The National Center for Deaf Health Research (NCDHR) conducts community participatory research on health promotion and disease prevention with deaf communities. Funded by the Centers for Disease Control and Prevention, NCDHR partners with Rochester deaf communities and with the National Technical Institute for the Deaf to identify the major health issues affecting deaf communities and q health care and health information that deaf community members may experience. Toward this goal, NCDHR has developed a computerized, linguistically accessible health survey to collect health data from deaf community members. Significant language and technology challenges were met to develop this survey, including challenges related to cultural and sign language translation issues, survey implementation and computer interface usability issues, and survey evaluation issues. The survey uses touch-screen technology to present 98 survey items in sign language, addressing physical and mental health, health care access, and health literacy. Respondents can audition and choose among six video-recorded signers to present the survey items, including ASL signers and signers who use conceptually accurate English-based signing. The survey instrument is self-instructing, permits ondemand control of signer choice, preferred language, and many display features, and incorporates a linked sign language terms. This poster highlights the development of the health survey and provides a hands-on demonstration of the survey instrument.