Standoff Distance and Scene Geometry

Version 1.0 · Current · October 2026

What It Is

Standoff distance is the spatial separation between an officer and a subject with an edged weapon at the time contact is initiated and maintained. Scene geometry refers to the overall spatial configuration of the encounter – the positions of officers, the subject, bystanders, cover, exits, and barriers – and how that configuration shapes the tactical options available.

Distance and geometry are not fixed conditions; they are managed variables. Officers who understand their role in creating and maintaining tactical geometry produce better conditions for both de-escalation and force application if force becomes necessary.

The Tueller Drill and Its Misapplication

The Tueller Drill, developed by Sergeant Dennis Tueller of the Salt Lake City Police Department in 1983, is a training exercise demonstrating that an average person can cover approximately 21 feet (6.4 meters) in 1.5 seconds – roughly the time required for a trained officer to draw and fire a handgun from a holstered position.

The drill is widely cited in law enforcement training and litigation as establishing a "21-foot rule" – a bright-line distance within which a subject with an edged weapon may be shot without warning. This application is incorrect and has been explicitly rejected by federal courts.

What the Tueller Drill actually shows: At approximately 21 feet with no obstacle between the officer and subject, a charging person may close to contact range before an officer can complete a draw-fire sequence. The drill quantifies a specific, constrained scenario.

What it does not establish: - That any subject with an edged weapon within 21 feet may be shot. - That 21 feet is a universal threshold for threat imminence. - That distance is the only variable that determines whether a person constitutes an immediate threat.

The drill assumes the subject is already in motion toward the officer, the officer's weapon is holstered, there is no intervening obstacle, and the officer has no advance warning of movement. Change any variable and the calculus changes. A subject standing at 18 feet who is not moving is not in the same tactical situation as a subject who has already begun charging at 21 feet.

Courts applying *Graham v. Connor* consistently require an assessment of actual threat, not a geometric threshold. Distance is a factor in that assessment, not a substitute for it.

Distance as a Tactical Resource

Distance matters for reasons beyond the draw-fire calculation:

Decision time. Distance provides time to assess evolving information. A subject's expression, body language, grip change, weight shift, or verbal content all communicate information that an officer at 30 feet can process differently than an officer at 8 feet. Shorter distances compress decision time and reduce the information available before force may be required.

De-escalation interval. Effective de-escalation requires a sustained period of non-threatening engagement. This is structurally difficult to create from close range. Officers who initiate contact at conversational distance (under 6 feet) have eliminated the spatial resource that makes de-escalation possible.

Force option availability. At close range, less-lethal options become less effective or tactically unavailable. CEW deployment requires distance for probe spread; chemical spray at close range creates cross-contamination risk; contact-range deployment of impact munitions is contra-indicated. An officer who allows distance to close to less than 6–8 feet has, in most equipment configurations, lost access to less-lethal options.

Recovery from error. At distance, an officer who misreads a situation has time to recognize the error and adjust. At close range, a misread may produce a contact that cannot be managed without force.

Scene Geometry

Scene geometry is the three-dimensional arrangement of the encounter. It includes:

Cover. A position behind ballistically or physically resistant material (vehicle, concrete pillar, brick wall, doorframe). Cover provides protection and creates a physical barrier that a subject must navigate to close distance.

Concealment. A position that reduces visual exposure without providing ballistic protection (shrubs, wooden fencing, a car door). Concealment has psychological value but does not provide meaningful physical protection.

Angles. The angular relationship between officers, the subject, and available cover determines which positions are mutually advantageous. An officer positioned such that the subject must move toward cover – rather than toward the officer – creates a geometry that favors the officer. Multiple officers positioned at different angles create crossfire risk but also prevent the subject from moving toward any single officer without exposing themselves to another.

Exit paths. Both the subject's available exits and the officer's exit path matter. An officer who has positioned themselves between the subject and the only exit has created an inadvertent cornering effect – the subject cannot leave without moving toward the officer, producing conditions that may precipitate force.

Choke points. Doorways, narrow corridors, stairwells, and vehicle lanes constrain movement for both the officer and the subject. In confined spaces, distance cannot be maintained without one party exiting the space. Officers who enter confined spaces to address an armed subject are trading distance – their primary tactical resource – for positional control.

Geometry Errors

The proximity trap. Officers who approach too close before threat assessment are difficult to reposition without triggering a response. Once an officer is at conversational range with an armed subject, creating distance requires the officer to move backward – which may not be tactically available – or the subject to move backward, which cannot be compelled.

The fatal funnel. Approaching through a doorway or other narrow opening places an officer in a position where their movement options are constrained at the moment of greatest risk. Officers should not approach through doorways directly. Positioning off-axis – beside rather than in front of the opening – preserves options.

Cornering the subject. An officer who positions themselves between a subject and the subject's available exit routes is not containing the subject; the subject cannot leave without moving toward the officer. This geometry increases the likelihood of an approach. Tactical containment should funnel the subject toward a wall or corner, with the officer maintaining a position that allows the subject to move away from them.

Failing to use cover. Officers who stand in the open when cover is available have eliminated a tactical resource. Using available cover does not require the officer to abandon communication – it requires them to manage their position while communicating.

Managing Distance Under Pressure

Distance management becomes most critical when the subject is moving. Three principles apply:

1. Move before the gap closes. An officer who waits until a subject is at contact range to begin repositioning has run out of distance. Lateral movement, backward movement, or movement to cover should begin when the subject starts moving, not when they arrive.
2. Communicate the distance requirement. "Stay where you are," "don't come any closer," and similar commands serve both a legal and a tactical function – they establish that the subject is being directed to stop and create an auditable record of the command.
3. Distance management is not retreat. The cultural equation of maintaining distance with tactical failure is not supported by evidence. Officers who manage distance effectively – maintaining a standoff that

preserves options – resolve more edged-weapon encounters without force than officers who allow proximity to eliminate their options.

Policy Implications

1. Replace 21-foot-rule training with action-reaction interval training that accurately represents the variables affecting force justification and timing.
2. Train distance maintenance as an active skill, not a passive condition. Officers should practice maintaining standoff under subject movement, in confined spaces, and under verbal pressure.
3. Include initial contact distance in use-of-force reporting. Agencies that do not capture where the officer was standing when the encounter began cannot evaluate whether distance management practices affect force frequency or lethality.
4. Conduct scene geometry review in use-of-force investigations. Post-incident reconstruction should map officer and subject positions at each stage of the encounter to assess whether tactical geometry contributed to force necessity.
5. Incorporate geometry training into de-escalation curricula. De-escalation is not only a communication skill – it requires the spatial conditions in which communication can occur.

HOW TO CITE

Edged-Weapon Response Lab. (2026). *Standoff Distance and Scene Geometry*. In *EWRL Evidence Library* (Version 1.0). https://droptheknife.org/bulletins/standoff_distance_scene_geometry (https://droptheknife.org/bulletins/standoff_distance_scene_geometry)