Study on Fighting High-Rise Fires Released
Phoenix already implements many of study’s recommendations

(Ted Houston, KFYI News) A landmark study on the hazards of, and suggestions for, fighting fires in downtown high rise buildings was released Wednesday at a national fire chiefs conference held in downtown Phoenix.

The study was conducted last summer in Washington, DC, where different configurations of firefighting crews, methods of accessing a high-rise fire, and other aspects of high-rise firefighting were tested in a controlled environment.

The study assumed an active fire on the tenth floor of a 13-story building, with people trapped on the 11th floor.

Among the key findings, the study found that a large, early firefighting response is much more effective at getting control of a fire, and rescuing people, than several smaller crews brought in over time.

Dr. Lori Moore-Merrell, co-lead researcher, said manpower is important: "Crew size matters. Larger crews come into a fire early. They are able to function differently with different tactics because they have enough firefighters to do so, than sending multiple engines over time... With smaller crews, it takes them a while to assemble enough firefighters to do the same tasks as the early-arriving crew with more firefighters on it. The larger crew can do multiple tasks simultaneously rather than in a sequence, or a series, over time."

She added that the findings will help fire departments fight off attempts to reduce staffing or close fire stations in downtown areas.

The study also found that allowing firefighters to use elevators to go to a floor just below the fire results in getting more firefighters and equipment to the "staging area" sooner than having them take the stairs.

Phoenix fire chief Bob Khan says the study shows that changes the Phoenix Fire Department has made over the last several years are reflected in the study's recommendations.

"Even before 9/11, we learned from the New York Fire Department about fighting fires in high-rises," he told KFYI News. "And they used to give us a hard time because they have REAL high rises. But when you get above ten floors, it's dicey. Ladder trucks go up to about the ninth floor."

Khan says Phoenix FD also learned through trial and error that in addition to having pipes bringing water up to each floor in a high-rise, it's also useful to have pipes bringing fresh air to a building's upper levels, since smoke may otherwise make it difficult for firefighters to breathe. When that's the case, they can tap into the fresh air supply pipes.

Khan says the study should help cities nationwide maintain a strong firefighting presence in their downtown areas. "People are asking hard questions of public safety," he says. "And you need research to explain to the people who are asking, who are paying the bill, why do you need these resources? And this study, in a clinical way, explains that."