



The Science of Training

with David Blake

What officers really need to know about the 21-foot kill zone

Each circumstance is unique and while action/reaction time is vital to the equation, there are many other pieces for consideration when using deadly force

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The Police Executive Research Forum recently released their report: Re-engineering Training on Police Use of Force. The document contains an in-depth discussion of Lieutenant Dennis Tueller's 21-foot drill, often erroneously cited as the "21-foot rule."

The comments within the document should be alarming. Many national police executives opine that the 30-year-old magazine article written by Tueller has been misinterpreted as creating a "21-foot kill zone."

Facts on Tueller's 21-foot Drill

Below are the facts from the original article (which you can read in full here):

- An armed (edged or blunt weapon) suspect can cross 21 feet in about 1.5 seconds
- An officer may draw from the holster and fire 2 rounds in 1 - 1.5 seconds
- Those first rounds may not stop the threat

Tueller's original recommendations include developing tactical awareness to spot danger signs early, spotting danger signs early will "probably" allow an officer to avoid the confrontation altogether, a tactical withdrawal may be your best bet and, finally, if an attack is imminent, move to cover, draw your weapon and plan the next move.

The bottom line is that Tueller identified a danger area of 21 feet for a holstered officer and made officer safety recommendations consistent with those contained in the PERF report. More importantly, Tueller's drill is the foundation for some of today's action/reaction time research, which should be correctly applied to train officers to increase distance (when possible) in myriad situations. The distance increase is likely beyond what officers may have originally felt was sufficient.

Submitted as evidence are the following suspect-movement time studies:

- A study by Duane Wolfe illustrates that seated suspects can cross five feet at an average of 1.3 seconds
- A second study by Wolfe shows standing suspects can cross six feet at an average of 1.1 seconds
- A study by the Force Science Institute shows standing suspects can cross 25 feet at an average of 1.6 seconds

Research on officer-movement time

In addition to the above studies, a study by Alexander Jason revealed that officers draw (multiple holster types) and fire one round from the holster at an average of 1.5 seconds.* A study by the Force Science Institute suggested that officers draw and fire one round from the Level III holster at an average of 2.0 seconds*, and findings from another study by them suggest that officers can fire from a high or low ready position at an average of .83s.* Finally, research by FLETC / Bruce Siddle revealed that officers reacting to a threat can fire from a high ready position at an average of one second with 30 percent accuracy. The accuracy increased to 90 percent with a response time of 2.3 seconds.**

What does it all mean?

The evidence listed here is not to suggest an expansion of any type of perceived kill zone or area where a use of deadly force becomes automatic.*** It does suggest that officers should be trained to increase distances beyond 21-feet when facing an armed suspect when possible.

My recommendation is to slow down and use good tactical decision making based on observation from a distance. Understanding how quickly a situation can go bad is a vital officer safety tool that can save lives on both sides of the badge (see video below).

Ultimately, each circumstance is unique and while action/reaction time is vital to the equation there are many other pieces for consideration: equipment, competency, accuracy, stress, environment, subject capabilities, officer capabilities, and the fact that a bullet does not always immediately stop threats.

A use of deadly force against a suspect with a knife or blunt force weapon will be evaluated on all the details and circumstances known or reasonably known to the officer at the moment the time was used. It is not simply the distance an officer was standing from a threat.

While the evidence for this opinion is anecdotal at best, this article is intended to clarify any misinterpretation. Add your thoughts in the comment section below.

Be safe. Be vigilant.

*Laboratory result based on sound stimulus. Officer already knows the response and only has to react without the decision making time of a real world encounter.

**Laboratory result based on Force Options Simulator.

***There is no such thing as a kill zone in Law Enforcement.

About the author

David Blake retired from a northern California police department after 15 years of federal and local police. He is a Force Science Certified Analyst with instructor certifications in DT, Firearms, Force Options Simulator and Reality Based Training. His career included duties within SWAT, Force Options Unit, Field Training, Gangs and Narcotics. He currently teaches Human Factors and Force Encounters Analysis for the California Training Institute. David is an adjunct professor, police academy instructor and owner of the Blake Consulting and Training Group. Blake holds a BS in Criminal Justice Management and a M.Sc. in Psychology.

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