This document describes the files used to estimate the Global Exposure Mortality Model (GEMM) as reported in “Global Estimates of Mortality Associated with Long Term Exposure to Outdoor Fine Particulate Matter, Burnett et al” published in the Proceedings of the National Academy of Science

There are two types of files:

1. Computer code
   1. Shape Constrained Health Impact Function (SCHIF) that estimates the PM2.5-mortality association within the 15 cohorts (SCHIF.R or SCHIF.sas). Extensive documentation is provided in these files.
   2. GEMM fitting code for non-accidental causes of death and all ages > 25 years (GEMM fitting code ALL COD.docx) and for age-specific GEMMs (GEMM fitting code ALL COD by Age.docx). These programs read in several data files that are contained in this repository.
   3. GEMM code for specific causes of death (GEMM fitting code by COD and Age.docx). This code reads in a single data file (GBD2015 input\_dataset with Pn and China Ensemble error.docx)
2. Data Files
   1. All data files are csv files