How to respond to vocal vaccine deniers? – Experimental evidence and new best practice guidance by WHO

Foundation Mérieux Conference | 26.09.2017

Dorothee Heinemeier[a,b] | Philipp Schmid[a,b]
Cornelia Betsch[a,b] | Katrine Habersaat[c] & Noni Macdonald[d]

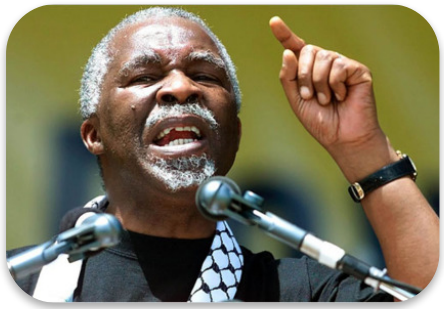
World Health Organization
REGIONAL OFFICE FOR Europe

UNIVERSITÄT ERFURT

CEREB
Center for Empirical Research in Economics and Behavioral Sciences

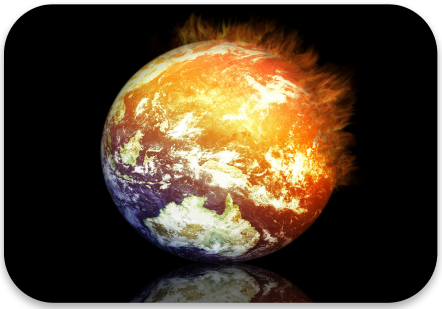
[a] Center for Empirical Research in Economic and Behavioral Sciences, University of Erfurt
[b] Department of Media and Communication Science, University of Erfurt
[c] World Health Organization (WHO), Regional Office for Europe, Denmark
[d] Dalhousie University, IWK Health Centre, Canada

Science denialism



HIV

…more than 300 000 deaths in South Africa (Chigwedere et al., 2008).



Global warming

…250 000 deaths between 2030 and 2050 (WHO, 2014).

Tobacco

…Tobacco is responsible for over 80% of lung cancer cases (WHO, 2015).

Vaccines

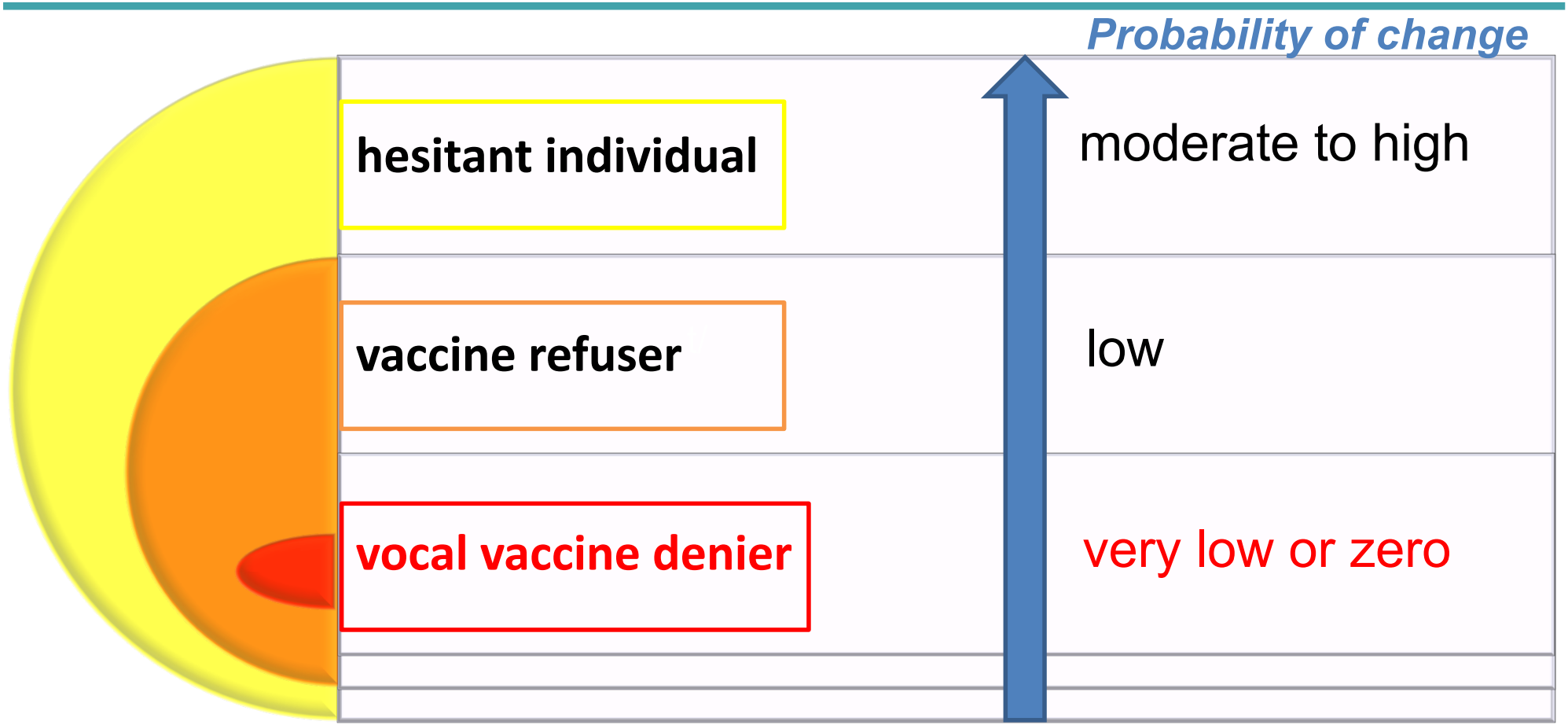
…1.5 million unvaccinated kids die yearly (UNICEF, 2014).

For further reading:

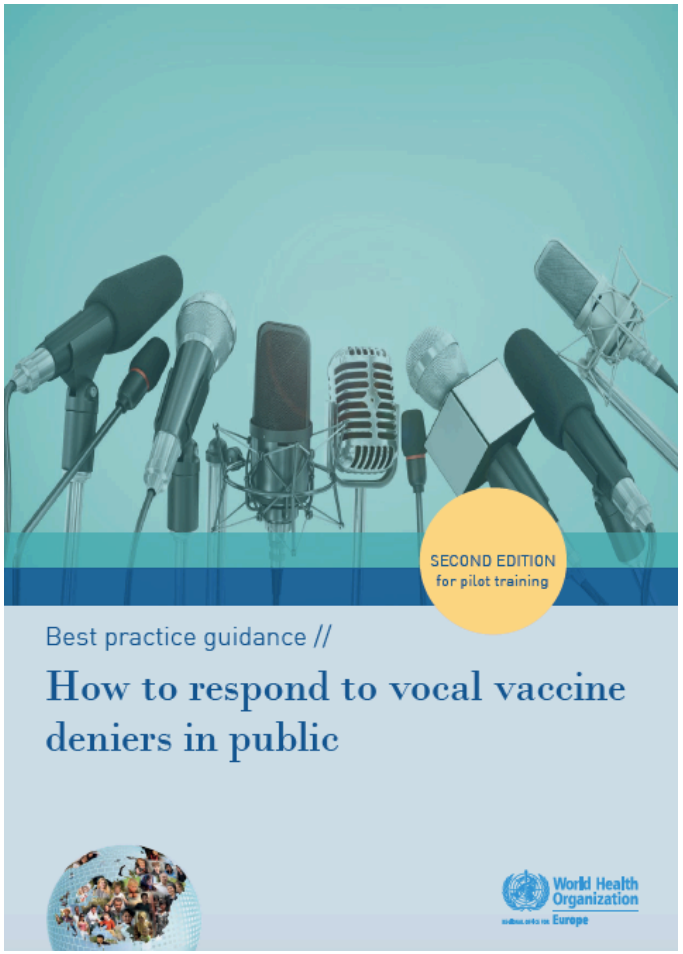
Oreskes, N., & Conway, E. M. (2010). Defeating the merchants of doubt. *Nature*, *465*(7299), 686-687.

Lewandowsky, S., Oberauer, K., & Gignac, G. E. (2013). NASA faked the moon landing—therefore,(climate) science is a hoax an anatomy of the motivated rejection of science. *Psychological science*, *24*(5), 622-633.

Who are the **Vocal Vaccine Deniers?**



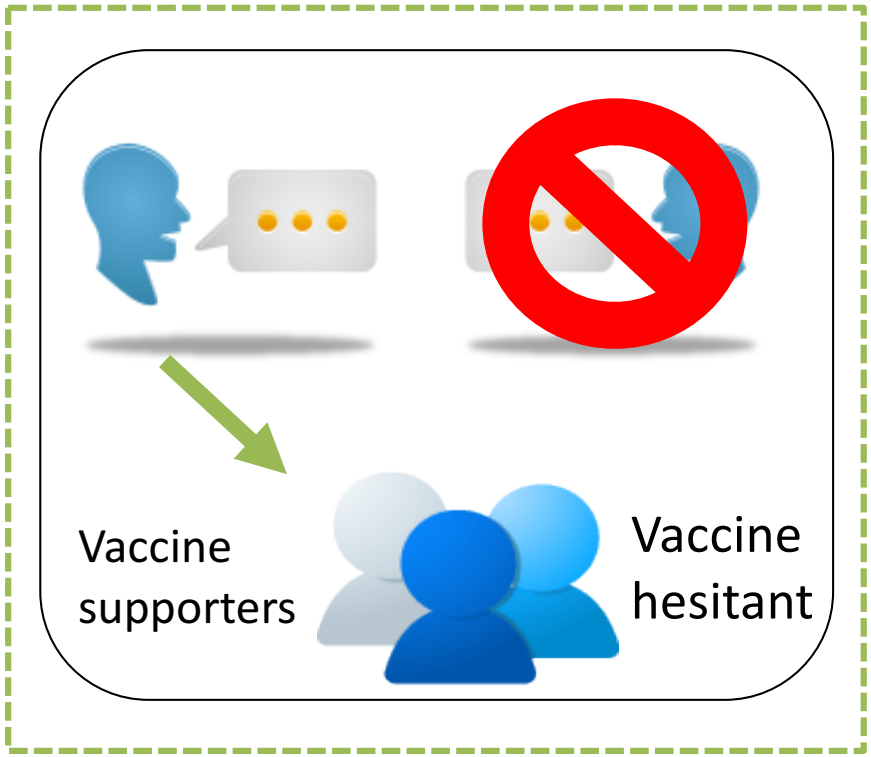
Best practice guidance: *How to respond to vocal vaccine deniers*



Best practice guidance: *How to respond to vocal vaccine deniers*

provides…	• principles on how to behave and respond to vocal vaccine deniers in a public debate
is for…	• spokespersons of any health authority.
is based on…	• public health data and peer-reviewed journal evidence & expert opinion in: psychology, communication and vaccinology.

Target audience = the public



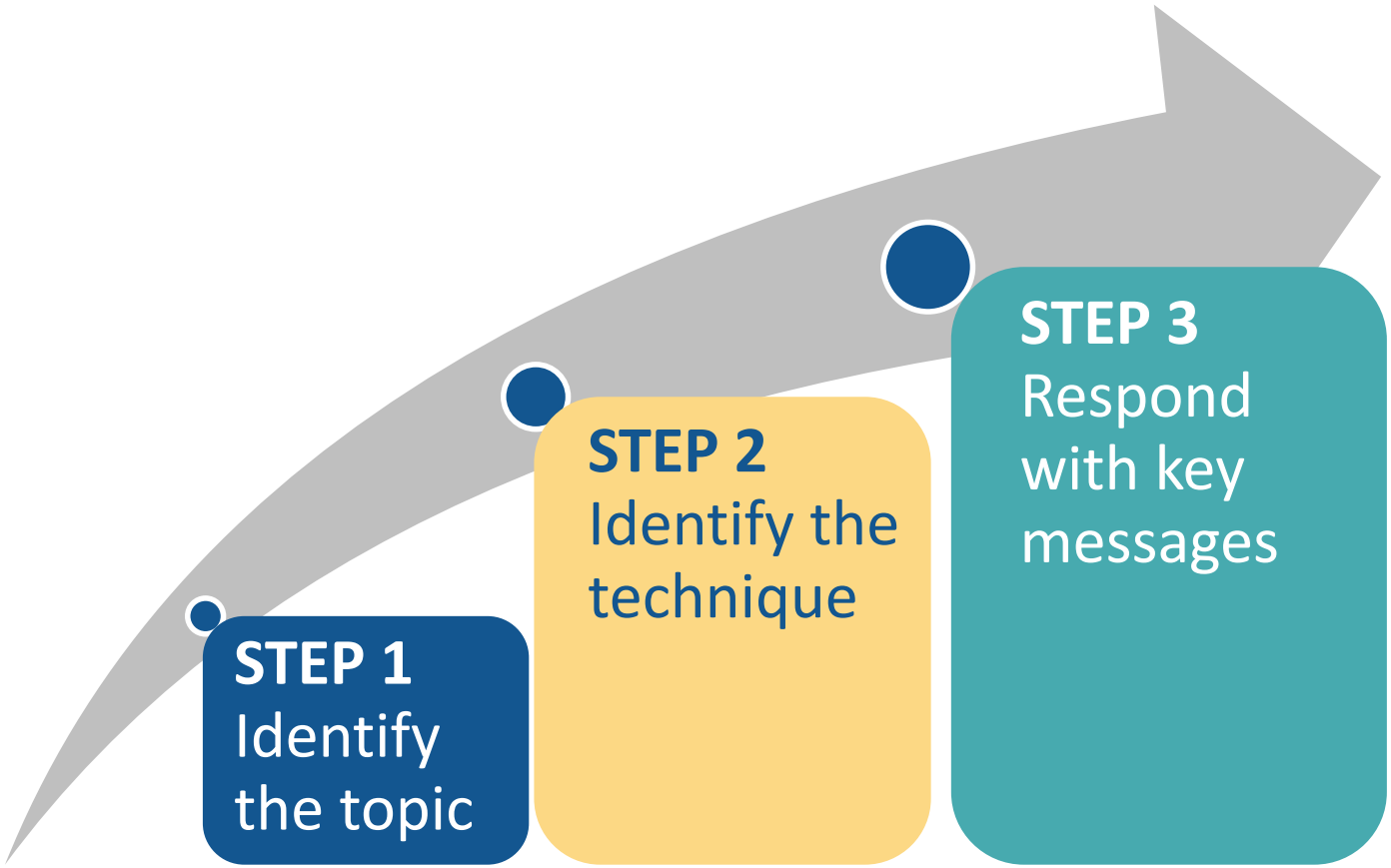
Situation: Public debate

Target audience = the public

Rule 1

••The general public is your target audience in the debate, not the vocal denier.

Designing the response

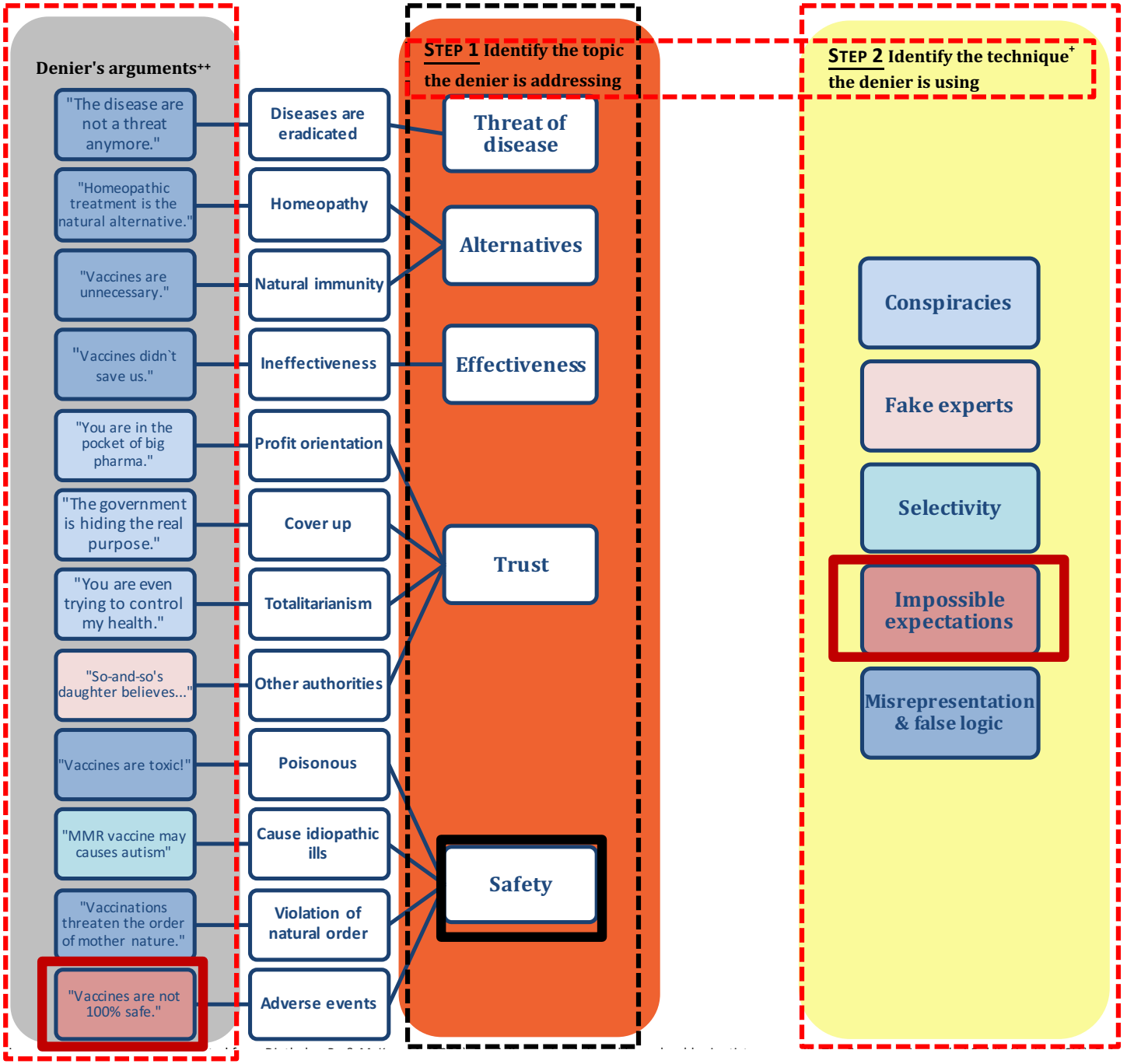


Designing the response

Rule 2

••Aim to correct the content AND unmask the techniques that vocal vaccine denier is using.

Algorithm


Denier's arguments++
"The disease are not a threat anymore."
"Homeopathic treatment is the natural alternative."
"Vaccines are unnecessary."
"Vaccines didn`t save us."
"You are in the pocket of big pharma."
"The government is hiding the real purpose."
"You are even trying to control my health."
"So-and-so's daughter believes..."
"Vaccines are toxic!"
"MMR vaccine may causes autism"
"Vaccinations threaten the order of mother nature."
"Vaccines are not 100% safe."
Diseases are eradicated
Homeopathy
Natural immunity
Ineffectiveness
Profit orientation
Cover up
Totalitarianism
Other authorities
Poisonous
Cause idiopathic ills
Violation of natural order
Adverse events
STEP 1 Identify the topic the denier is addressing
Threat of disease
Alternatives
Effectiveness
Trust
Safety
STEP 2 Identify the technique+ the denier is using
Conspiracies
Fake experts
Selectivity
Impossible expectations
Misrepresentation & false logic
RESPONSE

Response example: topic

Threat of disease: "Vaccine-preventable diseases can be very severe, and still cause millions of deaths per year around the world. Even with the best available care in the world, vaccine-preventable diseases can cause permanent disability and even death. Prevention is by far the best intervention."

Safety: "The scientific evidence is clear; vaccination is a safe way to prevent many serious diseases. Any theoretical risk to the individual and society is far outweighed by the risks to one and all of not doing so."

Trust: "We as an institution/agency are aiming to sustain the health of every individual member of the public. We are sorry that you ave lost trust in our effort but we hope to regain it."

Response example: technique

Selectivity: "Ms Y is cherry picking the scientific evidence, taking fragments from here and there which appear to back up her position and ignoring the bulk of solid evidence that disproves it. As long as she does not consider the scientific evidence as a whole, we will not have a fruitful discussion."

Impossible expectations: "In science, this argument is called an impossible expectation. No medical product or intervention, from aspirin to heart surgery, can ever be guaranteed 100% safe. Even though we will never be able to ensure 100% safety, we know that the risks of vaccine-preventable diseases by far outweigh those of the vaccines administered to prevent them."

The vaccine denier project

Under development
Generic Document

Workshops

World Health Organization
REGIONAL OFFICE FOR Europe

Scenario-based Approach

Summary points

- Best practice guideline provides 3 step-approach to respond to vaccine deniers in a public debate.
- Infinite number of arguments – we need to identify core topic that vaccine denier is using.
- Algorithm works best if topic and technique are used as a combined debunking strategy
- Further experimental evidence is needed: domain specific?

Thank you!

Further reading: Best practice guidance WHO EURO, tools and training opportunities:

http://www.euro.who.int/__data/assets/pdf_file/0005/315761/Best-practice-guidance-respond-vocal-vaccine-deniers-public.pdf