

Bólusetningahik og höfnun bólusetninga



Causes of vaccine hesitancy.....

Against vaccination in general

Vaccines not effective

Religious or fatalism

Mistrust in health institutions

Low risk/severity of disease

Social norms

Alternative prevention methods

Conspiracy theories

Individual and group influences

Side effects of vaccines

Responsibility if something bad happens

Violation of human rights

Children too weak to get vaccines

Fear of injection

Access

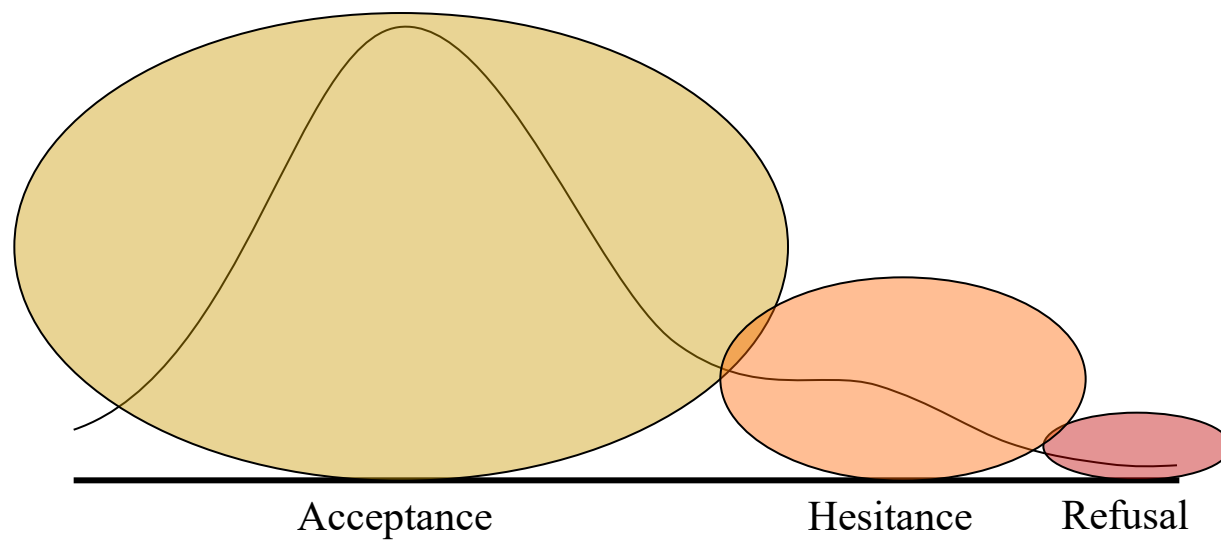
Diseases are beneficial

Financial cost



If I don't do anything,
I can't do anything wrong
(Omission bias).

Acceptance - refusal



Suggestions ...

- ✓ No single strategy
- ✓ Don't bring up things they did not mention
- ✓ Avoid debates
- ✓ We do like our peers!
- ✓ Who do you trust?
- ✓ Difference between science and opinion
- ✓ Presumptive statement: "...Next time you come will be a good day! It is time to start protecting your beautiful baby against infectious diseases!"

Adapted from: Opel et al.: Pediatrics 2013;132:1–10

We need more data on immunisations

Nooooo!!!

130.000.000 children born / year

>80% receive at least one dose of MMR
= 100 millj /year!

85% receive DTP x 3

116 millj infants = 350 millj / year

There are side effects

Yes! But very rare! Risk of specific side effects

Vaccine	Coverage	# children	# shots	# doses
DTP	85%	110 million	3	330 million
Measles	>80%	104 million	≥ 1	100-200 million
Hib	>70%	91 million	3	270 million
Polio	>85%	110 million	3	330 million
PCV	<50%	65 million	2	130 million
Hep B	>80%	104 million	3	312 million

$1,5 \times 10^9$

Measles: is 1(-10): 10^6

Influenza: Anaphylaxis: 1-2: 10^6 , Guillain-Barré <1: 10^6 ??

Oculo-respiratory sx 75: 10^6 ?? Narcolepsy: 75: 10^6 ??

Measles is no longer a serious disease.....

- It is a serious disease although rare (thanks to immunisations)
- The existing healthcare system in HIC countries provides enough resources for good care when someone is infected with measles!
 - You can treat fever and pain
 - No antivirals
 - Complications in 30%
 - No specific treatment, especially not for encephalitis

Getting the disease provides better protection..

Getting the disease

- Carries the risk of dying
- Having all kinds of complications
- Contracting life-long disabilities

Well....!

- For pertussis – possibly true, however!!!
- For other immunisations – probably not correct

Many vaccines overload the immune system....

Not true!

- Every day we encounter a vast number of antigens (bacteria, viruses, dust, various particles)
- The immune system deals perfectly well with all of them
- Studies of the immune response of multiple vaccines (MMR, MMR + Varicella, DTPHib etc) confirm excellent response

What about autism...

Andrew
Wakefield

The Lancet, feb 1998

EARLY REPORT

Early report

**Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and
pervasive developmental disorder in children**



The Lancet, feb 1998

EARLY REPORT

Early report

Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children

A J Wakefield, S H Murch, A Anthony, J Linnell, D M Casson, M Malik, M Berelowitz, A P Dhillon, M A Thomson, P Harvey, A Valentine, S E Davies, J A Walker-Smith

Background: We investigated a consecutive series of children with chronic enterocolitis and regressive developmental disorder.

Methods: 12 children (mean age 6 years [range 3–10], 11 boys) were referred to a paediatric gastroenterology.....

Findings: Onset of behavioural symptoms was associated, by the parents, with measles, mumps, and rubella vaccination in eight of the 12 children,

Interpretation: We identified associated gastrointestinal disease and developmental regression in a group of previously normal children, which was generally associated in time with possible environmental triggers.....

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A POPULATION-BASED STUDY OF MEASLES, MUMPS, AND RUBELLA VACCINATION AND AUTISM

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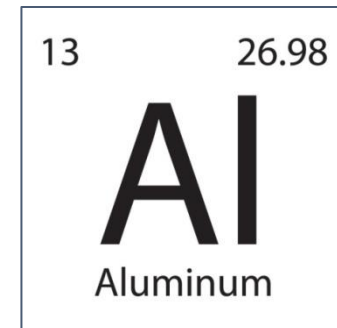
What about aluminum...

- Third most common element on earth (oxygen and silicon)
- 9% of earth's crust, found in plants, soil, water and air
- Found in foods and beverages including fruits and vegetables, beer and wine, seasonings, flour, cereals, nuts, dairy products, baby formulas, and honey
- Used in some vaccines as adjuvants (= less antigens)



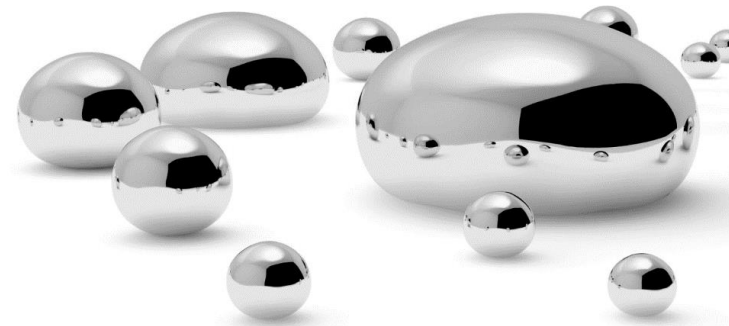
What about aluminum...

- First six months of life :
 - About 4.4 milligrams from vaccines
 - About 7 milligrams from breast-milk
 - About 38 milligrams from formula
 - About 117 milligrams from soy formula-fed
-
- Adults ingest 7 to 9 milligrams of aluminum per day
 - Eliminated through the kidneys, does not accumulate in harmful amounts in healthy individuals



What about mercury (thiomercal) ...

- NB: Ethylmercury (in thiomercal) is not the same as methylmercury (sometimes found in contaminated fish)
- Ethylmercury is processed and eliminated from the body much faster
- No link found in numerous scientific studies between thimerosal in vaccines health effects (including autism)



Where do we stand today ?

Under five mortality: > 5 million children

15.000 every day, 500 every hour

More than half is preventable !

More than half of these early child deaths are due to conditions that could be prevented or treated with access to simple, affordable interventions

(clean water, nutrition, immunisations)

Árangur bóluasetninga er ótvíræður

Ekki hika !!!

