

Obesity and Mortality

by Sam Gutterman, FSA, CERA, FCAS, MAAA

Presented at the Living to 100 Symposium

Orlando, Fla.

January 8–10, 2014

Copyright 2014 by the Society of Actuaries.

All rights reserved by the Society of Actuaries. Permission is granted to make brief excerpts for a published review. Permission is also granted to make limited numbers of copies of items in this monograph for personal, internal, classroom or other instructional use, on condition that the foregoing copyright notice is used so as to give reasonable notice of the Society's copyright. This consent for free limited copying without prior consent of the Society does not extend to making copies for general distribution, for advertising or promotional purposes, for inclusion in new collective works or for resale.

ABSTRACT

The percentage of the population who are obese has grown dramatically on a worldwide basis over the last several decades, with the prevalence of obesity stabilizing recently in the United States. Although there have been numerous studies of the effect of this trend on mortality, the findings have been inconsistent and controversial, in part because of methodological differences and the complexity of the relationship between obesity and mortality.

The objective of this paper is to discuss the issues surrounding this relationship and to shed some light on the likely effects of this epidemic. Of particular interest is the so-called obesity-mortality paradox, where mortality experience is lower for overweight individuals and in some cases those who are obese than for those in the normal weight category. Numerous issues associated with this reported paradox are discussed. Although more recent studies of the relationship between mortality and obesity seem to indicate obesity is related to a reduced percent of additional mortality, this may in part be due to the shorter average time those currently obese have been exposed to their condition. Additional premature deaths may arise as more individuals who have become obese are exposed for a longer period to excess adiposity tissue.

Health care costs and rates of disability associated with being obese are already significant and will contribute to increases in overall health care costs as this population segment ages. Although the issues surrounding obesity are being addressed with a great deal of activity and publicity, they have and will continue to prove quite challenging for both individuals and society to manage and overcome.