OBJECTIVE: To explore risk associations between health variables and to compare these associations with the prevalence of each risk. METHODS: Manufacturing-company employees (N=16,879) completed a self-reported health risk appraisal with on-site biometric screening. RESULTS: Risk prevalence and risk association findings differed by gender, age, and overall risk level. Risks that were most highly associated with other risks were different from risks that were most prevalent. CONCLUSIONS: The findings suggest that in addition to risk prevalence, individual characteristics and the level of association between risks are also important to consider when planning health interventions.