

Dementia (Alzheimer's) (1051)

Dementia includes Alzheimer's disease and several other related disorders (vascular dementia, Parkinson's disease, and dementia with Lewy bodies among others). From a search and rescue perspective there is no appreciable difference between the different dementias.⁴² Alzheimer's disease is the most common form of the irreversible dementias and the term is included since, in common language, it is often used to represent all dementias. Regardless of activity, search subjects with dementia were placed into this category.

Dementia results in a wide range of changes in behavior and cognitive (thinking) skills. It ranges from mild, where the person is still able to perform all activities of daily living, to severe. The more severe the dementia, the more likely the subject is to wander and experience symptoms such as hallucinations and psychosis. Dementia is the loss of memory, reason, judgment, and language to such an extent that it interferes with daily living. Some of the earliest symptoms may be problems with short-term memory. One or more cognitive areas are disturbed: (1) aphasia (problems with language, e.g., finding the right word); (2) apraxia (cannot move body correctly); (3) agnosia (cannot recognize common objects, especially faces); (4) decreased executive functions (planning, organizing, abstracting).¹⁹ Dementia often results in severe disturbances in how a person perceives and interprets events, sights, and sounds around him.

Furthermore, the visual field (peripheral vision) is narrowed, creating "tunnel vision."^{43,44} A reduction in peripheral vision results in poor navigators using only what they see in front of them versus excellent navigators who combine active scanning for landmarks they remember.⁴⁵ This may account for dementia wanderers' trademark behavior of essentially moving straight ahead: "They go until they get stuck." Direction of travel predicts a dementia subject's final location better than it does in most other subject categories.

Every subject is different, and determining the severity of the individual's dementia provides additional important insight. Mild to moderate severity is associated with more goal-directed wandering. Initially, the subject does in fact have a destination in mind. Distances traveled may be greater. The subject

is more likely to use public transportation. In a short conversation with the subject one may not detect anything unusual. Dementia subjects are usually recognized by the public due to inappropriate dress, unsafe or inappropriate behavior, asking for assistance, or an inappropriate response.⁴⁶ If engaged in a conversation, then suspicion is usually raised by repetitive questions, phrases or words. Subjects with severe dementia tend to show random (i.e., no discernable goal) wandering, travel shorter distances, and may have profound sensory disturbances. Exit-seeking behavior may be seen in both mild and severe dementia. One is more likely to see this behavior when a person is in a new location or has been taken out of a familiar environment.

Hallmark behaviors:

- ① They go until they get “stuck.”
- ② Appear to lack the ability to turn around and may ping-pong off some barriers.
- ③ Direction of travel is a good predictor of where they are found. Look for sign and attempt to determine exit door.
- ④ Oriented to the past. The more severe the dementia, the further in the past they exist. Figure out where in the past the subject is currently “living” in order to determine possible destinations (e.g., a former residence, a work place). Investigative questions assist to better understand the subject’s past (which, for them, may be the present).
- ⑤ May attempt to travel to former residence, favorite place or what appears to be former place, or workplace.

In an urban environment, the subject is typically found in structures or walking along roads. In both urban and wilderness environments, the subject is highly likely to cross or depart from a road (66%).⁴⁷ If the subject leaves the road or travel feature, he does not travel far. He may often go unnoticed unless his dress is highly unusual. Track offset statistics for dementia are the shortest of all subject categories. In the wilderness, the subject is typically walking or gets stuck in brush/briars or drainages. Structures are common. Subjects are also attracted to water features and will walk into water (perhaps without even realizing it is water). They are generally mobile for only a short period of time. In temperate domains, half of the subjects are mobile for less than an hour. In dry domains, subjects remain mobile longer. They will

not leave many verifiable clues. They will not cry out for help or respond to shouts—only 1% are responsive.⁴² Some dementia subjects could be viewed as “passive-evasive.” Since they do not perceive themselves as lost, they would not attempt to signal or even respond to shouts. **There is a 25% fatality rate if the subject is not found within the first 24 hours.** Fatality rate is higher in hot climates and cold rainy climates.²

Many states are developing “Senior” or “Silver” alerts similar to AMBER alerts. Such programs are highly effective in alerting the general public.

When you find the subject, approach him from the front. Make eye-contact. Non-verbal body language is highly important with dementia subjects. After assessing safety, slowly move to the subject’s side. Speak slowly and in simple, concrete terms. Break down commands, questions or directions into simple, easy-to-follow components. Touching, when appropriate, is helpful. Arguing with a person with dementia is pointless and may lead to a catastrophic reaction. Instead, redirect the person with a new line of reasoning. Telling the person that a favorite person or thing is waiting for him back at base may be acceptable. Keep in mind that other impairments associated with age, such as decreased vision, hearing, and walking ability, may also be present.

Dementia (Alzheimer's)

Distance (horizontal) from the IPP (miles)					
	Temperate		Dry		Urban
	Mtn	Flat	Mtn	Flat	
n	95	175	14	15	336
25%	0.2	0.2	0.6	0.3	0.2
50%	0.5	0.6	1.2	1.0	0.7
75%	1.2	1.5	1.9	2.2	2.0
95%	5.1	7.9	3.8	7.3	7.8

Distance (horizontal) from the IPP (kilometers)					
	Temperate		Dry		Urban
	Mtn	Flat	Mtn	Flat	
n	95	175	14	15	336
25%	0.3	0.3	1.0	0.5	0.3
50%	0.8	1.0	1.9	1.6	1.1
75%	1.9	2.4	3.1	3.6	3.2
95%	8.3	12.8	6.1	11.8	12.6

Elevation (vertical) Change from the IPP (feet)						
	Temperate			Dry		
	Uphill	Down	Same	Uphill	Down	Same
%	19%	42%	39%	50%	38%	13%
25%						
50%	75	60		317	187	
75%						
95%						

Mobility (hours)		
	Temperate	Dry
n	42	6
25%	0	
50%	0.25	4.5
75%	3.8	
95%	18	

Dispersion Angle (degrees)	
	Temperate
n	11
25%	11
50%	23
75%	66
95%	70

Dementia (Alzheimer's)

Find Location (%)			
	Temp	Dry	Urban
n	207	7	223
Structure	20%	29%	35%
Road	18%	14%	36%
Linear	9%		9%
Drainage	9%	14%	4%
Water	7%	14%	6%
Brush	6%		1%
Scrub			
Woods	17%		3%
Field	14%	29%	6%
Rock			

Scenario (%)	
n	1050
Avalanche	
Criminal	
Despondent	
Evading	
Investigative	2%
Lost	96%
Medical	
Drowning	
Overdue	1%
Stranded	
Trauma	

Survivability		
	Wilderness	Urban
Uninjured	73%	80%
Injured	17%	14%
Fatality	8%	6%
No Trace	2%	5%
Survivability	Alive	n
<24 hours	95%	736
>24 hours	77%	79
>48 hours	60%	30
>72 hours	60%	20
>96 hours	46%	13

Track Offset (meters)	
n	110
25%	4
50%	15
75%	71
95%	307

Dementia (Alzheimer's)

Initial Reflex Tasking

Investigation

- Determine planning data.
- Determine searching data.
- Start MPQ/LPQ. Ask specific questions.
- Previous wandering.
- Potential destinations.
- Severity of dementia.
- Check taxis, mass transit (all shifts), hospitals, EMS, jails, shelters, etc.
- Alert municipal workers.
- Issue "Silver" alert.

Initial Planning Point

- Preserve IPP.
- Locale search.
- Highly systematic grounds and structure search.
- Repeat search of grounds and structure.
- Task signcutters/trackers.
- Tracking/trailing dogs; ideal if they have practiced with persons with dementia.

Hub/Immediate Area

- Canvass campground.
- Canvass neighborhood.
- Thorough search of 25% zone. Sweep/area dogs.
- Notify community by media, flyer, door to door, and/or telephone system.

Containment

- Establish containment.
- Use statistical max zone or theoretical zone.
- Containment provided by road patrols/air.
- In urban environment, use road, bike, air patrols. Contain entrances to gated developments.

Travel Corridors

- Hasty search of trails, roads, drainages, and other routes leading away from IPP, patrol roads.
- Look for decision points and cut for sign at turn off points.
- Dogs into drainages.
- Corridor search parallel to roads and routes.

High Probability Tasks

- Check historical finds.
- Previous lost locations.
- High hazard areas.
- Previous homes.
- Ensure heavy brush is searched.

Dementia (Alzheimer's)

Additional Investigative Questions^{48,49}

- What is the exact diagnosis of the type of dementia?
- Name and contact number of neurologist/gerontologist.
- Last Mini-Mental Status Exam (MMSE), if known.
- Describe subject as mild, moderate, or severe dementia.
- Determine which description is most appropriate:
 - ⇒ Mild confusion and forgetfulness, short-term memory affected.
 - ⇒ Difficulty distinguishing time, place and person. Some language difficulties.
 - ⇒ Nearly complete loss of judgment, reasoning, and loss of some physical control.
- Does the subject know his own name?
- Does the subject know where he is when at home?
- Does the subject recognize the local neighborhood?
- Does the subject recognize familiar faces?
- Will the subject answer to his name being called?
- Is the subject able to conduct a conversation?
- How long can the subject do or discuss something before forgetting?
- How long does a conversation last until an average person suspects something is wrong or not quite right?
- Describe the subject's ability to tell time.
- Has the subject experienced personality or emotional changes? Describe.
- Does the subject have delusions? Describe.
- Does the subject have paranoia? Describe.
- Does the subject have hallucinations? Describe.
- Does the subject have depression? Describe.
- Has the subject experienced an emotional breakdown? Describe.
- Has the subject shown violence towards others? Describe.
- Is the subject registered in the Alzheimer's Association's MedicAlert® + Safe Return® program or any other similar registry? Describe any identification or marking jewelry or labels the subject might be wearing.

Dementia (Alzheimer's)

- List all of the subject's addresses, dwelling types, and how long he has lived at each address going back to childhood. List locations even if they no longer exist. What jobs and occupations did the subject have at each location?
- Did the subject recently move or change locations? If so, when? What was the previous location? How has he adjusted to being in a nursing home/new location?
- How have caregivers adjusted their routines?
- List of all immediate relatives and distant relatives the subject communicated with during their lifetime?
- Is the subject familiar with the area where last seen?
- What is the subject's favorite place?
- Has the subject been involved with outdoor classes, scouting, military, overnight experiences, or outdoor recreation? Describe.
- Is the subject afraid of noises, crowds, dogs, traffic, water, horses, the dark, or other items? Describe how he reacts.
- How does the subject respond to strangers? Does he approach strangers?
- Is the subject dangerous to himself? Dangerous to others?
- Has the subject ever wandered away before, and you (the interviewee) did not know his location for 5 minutes or more? If so, for each incident describe the following: Where was the subject last seen? What was the subject doing when last seen? Events that might have caused the subject to have wandered? What actions were taken? Where was the subject found? What was the distance "as the crow flies" from the point the subject was last seen and where found? How was the subject found? List any medical problems that resulted from being lost.
- What jobs and occupations has the subject held throughout his life?
- Subject's hobbies and interests? Able to still engage in hobby?
- What are subject's daily habits? Did they occur on the day last seen?
- Distance subject typically walks each day (e.g., during the past week).
- Number of walks during the past week.
- Greatest distance subject has walked during the past three months? During the past ten years?
- Estimate the greatest distance you believe the subject could walk.
- Describe the subject's ability to walk including any unique gait or shuffle. List any limitations to walking.

Dementia (Alzheimer's)

- Does the subject talk about a person or place? Is it out of town? Describe.
- Does the subject talk about a person who is no longer alive?
- Does the subject talk about visiting a person or place that is out of town? Describe.
- Has the subject attempted to visit a person or place without supervision? Describe.
- Can the subject drive a car safely? Can the subject find keys and start a car? Does he still have a driver's license? When was the last time he drove or expressed a desire to drive?
- Does the subject travel independently using public or private transportation?
- Has the subject attempted to travel independently on public or private transportation in the last six months?
- Does the subject walk or travel a considerable distance from home and return unaided? Describe.
- Does the subject get lost or confused easily in an unfamiliar setting?
- Does the subject get lost or confused easily at home or in living quarters?
- Does the subject wander? Wander at night? Wander during the day?
- Does the wandering appear goal-directed? Describe.
- Does the wandering appear random?
- Does the subject seek out exits or try to escape from present location?
- Does the wandering appear related to a search for a person or place? Provide a timeline of all events during the day.
- What was his emotional state when he was last seen? How does that compare to his baseline?
- Determine the door the subject most likely exited from and attempt to determine a direction of travel.
- How old is the provided picture? Describe any changes since the photograph was taken? How old does the subject actually appear now? Are any recent videotape or DVD images available?