

**Speaker:** *Peter Reuter*

**Presentation title:** When Good Surveys Go Bad: Norms for identifying and reporting massive errors in survey-based estimates

**Co-author:** *Philip Cook* (Duke University, USA)

Population surveys are a common tool for producing descriptive statistics. There is a well-developed survey methodology, and it is common in government reports and academic publications to characterize the quality of the survey by noting the methods used and metrics such as sample size, response rate, sample representativeness, and so forth. What is not common is to conduct checks on the plausibility of estimates. Unfortunately, there are many instances in which surveys that appear to be of high quality according to methods and metrics, actually produce particular parameter estimates that are far from the mark. For example, high-quality population surveys of drinking and smoking typically produce per capita consumption estimates that are about half of tax-paid sales (as measured by administrative data). The National Crime Victimization Survey yields estimates of the number of victims of gunshot assault that are about one-third the number from other, more credible sources. The National Survey on Drug Use and Health may underestimate regular heroin use by close to an order of magnitude

In this essay, we document the problem with examples from a number of domains, discuss the likely sources of massive error in good surveys, and provide suggestions about identifying implausible results and limiting their dissemination and use. Our examples are all taken from surveys that ask respondents about their personal experience or condition.