

## MEDICINE ELSEWHERE

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**Lasky T, Terracciano GJ, Magder L, et al. The Guillain-Barre syndrome and the 1992-1993 and 1993-1994 Influenza vaccines. N Engl J Med 1998;339:1797-1802.**

The number of reports of influenza vaccine-associated Guillain-Barre syndrome to the national Vaccine Adverse Event Reporting System increased from 37 in 1992-1993 to 74 in 1993-1994, arousing concern about a possible increase in vaccine-associated risk.

The Guillain-Barre syndrome is characterized by loss of reflexes and symmetric paralysis, usually beginning in the legs, which is mediated by an immune response that results in the direct destruction of either the myelin sheath surrounding the peripheral nerves or the axon itself. Among the vaccines reported to be associated with the onset of the Guillain-Barre syndrome are the swine influenza (A/New Jersey) vaccine in 1976-1977, oral polio vaccine, and tetanus toxoid. The association with the A/New Jersey swine influenza vaccine was notable for relative risks of Guillain-Barre syndrome ranging from 4.0 to 7.6 for 6 to 8 weeks periods after vaccination.

In this study, the patients given a diagnosis of the Guillain-Barre syndrome in the 1992-1993 and 1993-1994 influenza-vaccination seasons were identified from the hospital discharge data bases of four states. Disease with an onset within 6 weeks after vaccination was defined as vaccine-associated. 180 of 273 adults with the Guillain-Barre syndrome were interviewed. The vaccine providers confirmed influenza vaccination in the six weeks before the onset of the Guillain-Barre syndrome for 19 patients. The relative risk of the Guillain-Barre syndrome associated with vaccination, adjusted for age, sex, and vaccine season, was 1.7. The adjusted relative risks were 2.0 for the 1992-1993 season and 1.5 for the 1993-1994 season. In 9 of the 19 vaccine-associated cases, the onset was in the second week after vaccination, all between day 9 and day 12.

There was no increase in the risk of vaccine-associated Guillain-Barre syndrome from 1992-1993 to 1993-1994. For the two seasons combined, the adjusted relative risk of 1.7 suggests slightly more than one additional case of Guillain-Barre syndrome per million persons vaccinated against influenza.

**Johnson DL, Wiebe JS, Gold SM. et al. Cerebral blood flow and personality: A positron emission tomography study. Am J Psychiatry 1999;156:252-257.**

The objective of this study was to describe brain regions associated with the personality dimension of introversion / extroversion. Most major current models of personality include the dimension of introversion / extroversion at a fundamental level. At one end of the introversion / extroversion continuum are extroverts, who are described as gregarious, socially active, cheerful, assertive, and easily excitable. At the other end of the spectrum are introverts who tend to be reclusive and quiet, preferring books to other people. Introverts have higher cortical activity than extroverts, especially in the frontal lobes.

In this study 18 healthy individuals (10 male and 8 female) recruited from the community were studied. Introversion / extroversion scores were taken from the NEO Five-Factor Inventory, a 60-item abbreviated form of the NEO Personality Inventory-Revised. Men and women did not differ significantly in terms of extroversion scores. Measures of cerebral blood flow were obtained by means of positron emission tomography. There were eight regions correlated with introversion and seven correlated with extroversion. Regions showing a relationship with introversion had a larger volume than did regions cerebral blood flow with introversion / extroversion were calculated, and a three-dimensional map of those correlations was generated. Introversion was associated with increased blood flow in the frontal lobes and in the anterior thalamus. Regions in the anterior with extroversion. The findings of this study lend support to the notion that introversion is associated with increased activity in the frontal lobe regions. Moreover, the study suggested that individual differences in introversion and extroversion are related to differences in a fronto-striato-thalamic circuit.