

UNIVERSITY OF CALGARY | VP SERVICES | Environment, Health and Safety

Field Safety Communication Device Guide

EHSMS Element: Field Safety

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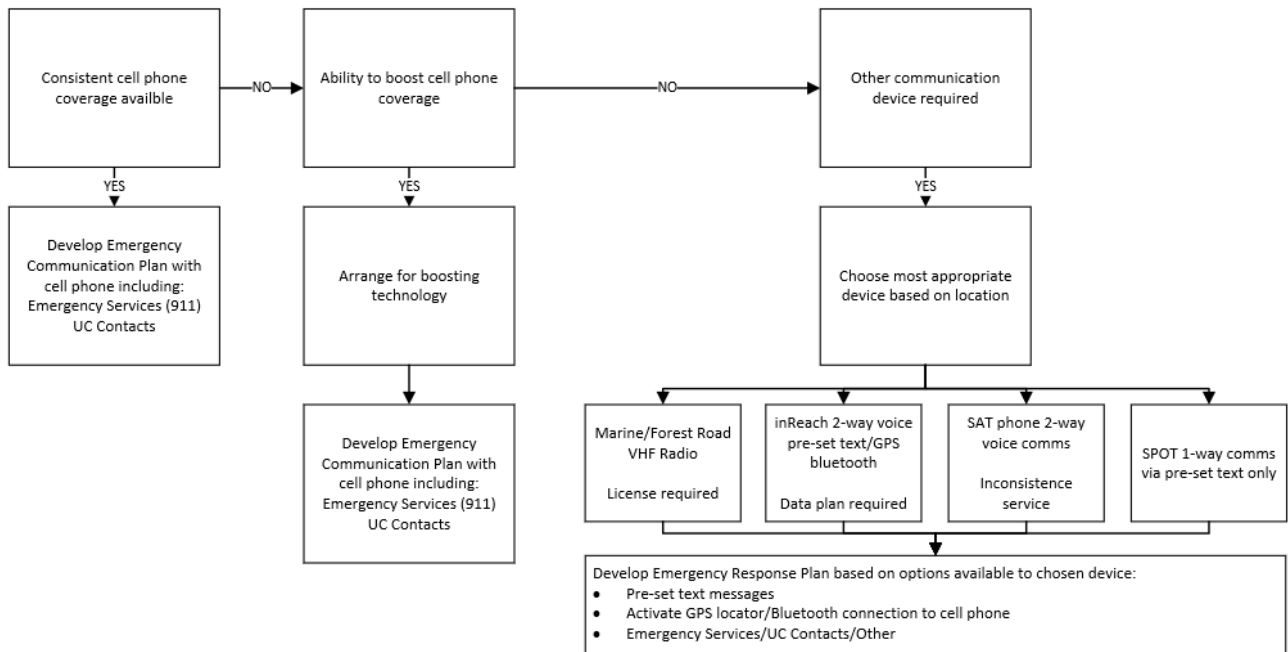
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Table of Contents

TABLE OF CONTENTS.....	1
1. COMMUNICATION DEVICE GUIDE	2
1.1 COMMUNICATION DEVICES	3

1. COMMUNICATION DEVICE GUIDE



1.1 COMMUNICATION DEVICES

Type of Device	Registration, Licencing, Subscription Requirements	How it Works	Strengths	Limitations
Cell Phone	Download UC Emergency App			
Marine/Forest Road VHF Radio	License required			
2-Way Radio				
Personal Locator Beacon (PLB)	Register with appropriate agency	<p>3-stage activation</p> <p>Sends GPS coordinates via Cospas-Sarsat satellite system to agency</p> <p>Agency deploys local area rescuers</p>	<p>Lithium battery is only engaged when PLB is in use (lasts for years)</p> <p>Can be used worldwide</p>	<p>Unable to provide further details to emergency responders</p> <p>Unable to verify help is on route</p> <p>Registration is user specific</p> <p>No additional features available</p> <p>Can't cancel activation</p> <p>Must be sent in for battery replacement</p>
Satellite Emergency Notification Device (SEND) or SPOT phone with International Emergency Response Coordination Centre (IERRC) website https://www.iercc.com/en-CA/	<p>Requires a subscription</p> <p>Must set up message and recipients in advance</p> <p>SPOT battery life based on type of use</p> <p>Power on/unused = one year</p>	<p>Uses private satellite systems to send your info to GEOS International Emergency Response Coordination Centre in Houston</p> <p>GEOS coordinates with local rescue agency</p>	<p>1-way pre-set text messages</p> <p>Can be used to send pre-set text message and GPS coordinates to family</p> <p>Some models allow SMS messaging</p>	<p>Unable to provide further details to emergency responders</p> <p>Unable to verify help is on route</p> <p>Subscription costs can be prohibitive</p> <p>Up to 5-minute delay in sending message (do not turn off device)</p>

	<p>SPOTcasting = 14 days</p> <p>911 mode =7 days</p>		<p>Some subscriptions are available by the month</p>	<p>immediately after sending message)</p> <p>Coverage is subscription/device dependent</p> <p>Restricted or prohibited in some countries due to threat of terrorism</p> <p>Weaker signal strength must be outside of building with clear view of sky</p>
SPOTX	<p>SPOTX requires active service subscription to properly utilize all device functions</p>	<p>2-way satellite messaging, tracing SOS capabilities and other device functions</p>		
<p>Garmin inReach With GEOS Emergency Monitoring website https://inreach.roadpost.ca/geos-emergency-response/</p>	<p>inReach uses Iridium satellite network to provide pole-to-pole coverage</p>	<p>2-way pre-set text GPS coordinates</p> <p>Bluetooth enabled</p>	<p>Can send or receive GPS location to anyone with a text, email or another inReach</p> <p>inReach mini offers access to weather reports, trip tracking and navigation</p>	<p>Set up multiple correspondence prior to leaving to ensure ability to connect in both directions</p>
<p>GeoPro and Iridium Extreme with GeoPro Mobile App</p>	<p>GeoPro Mobile App requires cellular network, range and data</p> <p>Emergency contact rollup must be preprogrammed</p>	<p>Maintains a forensic historical account of communications</p>	<p>Suitable for working alone and high-risk activities</p> <p>Emergency contact rollup can be automated</p>	

	Check in time must be scheduled in advance		Scheduled check in time provides missed check in notification 2-way communication	
Life 360	Free mobile app requires cell service and data Drains phone battery when in use		Can be set up as a family, team or department to track multiple people	User needs to shut off location when not in use
<p>Other devices information and details can be found at: Backcountry Communication Gadget Comparison by Tripsavvy https://www.tripsavvy.com/gadgets-for-backcountry-communication-4066040</p> <p>New technologies are continuously being developed that may not be addressed on this document. This is not an exhaustive list.</p>				

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