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Cellphones for Emergencies

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Many cellphones have features that allow you to contact 9-1-1 during an emergency. In theory these procedures sound appealing because they provide the impression that you can quickly access emergency services in a crisis. Yet, when we take into account the physiological and psychological responses to stress we find these emergency procedures may not be as effective as implied. This is not to say these emergency functions will not work in all situations. There are many variables that impact your ability to respond to a crisis especially relating to your level of training.

Depending on the type of phone you own the emergency procedures vary. For this article, I will be referring to the use of an iPhone. If you use a different brand of phone be sure to research the procedures for the phone you carry. First I will explain the procedures and then I will explain why they may not work as planned in an emergency situation.



Calling Emergency Services

There are two methods to access emergency services using an iPhone.

Method 1: Using an iPhone 8 or later:

1. Press and hold the side button and one of the volume buttons until the Emergency SOS slider appears.
2. Drag the Emergency SOS slider to call emergency services.

If you continue to hold down the side button and volume button, instead of dragging the slider, a countdown begins and an alert sounds. If you hold down the buttons until the countdown ends, your iPhone automatically calls emergency services.

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Method 1

1. Press and hold the side button and one of the Volume buttons until the Emergency SOS slider appears.

Volume Buttons

Side Button

2. Drag the Emergency SOS slider to call emergency services.

If you continue to hold down the side button and Volume button, instead of dragging the slider, a countdown begins and an alert sounds. If you hold down the buttons until the countdown ends, your iPhone automatically calls emergency services.



Method 2:

On iPhone 8 or later, you can call by pressing the side button five times.

Method 2



1. Press the side button 5 times

NOTE: You have 3 seconds to stop the call if the Emergency SOS function is accidentally activated or you are practicing this feature on the phone.

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If you cancel out of any of the previous procedures, you will need to enter your iPhone Password to access your phone.

The **Touch ID** feature will not work.

If it is still an emergency situation you can hit "Emergency" to dial a phone number.



From Theory to Reality

Now that the emergency procedures of the phone have been covered let's look into reasons why you may not be able to effectively use these features in a crisis situation. Under extreme stress you will experience both psychological and physiological reactions. For this article I will focus solely on the impact of the physiological reactions. The sympathetic nervous system (SNS) is activated during an emergency resulting in what is commonly called the chemical dump. Epinephrine (adrenaline), norepinephrine (noradrenaline), and cortisol are released into the bloodstream. As a result of the chemical dump you may experience dizziness, nausea, trembling in your hands, and tingling sensation in your fingers, arms, legs or face (not an exhaustive list). You will experience an almost immediate spike in heart rate that negatively impacts fine motor skills. This means it can inhibit your ability to perform necessary tasks effectively and efficiently in a timely manner. Following is an explanation of motor skills:

Motor Skills	Definition
Fine Motor Skills Deteriorates at 115 BPM	Skills performed by small muscle groups such as the hands and fingers. Typically requires precise hand-eye coordination.
Complex Motor Skills Optimal at 115-145 BPM	Skills that require hand-eye coordination, timing, movement and tracking. Techniques that consist of multiple movements.
Gross Motor Skills >175 BPM	Skills that utilize large muscle groups.

Fine motor skills deteriorate when your heart rate hits approximately 115 beats per minute (bpm). Most people will quickly reach a heart rate of 115 bpm in an emergency.

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Problems with Method 1

To call emergency services with an iPhone 8 is a two-step process consisting of the following:

Step 1: Press and hold the side button and one of the volume buttons until the Emergency SOS slider appears.

Problem 1: If you lose finger dexterity and your hands are shaking because of the physiological impact of stress it is going to be extremely difficult to find and hold both the side button and one of the volume buttons.

Problem 2: If you are able to accomplish step 1 you then get a screen that has numerous options such as power down, medical, emergency, and cancel. Having to choose the correct option under stress adds to the complexity of the task. There are too many options on this screen. Remember, fine motor skills requires precise hand eye coordination.

Step 2: Drag the Emergency SOS slider to call emergency services. If you continue to hold down the side button and volume button, instead of dragging the slider, a countdown begins and an alert sounds. If you hold down the buttons until the countdown ends, your iPhone automatically calls emergency services.

Problem 3: If you get to this step you still need the dexterity to slide the option for Emergency SOS. Under no stress this is extremely easy but stress makes it very challenging to use such fine motor skills.

Steps 1 and 2 both require fine motor skills that will not work for most people under stress.



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Problems with Method 2

Method 2 requires that you press the side button five times.

While this method has less steps and appears significantly easier to implement than method 1 it still suffers from the same issue in that it requires fine motor skills to a) find the side button and then b) press it a total of five times...while under stress!



Side Button

Pressing the side button is a Fine Motor Skill that is difficult under stress

Clearly method 1 has too many steps and is too complicated to use in an emergency. Let's focus on method 2 because it appears to be a process that is easier to implement. And it definitely is easier...if you are not under stress.

Problem 1: The problem remains that you need fine motor skills to find the side button.

Problem 2: If you are able to find the side button you must be able to press it five times in a row. Depending on the type of emergency you encounter this may not be possible, i.e. a threat is attacking you.

There are many other factors to consider that impact the feasibility of this method. I will discuss these shortly.

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Testing the Functionality

It is easy to assume how an item of safety gear will work. But the real test is using the gear in a training environment that incorporates stress. I've tested the functionality of cellphones for emergency use with a variety of different groups. Lets look at a group of citizens who attended an Active Killer Incidents class I facilitated. In this class was a diverse group of people ranging in age from their 20's to 70's. The class consisted of men and women from all walks of life. The process for testing out the effectiveness of cellphones (iPhone users only) was as follows:

Note: This is a general overview and not a detailed step by step process.

Part 1: No Stress

- I demonstrated how to initiate an emergency call by finding the side button on the iPhone and then press it 5 times. I demonstrated how to cancel the phone call and that they only have 3 seconds to do so.
- Participants were told to carry their phone however they normally carry it. Carry methods included:
 - Carrying the phone in a pocket
 - Carrying the phone in a purse
 - Carrying the phone in a case attached to a belt
 - Some held the phone in their hands
- With no external stress participants were told to access their cellphone and then initiate an emergency call by finding the side button and pressing it 5 times. They were told they had as long as they needed and that time was not a factor. If they were successful they were instructed to immediately cancel the call.

The majority of participants performed well on this initial test. Asked if they felt confident in making an emergency call using this method most responded yes.

Part 2: Practice

- I again demonstrated how to initiate an emergency call by finding the side button on the iPhone and then press it 5 times
- Participants were told to practice making an emergency call 10 times without any stress. Again, they were instructed to cancel the call.
- Asked if they felt confident in making an emergency call using this method after the practice session everyone said yes.

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Part 3: Scenario

- Participants were told to carry their phone however they normally carry it.
- Under stress of the scenario the students were to initiate an emergency call using the demonstrated method. If they were successful they were instructed to immediately cancel the call.

Outcome: Not one participant was able to initiate the emergency phone call during the scenario using the previously practiced method.

Problems encountered include:

- ⇒ Everyone reported that they had to look at their cellphone causing them to lose situational awareness of the threat. Some reported feeling disoriented during the scenario and did not know where the threat was or what was going on. This is a significant problem during a crisis.
- ⇒ Everyone reported they used two hands during the process. They used one hand to retrieve and hold the phone as their other hand was trying to find the side button and then press the side button 5 times. From a safety perspective this is problematic because the participants became overly focused on the phone rather than what the threat was doing and environmental factors.
- ⇒ Some reported that they changed the manner in which they performed the emergency phone process during the scenario from the way they practiced.
- ⇒ Some reported they dropped their phone during the scenario. Once the phone is dropped it is effectively out of play.
- ⇒ Some reported that they could not focus on the phone at all because of the scenario and what was occurring. Essentially, they became overwhelmed despite knowing that a scenario was going to occur and having practiced with their phone.

Remember, if it doesn't work in training it will not work in a real crisis.

Activating an emergency call on the phone is easy when:

- ⇒ you are not under stress
- ⇒ there is no threat
- ⇒ there is no danger to your safety

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Stress changes everything. The “chemical dump” you experience is going to result in a physiological response. One cannot out-train physiology. We must work within its limitations. Yes, it is possible to stress inoculate but this should not be misconstrued to imply that you will not be impacted by stress. Keep in mind that for this test it was fine motor skills that were impacted the most which are the exact skills required to activate the phones emergency functions.

Additional Factors to Consider:

Violence does not happen in a vacuum. You should never become so hyper-focused on trying to call 9-1-1, by whatever method, that you lose sight of the threat or place yourself in further jeopardy. Additional factors to consider include:

- Time is a factor in all violent incidents
- Distance is a factor in all violent incidents
- Actions of the threat, in part, dictate how you will respond
- Physiology is a factor that you will need to contend with during stressful encounters
- Fine motor skills will be impaired by stress rather quickly which impacts your dexterity
- How and where you carry your cellphone, or other safety equipment, is a factor
- If your cellphone is in a case, the type of case impacts your ability to access buttons
- There is a difference between stress inoculation training and out-training physiology

If you want to know the effectiveness of a technique and whether it will work you must pressure test it under stress. You cannot theorize the effectiveness of a technique. If you haven't tested it in a controlled scenario that includes stress then you are speculating what you think will happen versus what will really happen. Never underestimate the impact of stress and its relation to performance. The impact of stress on performance is well documented in research and CCTV's. Stress changes everything.

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When Can These Cellphone Techniques Work?

In general, these cellphone techniques are best utilized when you are NOT the focus of the emergency. This means you are not as impacted by stress and there is typically no danger to your personal safety. But note, this is not always the case. Some people who are not directly involved can still be impacted by stress to the point they are unable to activate these emergency phone functions. Your level of experience, training, and practice is a factor in how you will respond in a crisis.

What about “Hey Siri”?

It is also important to know that voice commands using Siri will often not work when you are under stress because the tone/pitch of your voice changes causing Siri not to understand your request to call emergency services. As voice recognition technology improves this may be less of a factor in the future.

The Frustration Factor

It is very easy to become frustrated when you are unsuccessful in your attempt to access emergency services using your cellphone regardless of the method utilized. Repeated unsuccessful attempts leads to increased frustration. Before long you are so worked up that any attempt to contact 9-1-1 becomes futile. It becomes a vicious cycle of ineffectiveness which only leads to more frustration.

Lesson Learned

The lesson to learn is that stress changes everything. One cannot ignore, deny, or minimize the impact of stress on performance. What you are able to easily accomplish under no stress will be significantly more difficult to implement in a stressful situation especially when the source is from a violent attacker!

About the author

Scott Kirshner, M.Ed., SAS-AP® has been a Parole Administrator, Supervisory Probation Officer, and a Corrections Officer. He has extensive experience as an officer survival trainer and has been a lead defensive tactics instructor, firearms instructor, and use of force instructor. He is the author of numerous safety related books which is available on Amazon.com. Mr. Kirshner is the owner and Lead Instructor of Dedicated Threat Solutions, LLC. The author can be reached at: info@dedicatedthreatsolutions.com or to learn more visit: www.dedicatedthreatsolutions.com

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