

Follow-through has its place. The benefits of trigger follow-through include: eliminating or preventing a flinch, maintaining sight picture, aid to quick follow-up shot, and facilitates in calling your shots.

Follow-through and dry-fire (combined with the dummy/live round drill) are excellent for curing a flinch problem and preventing an inexperienced shooter from developing a flinch. Follow-through “tricks” your brain into focusing on the post-bang moment and therefore negates the anticipation of the bang and recoil.

However, for experienced shooters with good trigger mechanics, there’s no evidence showing an accuracy gain from follow-through. The argument for an accuracy gain seems to be that once the sear breaks and the bang and recoil begin, involuntary reflexes act while the bullet is in the barrel.

But this is not the case with a modern bolt rifle. The time from the break of the sear to when the bullet exits the barrel is about 6 milliseconds for modern bolt rifles and a bit longer for others. (Lock time is about 3ms; ignition time 0.5ms and barrel time is 2ms)

Studies of the Startle Response in humans to a loud noise shows involuntary reflex actions starting, on average, in 30-50ms. I did see one study that showed the jaw muscle react in as fast as 14ms but that seemed to be an exception.

So the bullet is long gone before you can blink or your jaw muscles twitch.

Notice: a flinch is not considered here as a normal reflex action. A flinch is an involuntary anticipation of the noise and recoil and can occur before, during, and after the sear falls.

The time span from sear break to bullet exit is divided into three parts: lock time, ignition time, and barrel time:

- Lock time, the time from sear release until the primer is struck
- Ignition time, the time from when the primer is struck until the projectile starts to move. Most studies put this time in terms of microseconds (one thousandth of a millisecond) and usually between 200 and 500 microseconds
- Barrel time, the time from when the projectile starts to move until it exits the barrel. This depends on barrel length, twist, and velocity but most agree it is between one and two milliseconds.

Lock time examples

Manufacturer and model	Lock time milliseconds
Rößler Titan 3, 6, 16 and Alpha	1.6 ms
Savage 10 AccuTrigger	1.6 ms
Anschütz 1827 Fortner	1.7 ms
Sig Sauer 200 STR	2.4 ms
Remington 700 (short action)	2.6 ms
Winchester Model 70	3 ms
Remington 700 (long action)	3 to 3.2 ms
Ruger M77	3.6 ms
M1917 Enfield	4 to 5 ms
Mauser M98	4 to 5 ms
M1903A Springfield	5.7 to 6.5 ms
Lee-Enfield	8 to 9 ms

AR-15/M4/HK416	approximately 10 ms
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After all this, I will say: I don't think there is a down side for experienced shooters practicing trigger follow-through. My point is that if you are an experienced shooter with good fundamentals, your accuracy problem is not likely to be solved by a one second follow-through after the shot. You need to look elsewhere.