#### Getting a Flu Shot, or Not...

The 2012 Winter edition of *Prevention* magazine wrote "23 Ways To Stop Colds & Flu." Vaccination is included in their list but should flu vaccination have been listed first, last or not at all?

## Annual incidence of Influenza-like Illness versus Clinically Confirmed Influenza.

Each year in the USA, about 15 to 20 percent of adults, 18 to 64 years old, experience what most people call the flu and medical professionals call an Influenza Like Illness (ILI). There are many causes of ILI and thus clinically confirmed influenza is only a small subset of the ILI cases. Using a culture or other method to determine the viral identies of specimens from each ILI sufferer confirms clinically confirmed influenza is only 10 to 15 percent of the individuals suffering with an ILI. At the high end, 15% of 20% is 3%. While at the low end, 10% of 15% is 1.5%. Plainly put, out of every 100 adults aged 18-64, there will be only 1 to 3 cases of influenza in a typical year. Thus, 97-99 percent of non-vaccinated adults in this age group are immune to clinically confirmed influenza without receiving a shot and will NOT have true influenza, the sole target of the flu vaccine.

#### Claims

**WebMD.com**, an online health advisory website, credits the CDC with claiming "the flu vaccine reduces the odds of getting the flu by 70% to 90%."(1) This claim is widely quoted for flu vaccines used on healthy adults. WebMD received nearly 4 million dollars from Merck Pharmaceuticals from 2008 through 2012 bringing into question their creditability. (2)

#### Questions

Is getting a flu shot justified when you expect the most your immunity can increase is from 97% to 99%? Is this alleged 1 or 2% improvement in immunity proven to exist?

# What "evidence" is available and what is the quality of the research?

An independent review by the Cochrane Collaboration concluded, "Influenza vaccines have a modest effect in reducing influenza symptoms and working days lost. There is no evidence that they affect complica-tions, such as pneumonia, or transmission."(3) They warn about possible bias in their conclusions stating, "The review showed that reliable evidence on influenza vaccines is thin but there is evidence of widespread manipulation of conclusions and spurious notoriety of the studies. The content and conclusions of this review should be interpreted in light of this finding.(4)

The data below with explanations hopefully will make clear how bias is built into influenza vaccine trials. We will use excerpts from a typical influenza package insert. Package inserts are also known as prescribing information (PI) and are published by each vaccine's manufacturer. Table 4 and Table 5 inserted into this flyer are from the Package Insert for Fluarix, a GlaxoSmithKline flu vaccine, copyright 2012. (5)

#### Efficacy: 66.9 percent, 2 percent or Nothing?

Table 4. Attack Rates and Vaccine Efficacy Against Culture-Confirmed Influenza A and/or B in Adults 18 to 64 Years of Age (Total Vaccinated Cohort)

			Attack Rates (n/N)	Vac	cine Effic	cacy		
	N	N	%	%	LL	UL		
Antigenically Matched Strains <sup>a</sup>								
FLUARIX	5,103	49	1.0	66.9 <sup>b</sup>	51.9	77.4		
Placebo	2,549	74	2.9	-	-	-		
All Culture-Confirmed Influenza (Matched, Unmatched, and Untyped) <sup>c</sup>								
FLUARIX	5,103	63	1.2	61.6 <sup>b</sup>	46.0	72.8		
Placebo	2,549	82	3.2	-	-	-		

N column 2 = number vaccinated or given "Placebo." N column 3 = number sick with influenza. LL = Lower limit of statistical probabilities.UL = Upper Limit of statistical probabilities.

OL – Opper Limit of statistical probabilities.

In Table 4 (above), row 4, column 5, shows 66.9% efficacy [effectiveness] of Fluarix to prevent culture-confirmed influenza. This is based on Fluarix recipients experiencing a 1% rate of influenza while the "placebo" group experienced a 2.9% influenza attack rate (column 4). This calculates to 66.9% but is it a true reduction and is it misleading. Stating the vaccine is 66.9 percent effective is **misleading at best**.

#### Restating

Subtract 1 from 2.9 and the result is 1.9 fewer cultureconfirmed cases per hundred individuals. The data presented below will show that **stating the efficacy as 1.9% is also misleading** because the total amount of disease in the vaccinated group is greater than the nonvaccinated group.

#### Bias

The package insert informs that test participants were "... monitored for influenza-like illnesses (ILI) starting **2** weeks post-vaccination and lasting for approximately 7 months."(6) The problem is that during the 2 weeks postvaccination period, vaccinated individuals suffered more disease than the "Placebo" group.

#### How do we know?

We do not have a nice table showing the total differences in disease incidence in the vaccinated and non-vaccinated groups in the 14 days following vaccination but we have sufficient information to make an informed decision. Table 1 shows the adverse effects occurring in only four (4) days following vaccination. The flu shots in the trial were given before the beginning of the flu season at a time when very few cases of ILI were occurring in the general population. Thus the majority of the adverse events in Table 1 must be added to the 1% culture-confirmed influenza rate shown in the vaccinated group in Table 4, if we hope to appropriately compare vaccinated versus non-vaccinated.

Don't be deceived by the high rates of adverse reactions listed under the "Placebo." The "Placebo" is likely composed of the non-viral yet toxic components of a vaccine. The events listed under the "Placebo" are significantly higher in number than what would be expected in a comparable non-trial segment of the population given the short period of time and time of year.

Table 1. Percentage of Subjects With Solicited Local Adverse Reactions or Gen	eral
Adverse Events Within 4 Days <sup>a</sup> of Vaccination (Total Vaccinated Cohort)	

	FLUARIX	Placebo N = 192	
	N = 760		
	%	%	
Local Adverse Reactions			
Pain	55	12	
Redness	18	10	
Swelling	9	6	
General Adverse Events			
Muscle aches	23	12	
Fatigue	20	18	
Headache	19	21	
Arthralgia	6	6	
Shivering	3	3	
Fever ≥100.4°F (38.0°C)	2	2	

#### More adjustments

## Additionally, page 4 of the package insert, states:

"Unsolicited adverse events that occurred in  $\geq 1\%$  of recipients of FLUARIX and at a rate greater than placebo included

upper respiratory tract infection (3.9% versus 2.6%), nasopharyngitis (2.5% versus 1.6%), nasal congestion (2.2% versus 2.1%), diarrhea (1.6% versus 0%), influenza-like illness (1.6% versus 0.5%), vomiting (1.4% versus 0%),

and dysmenorrhea (1.3% versus 1.0%)." (7)

The "unsolicited adverse events" occurred in the period 0 to 21 days following vaccination, thus a portion of the influenza-like illness listed may have been cultured for clinical influenza and included in Table 4 figures. Even so, the diseases listed in Table 1 plus those recorded under "unsolicited adverse events" form a total disease burden in the vaccinated group that is far exceeds the alleged "disease reduction" used as a basis for efficacy calculation in Table 4.

#### **Conclusions:**

Beginning the monitoring period on the day of vaccination instead of two weeks later yields an opposite result for efficacy than that claimed by the manufacturer and government agencies such as the CDC. The total disease burden in the vaccinated trial subjects is greater than the disease burden in the non-vaccinated group.

Thus the vaccine clearly had no effectiveness.

The trial methodology is biased to give an unjustified favorable outcome for the vaccine.

Our conclusions have nothing to do with the vaccine brand name. Other brands will yield similar results.

### Vaccine Trials

Vaccine value should be a measurement of the total health outcomes of a vaccinated group compared to a nonvaccinated group where both have the same health potential other than the vaccination status. Vaccine manufacturers do not want to be burdened by valid scientific methods. Links to studies that show better health in the non-vaccinated for other vaccines are posted on Vaccination Liberation's website. (8)

For more information on influenza and flu vaccines, see http://vaclib.org/basic/fluindex.htm

or Dr. Sherri Tenpenny's website: http://drtenpenny.com/the-truth-about-the-flu-shot/

References:

- 1. http://www.webmd.com/vaccines/how-effective-isflu-vaccine
- http://vactruth.com/2013/01/04/merck-paidwebmd-millions/ from documents found on Merck's website: http://www.merckresponsibility.com/...

3. http://www.cochranejournalclub.com/vaccines-forpreventing-influenza-clinical/

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