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**Destroying Myths & Discovering Cold Facts**  
with The Force Science Research Center

## **Edged Weapon Defense: Is or was the 21-foot rule valid? (Part 1)**

*Part 1 of a 2-Part Series*

For more than 20 years now, a concept called the 21-Foot Rule has been a core component in training officers to defend themselves against edged weapons.

Originating from research by Salt Lake City trainer Dennis Tueller and popularized by the Street Survival Seminar and the seminal instructional video "Surviving Edged Weapons," the "rule" states that in the time it takes the average officer to recognize a threat, draw his sidearm and fire 2 rounds at center mass, an average subject charging at the officer with a knife or other cutting or stabbing weapon can cover a distance of 21 feet.

The implication, therefore, is that when dealing with an edged-weapon wielder at anything less than 21 feet an officer had better have his gun out and ready to shoot before the offender starts rushing him or else he risks being set upon and injured or killed before he can draw his sidearm and effectively defeat the attack.

Recently a Force Science News member, a deputy sheriff from Texas, suggested that "it's time for a fresh look" at the underlying principles of edged-weapon defense, to see if they are "upheld by fresh research." He observed that "the knife culture is growing, not shrinking," with many people, including the homeless, "carrying significant blades on the street." He noted that compared to scientific findings, "anecdotal evidence is not good enough when an officer is in court defending against a wrongful death claim because he felt he had to shoot some[body] with a knife at 0-dark:30 a.m."

As a prelude to more extensive studies of edged-weapon-related issues, the Force Science Research Center at Minnesota State University-Mankato has responded by reexamining the 21-Foot Rule, arguably the most widely taught and commonly remembered element of edged-weapon defense.

After testing the Rule against FSRC's landmark findings on action-reaction times and conferring with selected members of its National and Technical Advisory Boards, the Center has reached these conclusions, according to Executive Director Dr. Bill Lewinski:

1. Because of a prevalent misinterpretation, the 21-Foot Rule has been dangerously corrupted.
2. When properly understood, the 21-Foot Rule is still valid in certain limited circumstances.
3. For many officers and situations, a 21-foot reactionary gap is not sufficient.
4. The weapon that officers often think they can depend on to defeat knife attacks can't be relied upon to protect them in many cases.

5. Training in edged-weapon defense should by no means be abandoned.

In this installment of our 2-part series, we'll examine the first two points. The others will be explained in Part 2.

## **1. MISINTERPRETATION**

"Unfortunately, some officers and apparently some trainers as well have 'streamlined' the 21-Foot Rule in a way that gravely distorts its meaning and exposes them to highly undesirable legal consequences," Lewinski says. Namely, they have come to believe that the Rule means that a subject brandishing an edged weapon when positioned at any distance less than 21 feet from an officer can justifiably be shot.

For example, an article on the 21-Foot Rule in a highly respected LE magazine states in its opening sentence that "a suspect armed with an edged weapon and within twenty-one feet of a police officer presents a deadly threat." The "common knowledge" that "deadly force against him is justified" has long been "accepted in police and court circles," the article continues.

Statements like that, Lewinski says, "have led officers to believe that no matter what position they're in, even with their gun on target and their finger on the trigger, they are in extreme danger at 21 feet. They believe they don't have a chance of surviving unless they preempt the suspect by shooting.

"However widespread that contaminated interpretation may be, it is NOT accurate. A suspect with a knife within 21 feet of an officer is POTENTIALLY a deadly threat. He does warrant getting your gun out and ready. But he cannot be considered an actual threat justifying deadly force until he takes the first overt action in furtherance of intention--like starting to rush or lunge toward the officer with intent to do harm. Even then there may be factors besides distance that influence a force decision.

"So long as a subject is stationary or moving around but not advancing or giving any indication he's about to charge, it clearly is not legally justified to use lethal force against him. Officers who do shoot in those circumstances may find themselves subject to disciplinary action, civil suits or even criminal charges."

Lewinski believes the misconception of the 21-Foot Rule has become so common that some academies and in-service training programs now are reluctant to include the Rule as part of their edged-weapon defense instruction for fear of non-righteous shootings resulting.

"When you talk about the 21-Foot Rule, you have to understand what it really means when fully articulated correctly in order to judge its value as a law enforcement concept," Lewinski says. "And it does not mean 'less than 21 feet automatically equals shoot.'"

## **2. VALIDITY**

In real-world encounters, many variables affect time, which is the key component of the 21-Foot Rule. What is the training skill and stress level of the officer? How fast and agile is he? How alert is he to preliminary cues to aggressive movement? How agile and fast is the suspect? Is he drunk and stumbling, or a young guy in a ninja outfit ready to rock and roll? How adept is the officer at drawing his holstered weapon? What kind of holster does he have? What's the terrain? If it's outdoors, is the ground bumpy or pocked with holes? Is the suspect running on concrete, or on grass, or through snow and across ice? Is the officer uphill and the suspect downhill, or vice versa? If it's indoors, is the officer at the foot of stairs and the suspect above him, or vice versa? Are there obstacles between them? And so on.

These factors and others can impact the validity of the 21-Foot Rule because they affect an attacking

suspect's speed in reaching the officer, and the officer's speed in reacting to the threatening charge.

The 21-Foot Rule was formulated by timing subjects beginning their headlong run from a dead stop on a flat surface offering good traction and officers standing stationary on the same plane, sidearm holstered and snapped in. The FSRC has extensively measured action and reaction times under these same conditions. Among other things, the Center has documented the time it takes officers to make 20 different actions that are common in deadly force encounters. Here are some of the relevant findings that the FSRC applied in reevaluating the 21-Foot Rule:

- Once he perceives a signal to do so, the AVERAGE officer requires 1.5 seconds to draw from a snapped Level II holster and fire one unsighted round at center mass. Add 1/4 of a second for firing a second round, and another 1/10 of a second for obtaining a flash sight picture for the average officer.
- The fastest officer tested required 1.31 seconds to draw from a Level II holster and get off his first unsighted round. The slowest officer tested required 2.25 seconds.
- For the average officer to draw and fire an unsighted round from a snapped Level III holster, which is becoming increasingly popular in LE because of its extra security features, takes 1.7 seconds.
- Meanwhile, the AVERAGE suspect with an edged weapon raised in the traditional "ice-pick" position can go from a dead stop to level, unobstructed surface offering good traction in 1.5-1.7 seconds.

The "fastest, most skillful, most powerful" subject FSRC tested "easily" covered that distance in 1.27 seconds. Intense rage, high agitation and/or the influence of stimulants may even shorten that time, Lewinski observes.

Even the slowest subject "lumbered" through this distance in just 2.5 seconds.

Bottom line: Within a 21-foot perimeter, most officers dealing with most edged-weapon suspects are at a decided - perhaps fatal - disadvantage if the suspect launches a sudden charge intent on harming them. "Certainly it is not safe to have your gun in your holster at this distance," Lewinski says, and firing in hopes of stopping an activated attack within this range may well be justified.

But many unpredictable variables that are inevitable in the field prevent a precise, all-encompassing truism from being fashioned from controlled "laboratory" research.

"If you shoot an edged-weapon offender before he is actually on you or at least within reaching distance, you need to anticipate being challenged on your decision by people both in and out of law enforcement who do not understand the sobering facts of action and reaction times," says FSRC National Advisory Board member Bill Everett, an attorney, use-of-force trainer and former cop. "Someone is bound to say, 'Hey, this guy was 10 feet away when he dropped and died. Why'd you have to shoot him when he was so far away from you?'"

Be able to articulate why you felt yourself or other innocent party to be in "imminent or immediate life-threatening jeopardy and why the threat would have been substantially accentuated if you had delayed," Everett advises. You need specifically to mention the first articulable motion that indicated the subject was about to attack and was beyond your ability to influence verbally."

And remember: No single 'rule' can arbitrarily be used to determine when a particular level of force is lawful. The 21-Foot Rule has value as a rough guideline, illustrating the reactionary curve, but it is by no means an absolute.

"The Supreme Court's landmark use-of-force decision, in *Graham v. Connor*, established a 'reasonableness' standard," Everett reminds. "You'll be judged ultimately according to what a 'reasonable' officer would have done. All of the facts and circumstances that make up the dynamics between you and the subject will be evaluated."

Of course, some important facts may be subtle and now widely known or understood. That's where FSRC's unique findings on lethal-force dynamics fit in. Explains Lewinski: "The FSRC's research will add to your ability to articulate and explain the facts and circumstances and how they influenced your decision to use force."

Related Story:

[Edged Weapon Defense: Is or Was the 21-foot Rule Valid? Part 2](#)

[Salt Lake Police Shoot Man Who Has Knife](#)

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### **Comments Requested:**

To what distance are some trainers extending the 21-Foot Rule? How are officers making themselves unnecessarily vulnerable to edged-weapon attacks by over-investing in a certain defensive tool? How can training be made more realistic and relevant?

### **Related Training:**

Three courses for trainers on edged-weapon defense are offered through the new PoliceOne Training Network, in conjunction with the national training division of Fox Valley Technical College: Basic and Master Edged Weapon Instructor training, taught by Dave Young, and the Tactical Weapon Control Instructor course, taught by Gary Klugiewicz. [More information](#)

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The FSRC was launched in 2004 by Executive Director Bill Lewinski, PhD. - a specialist in police psychology - to conduct unique lethal-force experiments. The non-profit FSRC, based at Minnesota State University-Mankato, uses sophisticated time-and-motion measurements to document-for the first time-critical hidden truths about the physical and mental dynamics of life-threatening events, particularly officer-involved shootings. Its startling findings profoundly impact on officer training and safety and on the public's naive perceptions.

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