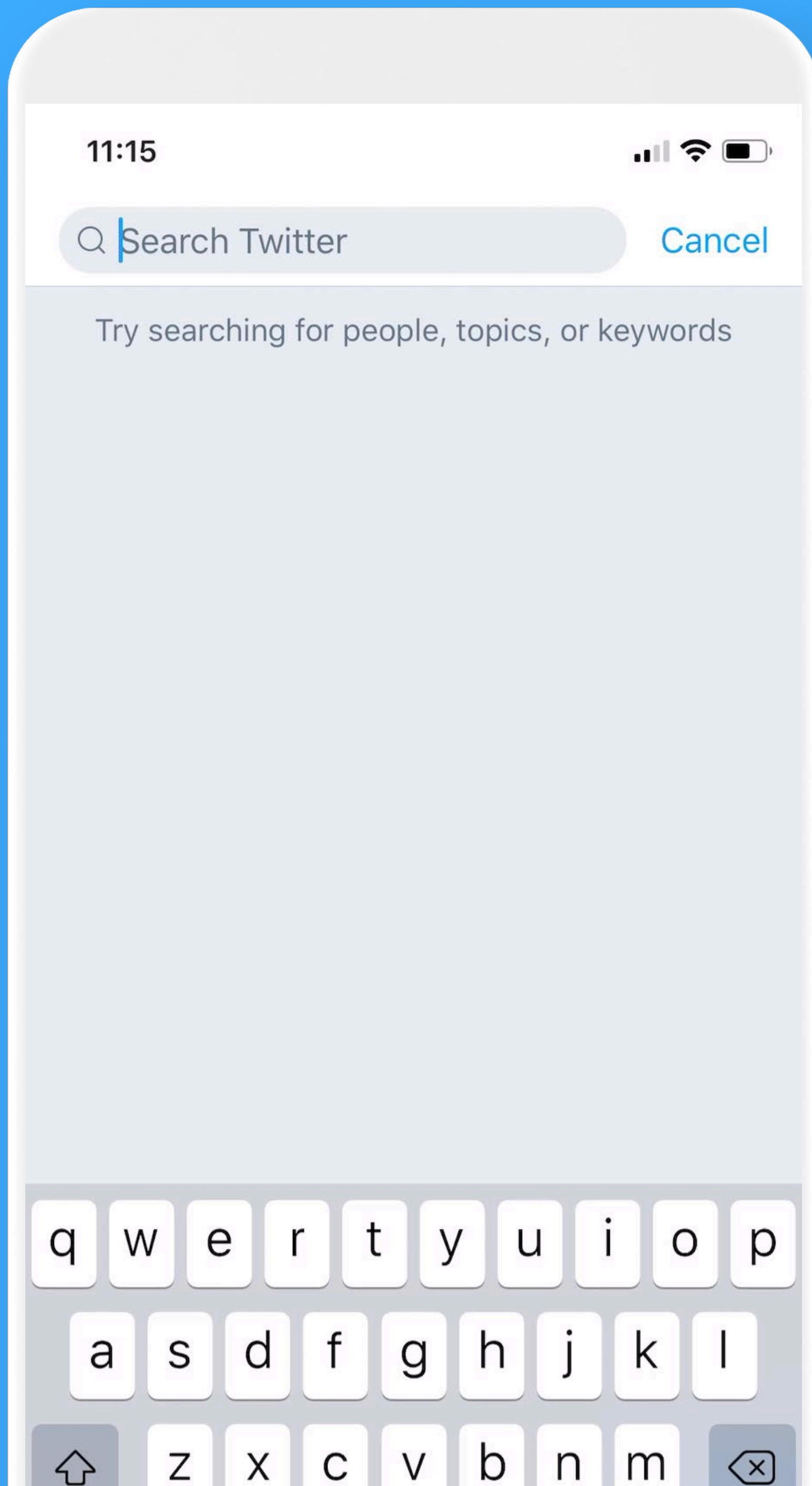


Thank you!





**#ThereIsHelp
Vaccines**



#ThereIsHelp



#ThereIsHelp



Argentina AR
Bolivia BO
Brazil BR
Canada CA
Chile CL
Colombia CO
Costa Rica CR
Dominican Republic DO
Ecuador EC
El Salvador SV
Guatemala GT
Germany DE
Honduras HN
Hong Kong HK
Indonesia ID
Ireland IE
Japan JP

Korea KR
Malaysia MY
Mexico MX
Nicaragua NI
Panama PA
Paraguay PY
Peru PE
Philippines PH
Singapore SG
Spain ES
Taiwan TW
Thailand TH
UK GB
Uruguay UY
US US
Venezuela VE



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Prompts



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Countries



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Languages



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Official Sources of Information



#WorldImmunizationWeek

April 2020

NVAC Feb. 14, 2020 Meeting

Vaccine Misinformation: The Role of Social Media

Ana Santos Rutschman
Saint Louis University School of Law
Center for Health Law Studies

Vaccine Misinformation

- **Definitional Questions**
 - Vaccines per se
 - Vaccination laws/policies
 - Ownership of vaccine technology

Vaccines

YOUR HEALTH

Lancet Renounces Study Linking Autism And Vaccines

February 2, 2010 · 12:25 PM ET

Source: NPR



National Vaccine Injury Compensation Program

Laws/Policies

New York ends religious exemption to vaccine mandates

By DAVID KLEPPER June 14, 2019

Source: AP

Vaccine Tech Ownership



US010130701B2

(12) **United States Patent**
Bickerton et al.

(10) **Patent No.:** **US 10,130,701 B2**
(45) **Date of Patent:** **Nov. 20, 2018**

(54) **CORONAVIRUS**

OTHER PUBLICATIONS

(71) Applicant: **THE PIRBRIGHT INSTITUTE**,
Pirbright, Woking (GB)

Sperry Journal of Virology, 2005, vol. 79, No. 6, pp. 3391-3400.*
Altschul et al., Basic local alignment search tool. *J. Mol. Biol.* 215:
403-10 (1990).

(72) Inventors: **Erica Bickerton**, Woking (GB); **Sarah
Keep**, Woking (GB); **Paul Britton**,
Woking (GB)

Ammayappan et al., Identification of sequence changes respon-
sible for the attenuation of avian infectious bronchitis virus strain
Arkansas DPI, *Arch. Virol.*, 154(3):495-9 (2009).
Anonymous: "EM_STD:KF377577", Oct. 30, 2013.

(73) Assignee: **THE PIRBRIGHT INSTITUTE**,
Woking, Pirbright (GB)

Armesto et al., A recombinant avian infectious bronchitis virus
expressing a heterologous spike gene belonging to the 4/91 serotype,
PLoS One, 6(8):e24352 (2011).

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

Armesto et al., The replicase gene of avian coronavirus infectious
bronchitis virus is a determinant of pathogenicity, *PLoS One*,
4(10):e7384 (2009).

(21) Appl. No.: **15/328,179**

Armesto et al., Transient dominant selection for the modification
and generation of recombinant infectious bronchitis coronaviruses,
Methods Mol. Biol., 454:255-73 (2008).

(22) PCT Filed: **Jul. 23, 2015**

Ausubel et al., Short Protocols in Molecular Biology, 4th edition,
Chapter 18 (1999).

(86) PCT No.: **PCT/GB2015/052124**

Britton et al., Generation of a recombinant avian coronavirus
infectious bronchitis virus using transient dominant selection, *J.*
Virol. Methods, 123(2):203-11 (2005).

§ 371 (c)(1),

(2) Date: **Jan. 23, 2017**

Britton et al., Modification of the avian coronavirus infectious
bronchitis virus for vaccine development, *Bioeng. Bugs.*, 3(2):114-9
(2012).

The role of social media

- **Social media as vehicles for misinformation**
- **Social media as catalysts for cultural change**

Amplification

- **Social media as amplifiers of misinformation**
- **Disproportionality in message outreach**
- **Additional layer**
 - **content automatization**
 - **Broniatowski 2018 study**

Response

- **Social media as venues for curbing vaccine misinformation**

The background features several concentric, curved lines in shades of gray, some solid and some dashed, creating a sense of motion or a circular path. A dark blue rectangular box with a white border and a small white triangle at the bottom center is positioned on the left side of the slide.

Types of responses

- **Suppression approach**
- **Downgrading/reorganizing approach**
- **Other approaches**

- **Technical component**

Suppression

- Removal of content qualifying as vaccine misinformation
- May be paired with interventive steps
 - e.g. showing content from WHO, Vaccine Safety Net

Downgrading

- **Flag pre-defined search terms**
- **Contract with independent 3rd-party fact checkers**
- **Downgrade misinformation**
- **May also be paired with interventive steps**



Other

- **Free ad credits for online information campaigns (e.g. Facebook)**
- **Broader informational campaigns**
 - containing different types of health info
 - using apps
 - incentives initiatives

Technical

- **Target bots/malware**
 - **potentially also targeting accounts known for spreading misinformation**
 - **may entail targeting accurate vaccine content available online**



Legal issues

- **Public health law perspective**
- **Freedom of speech perspective**
- **Interaction with vaccine mandates**



Policy issues

- **Defining misinformation**
- **Avoiding exacerbating the divide**
- **Bringing all voices to the table**

Next steps

- **Combined approaches**
 - broad range (stretching into topics like patents, etc.)
- **Social media campaigns addressing vaccine hesitancy**
- **Proactive “counter-misinformation” campaigns beyond outbreak du jour (e.g. flu)**

NVAC Feb. 14, 2020 Meeting

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