## Talking to parents about vaccine concerns

Ari Brown, M.D., FAAP

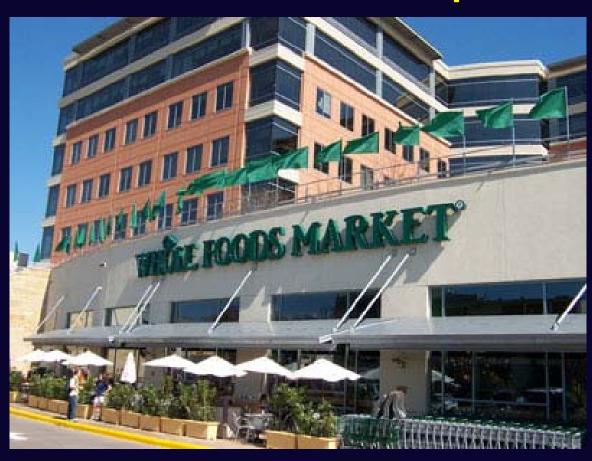
### Disclosure

I have no real or perceived conflicts of interest personally or professionally that relate to this presentation

### Greetings from Austin



### Home of Whole Foods International Headquarters



### Home of Andy Wakefield

7:43 AM



Controversial autism doctor: 'I'm not going away'

### Question #1: How did we get here?

### Is it the media's fault?





### The Internet?

On the Internet, nobody knows you're a dog.



Health Topics A-Z

Public NIP Home Health Care Professionals

Media

Search

Informacion en Espanol

TD:

#### NIP HOME

First time visitor?

About NIP

Data and Statistics International Efforts

Links

to other web sites
Glossary/ Acronyms

#### IIP sub-sites:

ACIP

Flu Vaccine Immunization Registries

Vaccines for Children Program

CASA (Clinic Assessment Program)

AFIX (Grantee Assessment)

VACMAN

#### NIP Site Search

Search

#### In the Spotlight...for the Public

Archived materials from NetConference, "<u>Current Issues in Immunization</u>; Influenza Immunization and Vaccine Supply" (Oct. 14)

**CDC** Home

**Partners** 

- Vaccine Delays & Availability: Flu Vaccine Update (Oct. 7)
- Interim Influenza Vaccine Recommendations 2004-05 (Oct. 6)
- Flu Bulletin Number 3 (Sept. 28)
- Vaccine Quiz Helps You Decide If You Need Vaccines (Sept. 8)
- More...Archived spotlighted items

#### Major Topics:

Frequently Asked For | Vaccines | Diseases | Resources
Vaccine Safety | Specific Groups | News & Events
Statistics & Surveillance

#### Recommended Vaccination/ Immunization Schedules

- Adult vaccination schedule
- Childhood & Adolescent Immunization Schedule
- Catch-up Schedule
- Make a vaccination schedule for your child (birth to 5 years)
- > More items...

#### **Frequently Asked For**

- Parent's Guide to Childhood Immunization
- Vaccine Info. Statements (VIS)
- Vaccine Recommendations from the

#### **News & Events**

- News, Newsletters, & Listservs
- What's new on this web site?
- Calendar of vaccine related events
- NIP Events and Programs New!
- National Adult Immunization Awareness Week (Sept 26-Oct 2)
- More items...

#### Diseases

- Anthrax information
- Flu information UPDATED!
- Smallpox information
- Diseases preventable in <u>children</u>

VACCINE SAFETY

6 ACCOUNTABILITY



#### INFORMATION CENTER -

MAKE A DIFFERENCE, **BECOME A MEMBER** 

#### FREE E-NEWS

VACCINE NEWS OF THE WEEK

HEALTH TALK CALENDAR

#### ISSUES

VACCINATION DECISIONS

FREEDOM IN VACCINATION & INFORMED CONSENT

STATE INFORMATION

TRACKING SYSTEMS & PRIVACY

HOMELAND SECURITY

#### HOT LOTS

NATIONAL VACCINE INJURY COMPENSATION PROGRAM

INSTITUTE OF MEDICINE REPORTS

Sign an on-line petition to open vaccine databases to independent researchers!

**NVIC Responds to Institute of** Medicine Report: Vaccines and Autism

#### Free E-News and

Newsletters

#### WELCOME!

Vaccines or immunizations are recommended for every child born in the United States. Vaccinations shouldn't hurt a child but sometimes they do. Before your child takes the risk, find out what it is.



Click on photo to read these children's stories Website reconstruction funded in part by the Tides Foundation



#### NVIC CONFERENCES

BARBARA LOE FISHER SPEAKS OUT

#### ARTICLES AND INTERVIEWS

THE BRIAN LEHRER SHOW Public Health vs Parents' Fears 10/9/03

REDFLAGSDAILY.COM The Challenge to Mass Vaccination 9/15/03

INSIGHT MAGAZINE Vaccines fueling autism epidemic? 6/9/03

CBS NEWS THE EARLY SHOW, 12/04/

CHRISTIAN BROADCASTING

# ARE WE TO BLAME? How much time do we spend talking about vaccines?

➤ Nurses
9.2 minutes

Pediatricians
3.9 minutes

Family Practitioners 3.1 minutes

### PARENT PARANOIA

#### THE ROANOKE TIMES Monday, September 20, 2004





STEPHANIE KLEIN-DAVIS 1 The Roanoke Times

Mellisa Williamson, 35, a Bullitt Avenue resident, worries about the effect on her unborn child from the sound of jackhammers.

# Question #2: How do parents approach vaccine decisions?

### Analysis of mothers' decisionmaking about vaccines for infants: the importance of trust Pediatrics, 117 (5) 2006

### **4 Types of Parents**

- Believers
- Relaxed
- Cautious
- Unconvinced

### VACCINE KNOWLEDGE

- All parents had poor knowledge of vaccines
- Only 2 moms could name one vaccine given at the two-month well check at the follow-up interview
- 3 moms listed autism as a known side effect of the MMR vaccine
- Sources of info: Internet, books, Mothering Magazine

"The pediatrician respected the fact that we wanted to sit and talk for an hour and a half about vaccinations..he stayed very late one night..it wasn't something that they could charge us for..and it's a very busy practice."

"Doctors don't have the answers for me to these specific questions about vaccination...I don't think they have the time or motivations to find me the answers.."

### Vaccinators

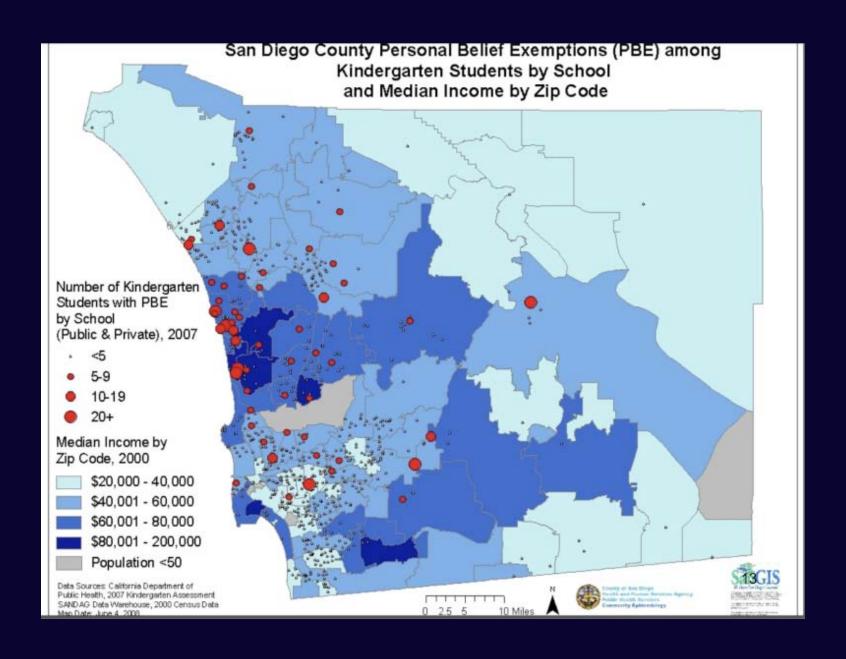
- #1: Trust their doctor
- Feel satisfied with discussion
- Feel that vaccinating is the norm
- Believe in the social contract
- Want to prevent disease

### Non-Vaccinators

- Feel alienated by the doctor (poor communication, condescending)
- Have a previous medical experience leading to mistrust (misdiagnosis)
- Distrust info or motives (doc does not know and makes money on vax)
- Trust a homeopath or naturopath

### Non-vaccinators

- Believe that vax-preventable diseases are rare, not serious, or easily treatable
- Worry about adverse effects
- Feel that their child is not at risk because others vaccinate (free-riding)



## Parental Vaccine Safety Concerns in 2009

Freed GL, etal. *Pediatrics* 2010;125:654-59.

### Key Findings

- 90% of parents agree that vaccines protect their kids & follow doc's advice
- 54% worry about serious effects
- 25% believe some vaccines cause autism
- Moms are more concerned/more likely to refuse vaccines

### Question #3: When did anti-vaccine sentiment start?

### As the World Turns



- 1796: Smallpox vaccine
- 1821: England requires
- 1830's: Antivaxxers arrive
- 1998: MMR study
- 1999: Thimerosal concerns
- 2001: T-free vaccines

### But wait, there's more...

- 2004: IOM reports on MMR/ thimerosal
- Sept 2007: Jenny McCarthy
- Oct 2007: Dr Bob Sears
- Mar 2008: Hannah Poling awarded compensation for Mitochondrial d/o

### Feb 2009: Omnibus #1

"The reports and advice given to the [family] by Dr. Krigsman and some other physicians ... have been very wrong... Unfortunately, [they have] been misled by physicians who are guilty, in my view, of gross medical misjudgment."

—Special Master Hastings

### February 2010

- Wakefield found guilty of 30 counts of medical misconduct
- Lancet retracts study
- Resignation from Thoughtful House

#### Early report

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

A J Wakefield, SH 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 unit with a history of normal development followed by loss of acquired skills, including language, together with diarrhoea abdominal pain. Children underwert gastroenterological, neurological, and developmental assessment and review of developmental records. lleocolonoscopy and biopsy sampling, magnetic-resonance Imaging (MRI), electroencephalography (EEG), and lumber puncture were done under sedation. Barium follow-through radiography was done where possible. Blochemical. haematological, and immunological profiles were as amined.

by the parents, with measles, mumps, and rub vaccination in eight of the 12 children, with mea infection in one child, and otitis media in as children had intestinal abnormalities lymphold nodular hyperplasia to an Histology showed patchy chronic Inflan in 11 children and reactive lies autism (nine), disintegrative focal neurological ab malities and u and EEG tests acid compared with agenaemoglobin in four

landseamlorized betaloo regression in a group of m, which was generally associated mental triggers.

Inflammatory Bowol Disease Study Group, University Departments of Modicine and Histopathology (A J Walesfield recs, A Anthony MI, J Linnell Rd, A P Dhillon washab, S E Davies washab) and the University Departments of Paediatric Castroenterology

(S.H.Murch Mr., D.M. Casson Mice, M. Malik Mice, M.A.Thomson Fice, J.A. Walker Smith Fice,), Child and Adol Psychiatry (M Borolowitz Hopers), Neurology (P Harvey mort), and Radiology (A Valentine most), Royal Free Hospital and School of Modicine London NW3 20C UK

Correspondence to: Dr A J Wakefield

#### Introduction

We saw several children who, after a p normality, lost acquired skills, inclu-They all had gastrointestinal abdominal pain, diarrhoes, and

included a review of prospective developmental record ents, health visitors, and general practitioners. Fou from a mis, health vasturs, and general practitioner children did not underp psychiatric assessment in hosp had been assessed professionally elsewhere, so these asses were used as the basis for their behavioural diagnosis.

After howel preparation, ileocolomiscopy was perform SIM or MAT under solation with midazolam and po

SHM or MAT under solation with midsamlam and pethidrat. Paired frozan and formatin-fload muosals biopy samples were taken from the terminal litears; ascending, transverse, descending, and signoid colonies, and from the rectum. The procedure was recorded by wides or still images, and were compared with images of the provious secon canascutive passificative coloniesceptics (four normal coloniesceptis and these or children with ulcerative colonies, in which the physician or children with ulcerative colonies, in which the physician

are extended with successive control, in which in grigotian control with the property of the p

#### Laboratory investigations

Laboratory investigations: Thyroid functions, serum long-chain fairy saids, and cerebraspiral-fairil lactate were measured to exclude known causes of childrend measured generative fairness. Urensy, and the said of the 12 children and 14 age-matched and ser-matched recordingly of the 12 children and 14 age-matched and ser-matched previously. Chemistograms were sciented digitally on computer, to study the thickness of the third previously. Chemistograms were sciented digitally on computer, to study the third previously the said of the said and controls. Urinary methylmalonic-acid concentrations is patients and controls were compared by a two-sample t test Urinary creatinine was estimated by routine spectrophotometri

Oildren were screened for antiendomyscal antibodies and boys were screened for fragile-X if this had not been done

### March 2010: Omnibus #2

"The theory of vaccine-related causation is scientifically unsupportable."

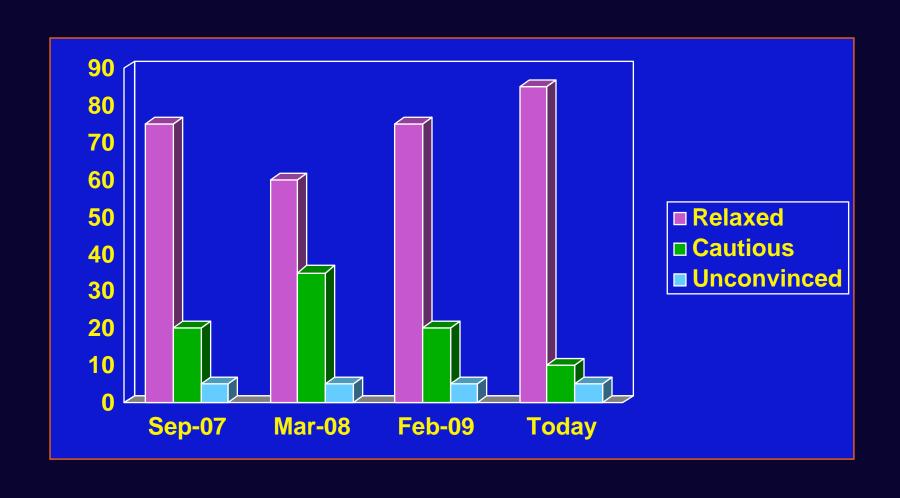
### May 2010



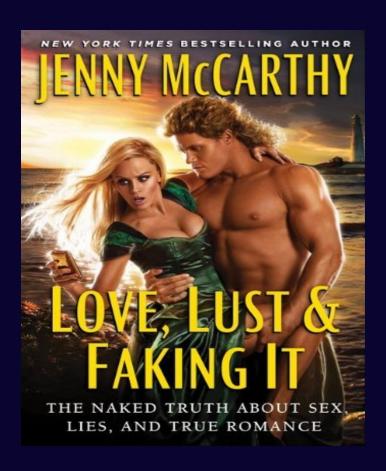


# Question #4: Where are we today?

### Dr B's Worry-O-Meter



### Are we done yet?



#### VACCINE SAFETY: THE UPROAR IS OVER....OR IS IT?

- 33% of U.S. Healthcare Workers surveyed questioned the safety of the 2009 H1N1 vaccine!
   National Health Interview Survey reported by the CDC, 4/2/10 WHY?
- Ranked brainiest city in the country, only 60% of Boulder County's children were up to date on all recommended vaccinations in 2007! — The Daily Camera 8/30/10 and 9/5/10 WHY?
- Time Magazine, "... it has been hard not to wonder if the FDA regulators have not been captured by the drug industry!"

   8/17/10 WHY?
- Dr. Andrew Wakefield's controversial research, which suggested a potential link between MMR and autism in some children, has now been replicated in five countries!

Andrew Wakefield, a UK academic gastroenterologist and surgeon, was barred from practice by the British Medical Council after daring to suggest the safety of childhood vaccines needed more comprehensive research.

In his book, Wakefield reveals the untold story of powerful pharmaceutical corporations' role in the vaccine controversy.



Meet Dr. Wakefield and hear the other side of the story!

WEDNESDAY, OCTOBER 20 - 6:00PM BOULDER PUBLIC LIBRARY'S CANYON THEATER Parking lots on Arapahoe and on Canyon between Broadway and 9th streets For information call 303.983.8240

## No, but we're doing well!

<1% of kids 19—35 months are not vaccinated

NIS survey 2009

# Question #5: How do we win the PR Battle?

### It's a team effort

- Immunization Alliance
- Traditional Media
- Social Media
- Exam Room 1

## Public Opinion Survey 08

 Most effective message: "I want what is best for my child and my patients. That's why I recommend vaccinating."

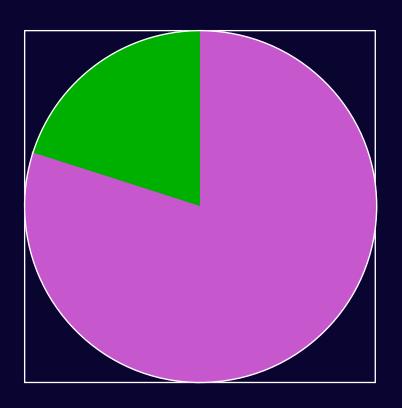
## Messaging

- WANT to be listened to and respected.
- WANT to be respected they want what's in child's best interest.
- WANT explanation from trusted source.
- DON'T WANT scare tactics.
- DON'T WANT to be scolded.



# What determines credibility? In LOW concern settings

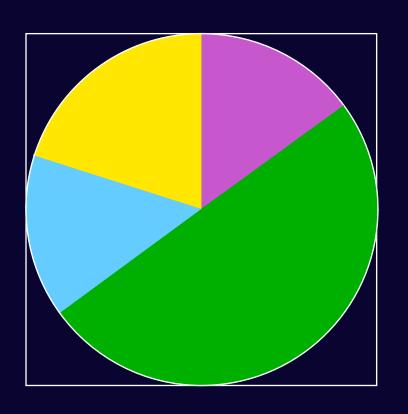
Randall Hver, NIC, 2005.



- Expertise 80%
- Other 20%

# What determines credibility? In HIGH concern settings

Randall Hver. NIC, 2005



- Honesty 15%
- Listening/Empathy50%
- **■** Expertise 15%
- **Other 20%**

### **Great Communicators**



- Know their audience.
- Talk WITH them.
- Care about them.
- Don't argue.
- Don't show contempt for reasoning.
- Seek common ground.
- Listen.

### What YOU can do

- ✓ Prenatal visit
- ✓ Develop trust
- ✓ Offer reliable sources for more info
- ✓ Offer your expertise to the media
- ✓ Practice what you preach
- ✓ DON'T GET DEFENSIVE

# Question #6: How do I address vaccine myths?

## **MYTH #1**

Vaccine preventable diseases are rare, not serious, and treatable.



### REALITY:

- Measles outbreak 2008
- HIB outbreak 2008/09 (5 deaths)
- Mumps outbreak 2009/10 (1500 cases/ 2 had meningitis, 5 pancreatitis, 55 testiculitis)
- H1N1 outbreak (~60 million/12k deaths)
- Pertussis outbreak 2009/10 (10 deaths)

## **MYTH #2**

Too many shots, too soon.

#### **REALITY:**

- Thank goodness we have more shots.
- These are safer and smarter vaccines.
- Smallpox, oral polio, DTwP
- It may look like more shots, but the immune load is actually LESS.

# MYTH #3

• Thimerosal causes autism.

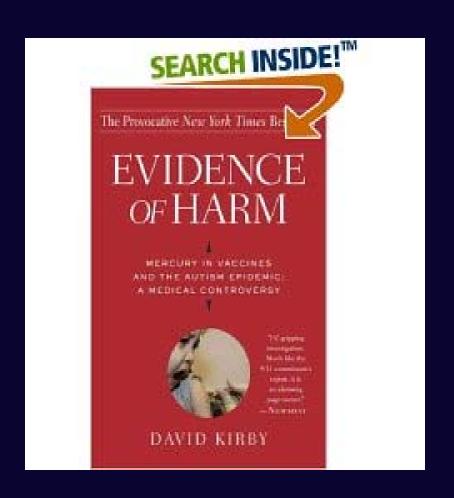


## REALITY

Mercury removed in 2001. Rates of Autism still rising.

## **MYTH #4**

MMR causes autism.



### REALITY

Japan switched from MMR to separate vaccines in 1993.

Autism rates still rising.

## Reality: Causes of Autism

- Genetic: several defects, including Fragile X
- Fathers over age 40
- Extreme prematurity (<25 weeks)</li>
- Medications during pregnancy



## MYTH #5

 It's all a government conspiracy to protect Big Pharma and inject cancercausing agents into our children.



### **REALITY:**

This would be the largest worldwide conspiracy in history.

Just ask your doc if she vaccinates her child.

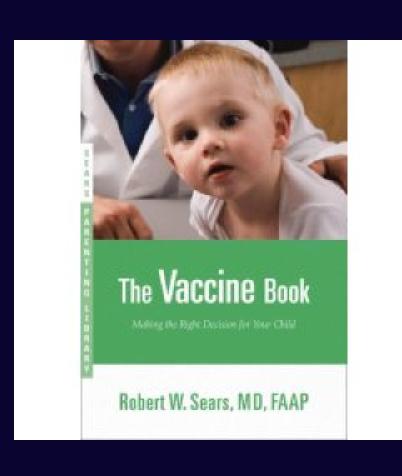
# MYTH #6: We need to green our vaccines



#### REALITY

- Aluminum is the #1 metal in the earth's crust.
- It's in our water, soil, and food (including breastmilk)... and our deoderant.
- The amount is scant compared to our daily exposures.

## **MYTH #7:**



It's safer to use an alternative or staggered vaccination schedule

#### REALITY

- Delaying vaccinations leaves the most susceptible at risk.
- "My schedule doesn't have any research behind it. No one has ever studied a big group of kids using my schedule to determine if it's safe or if it has any benefits."—Dr Bob Sears

#### Vaccine information

- cdc.gov/vaccines/conversations
- aap.org
- vaccine.chop.edu
- immunize.org
- baby411.com



"I'm mad as hell and I'm not gonna take this anymore!"

## **Teaching Moments**

Build a relationship, develop trust, and educate!