

# **Status of Respiratory Protection Programs in Kentucky Firefighters**

**Gregory Easterling and Scott Prince**

University of Kentucky,  
121 Washington Ave., Suite 220  
Lexington, Kentucky 40514-0003  
Email: [tprince@uky.edu](mailto:tprince@uky.edu)

Firefighters are exposed to a variety of harmful substances when performing fire-fighting functions; this makes properly functioning and fitting respiratory protection critical to protecting their health and safety. However, many Fire Departments (FDs) still do not have respiratory protection program in place, or if they do, the plan is may not be totally adequate. A questionnaire was sent to all 825 of Kentucky's FDs assessing their respiratory practices during the past 12 months. A 60% survey response rate was achieved, with 118 of Kentucky's 120 counties returning at least one survey. Of the 494 responding departments, all indicated that they were utilizing some form of respiratory protection, but only 37% of the respondents indicated that they had a written respiratory protection program in place. Paid FDs reported the highest level of having a written program, with 92%, as compared to volunteer-only departments with 25%, and combination paid/volunteer departments reporting 76%. When FDs were divided by size, only 26% of the departments with less 30 members had a written respiratory protection program. For FD's that did not have a program in place lack of funding (52%) and lack of understanding (40%) were the most commonly cited barriers to implementing a program. All departments surveyed indicated that they conduct equipment training on an at least annual basis, while only 52% indicated they had conducted fit testing of some type. Only 24% of all respondents indicated that they have a health care provider that reviews medical questionnaires and/or provides medical evaluations of their fire fighters. This survey shows that many Kentucky departments are not meeting the required and voluntary respiratory protection standards, and also demonstrates the need for improved education and funding to ensure that fire fighters are adequately protected from respiratory hazards. This is particularly applicable to volunteer and small rural departments, which showed the greatest gap in compliance.