## Increase in autism incidence Tentative association with other environmental variables based on demographics.

Gerald Goldberg, MD - 20 February 2007

 $Sources: \underline{http://www.emfacts.com/weblog/index.php?p=655} + \underline{http://www.buergerwelle.de/pdf/autism\_increase.doc} + \underline{http://www.buergerwelle.de/pdf/autism\_increase.doc$ 

Recently there has been a new science looking at the demographics of disease incidence based on comparing them to the rise or introduction of new technologies. One such variable that has been analyzed is electromagnetic radiation generated by artificial sources.

Biological systems have evolved over long periods of time and have adapted to using basic signaling mechanisms as the foundation of adaptive, interpretative and integrative behaviors. Electromagnetic signaling as a technology is a relatively new phenomenon which has been introduced and is being used globally. The signaling has the potential ability to interfere with the preexistent mechanisms of cell signaling and integration which have evolved over billions of years. However the biological and long term effects of prolonged low level electromagnetic exposure to certain frequency ranges is poorly understood.

There are multiple studies which have shown the profound effects of electromagnetic radiation as contributing to the generation of free radicals, damping down oxidative metabolism in cells, and producing DNA damage along with immune suppression and an increased range of hyperplastic and neoplastic transformations.

Emf has been shown to affect brain function either through a direct effect of cell signaling or a secondary effect of disrupting circulation in the nervous system or the integrity of the blood brain barrier. The end result of these disruptive changes in cell signaling and integration is the production of various states of dysfunctionality of nervous system integration resulting in a plethora of illnesses characterized by, behavioral, motor or sensory abnormalities.

In Sweden impairment secondary to electromagnetic radiation is a recognized disease producing entity. The Swedish system recognizes the impairment and duly supports impaired individuals under their disability act.

In the last 10 to 15 years there has been a dramatic increase in the incidence of disease beyond what can be logically inferred from genetic causes or reproduction. Of note is the incidence and rise of autism. The incidence of autism has risen from approximately from 4/10,000 ten years ago to approximately 1:166. There are many theories associated with the rise in autism are associated with the idea of pollutants affecting the nervous system.

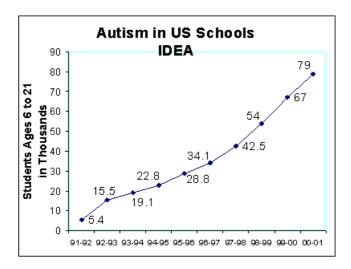
Recently we had reviewed the raw data of the incident rise in the rate of autistic disorder in all states of the union. The data looked at the relative rate of change from 1992 to 1993 and compared it to the 1999-2000; a seven year span of time. The survey was used to gauge the need for services for these severely impaired individuals. Contained within the data was an alarming trend. Of note, there is a definite overall increase from a geographic standpoint based on the data.

State	1992-1993	1999-2000	% Increase
Alabama	68	670	885
Alaska	8	165	2,053
Arizona	199	897	351
Arkansas	30	560	1,767
California	1,605	8,376	422
Colorado	14	350	2,400
Connecticut	164	1,032	529
Delaware	15	248	1,553
District of Columbia	0	65	(infinite)
Florida	582	3,114	435
Georgia	262	1,602	511
Hawaii	52	198	281
Idaho	39	239	513
Illinois	5	2,435	48,600
Indiana	273	2,080	442
Iowa	67	543	710
Kansas	74	471	636
Kentucky	38	739	1,845
Louisiana	409	1,032	152
Maine	37	358	868
Maryland	28	1,551	5,439
Massachusetts	493	543	10
Michigan	288	3,449	1,098
Minnesota	296	1,958	561
Mississippi	0	333	(infinite)
Missouri	336	1,361	306
Montana	20	127	535
Nebraska	4	289	7,125
Nevada	5	273	5,360
New Hampshire	0	268	(infinite)
New Jersey	446	2,378	433
New Mexico	16	193	1,106
New York	1,648	4,951	200
North Carolina	786	2,391	204
North Dakota	9	98	988
Ohio	22	1,574	7,055
Oklahoma	31	547	1,665
Oregon	37	2,218	5,895
Pennsylvania	346	2,707	682
Puerto Rico	266	408	53
Rhode Island	19	238	1,153
South Carolina	141	717	5,021
South Dakota	36	168	367
Tennessee	304	819	169
Texas	1,444	5,134	256
Utah	105	472	350
Vermont	6	160	2,567
Virginia	539	1,714	218
Washington	476	1,376	189
West Virginia	101	262	159
Wisconsin	18	1,445	7,928
Wyoming	15	83	453
Total	12,222	65,396	435

## Children with a diagnosis of autism aged 6-21 served by IDEA

(Individuals With Disabilities Education Act)
From the Department of Education annual reports
to the US Congress

http://www.IDEAdata.org/tables/ar aa2.htm



In round terms, for every two children registered through IDEA with autism in 1992-93, there were almost eleven by 1999-2000.

The data shows that Illinois is the epicenter with an increase of 48,600%. What is interesting is there seems to be an east to west peak from the epicenter which has a node of about 500 to 750 miles. Specifically the distribution does not appear to extend centripetally in a

perfectly circular manner but seems to follow an east to west distribution with Illinois in the center. In a westerly direction if you note the data, Nebraska (7,125%), Nevada (5,360%) and Oregon (5,895%) on the west coast and on the East coast Ohio(7,055%), Maryland (5,439%).

Even though there is an overall increase the markedly different changes in these states suggest that some other vector is operating. The distribution suggests a pulsed beam with a node or wavelength of approximately 500-750, miles. This would correlate with extra long frequency radiation.

The pattern seems to suggest some other secondary phenomena in operation. The pattern is not uniform and concentric from the epicenter. The increase is not uniform which is what one would expect from vaccinations, toxins or pollutants, pesticides or other containments which would seem to a have a more uniform rate of change and a more graduated and uniform pattern of incidence increase.

This is not to discount the currently held models of the disease but instead points to another variable which may be impacting these individuals. This matter deserves further study and clarification.

What is alarming about these statistics is that the disease does not seem to be abating and instead the incidence is increasing at an exponential rate. This is remarkable for an illness that is presumed to have a genetic basis, i.e. though unproven.