

# Validity of Random-Digit-Dialing in Recruiting Controls in a Case-Control Study

Peizhong Peter Wang, MD, PhD; Elizabeth Dicks, PhD; Xianying Gong, MSc; Sharon Buehler, PhD; Jinhui Zhao, MSc; Josh Squires, BSc; Banfield Younghusband, PhD; John R. McLaughlin, PhD; Patrick S. Parfrey, MD

---

**Objectives:** To evaluate whether the participating controls represented the underlying population in a colorectal cancer case-control study in a geographically isolated North American population. **Methods:** The characteristics of the study controls recruited through Random-digit-dialing (RDD) were compared with those in the corresponding target population estimates. **Results:** Partici-

pating controls were more likely to have higher levels of education and income and were less likely to be smokers. **Conclusion:** Study controls recruited through RDD tend to have higher socioeconomic status, which may lead to overestimation of a number of risk factors in this study.

**Key words:** case-control study, random-digit-dialing, Newfoundland  
*Am J Health Behav.* 2009;33(5):513-520

---