

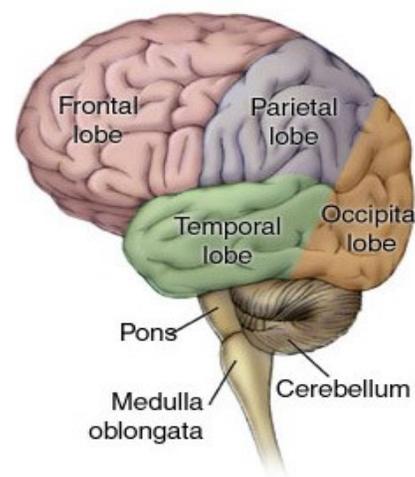
# Delusions, Hallucinations and Visual Mistakes



The way we see and interpret the world is complex. It involves many parts of the brain working simultaneously to make sense of what we observe around us. Symptoms such as delusions, hallucinations and visual “mistakes” can occur when parts of the brain that help us to make these interpretations become damaged.

## Visual Processing:

The occipital lobe, located in the back of the brain, is the brain’s visual processing centre. It is responsible for making sense of the visual information our eyes take in and communicating that information to other parts of the brain. Our perception of the visual information taken in then informs how we respond; for example, the way we move our bodies in response to what we see. Sometimes, it isn’t that our eyes aren’t seeing clearly, but that our brain isn’t processing the information taken in correctly.



## Changes in Visual Perception:

When there is damage in parts of the brain as a result of Alzheimer’s disease or other types of dementia, we may begin to experience difficulties with how our brain interprets the visual information it receives, meaning our ability to make sense of what we see around us is impaired.

Understanding the cause behind these visual mistakes can be helpful in identifying if a symptom we observe in the person living with dementia is the result of a delusion, hallucination, or simply a misunderstanding of their visual processing.

## Mistakes in Visual Perception and Hallucinations:

Often, the visual mistakes made by a person living with dementia are mistaken as hallucinations. For example, we may describe seeing people in our living room. While this may initially appear to be a hallucination, a second look at the room shows little contrast between the sides of the television and the walls, making it appear as though the people in the television are in the room when instead, the visual-processing areas of our brain have made a mistake.

Hallucinations are most common among those diagnosed with Lewy body dementia or Parkinson’s disease dementia. While those diagnosed with Alzheimer’s disease do experience hallucinations, this is more common in the later stages of the disease and is commonly the result of medication use.

### Common mistakes in visual perception:

#### Misperceptions

An object or person is mistaken as something it is not; e.g. a black mat is mistaken as a hole, or a coat hanging by the door is mistaken as a person.

#### Misidentifications

The details of an object or person become muddled. While the person can identify a person as a person, they may mistake a spouse for one of their children or a dog as a cat.

# Delusions, Hallucinations and Visual Mistakes

## What are hallucinations?

Hallucinations are incorrect perceptions of objects or events involving the senses but in the absence of actual sensory stimuli. In other words, they are a sensory experience that only the person experiencing it can see, hear, or in some less common cases, feel. Hallucinations can affect all of the senses; however visual and auditory hallucinations are most common.



### VISUAL

The person sees something that isn't there; for example, an animal, a brightly coloured person, an object on the floor.



### AUDITORY

The person hears something when no sound exists; for example, a person's voice or music.

Although less common, a person can experience **olfactory hallucinations**, where they smell something that isn't there (e.g. a specific food), or **tactile hallucinations**, where they feel something that isn't real (e.g. bugs on the skin or a feeling of floating).

## What are delusions?

Delusions are false beliefs that cannot be changed using logic. For example, a person living with dementia may have a delusion (false belief) that their food has been poisoned or that their belongings have been stolen. Others may believe that someone is spying on them or trying to hurt them. Some may accuse their partner of having an affair.

Paranoia is a common form of delusion, resulting in the person becoming suspicious of those around them. A person experiencing a paranoid delusion may accuse others of stealing from them or plotting against them. Trying to use facts to explain to them why this isn't true will not change the person's mind.

## Possible causes of hallucinations and delusions:

- Damage to parts of the brain that make judgements about the world and separate fact from fiction.
- Medication use (consult with a doctor)
- Physical illness (e.g. infection)
- Concurrent psychiatric illness
- Changes in routine
- Inadequate lighting
- Unfamiliar environment (can't recognize the place or people in it)
- Overstimulating environment (too much noise, too many people)
- Late afternoon or evening disorientation (commonly known as Sundowning).

# Delusions, Hallucinations and Visual Mistakes

## Strategies for responding

<b>Do not argue</b>	Listen to the person and try to understand their reality. Arguing with the person and trying to convince him or her that their belief or hallucination is not real will likely worsen the situation by making the person more confused, agitated, or angry. Remember, the hallucination and delusions are very real to the person.
<b>Validate feelings</b>	Acknowledge his or her belief and validate the person's feelings. For example, "I see that you are upset by this." Reassure the person by letting them know you care. You can also hand them a favorite object, or bring them to familiar surroundings to provide a sense of security.
<b>Distract with something familiar</b>	Try to steer the person away from their delusion. Distract them with a treat or redirect them to an activity, such as going for a walk or folding the laundry, but only after acknowledging their feelings.
<b>Offer reassurance</b>	Respond in a calm, supportive manner. You may want to respond with, "Don't worry, I'm here. I'll protect you. I'll take care of you." Gentle patting may turn the person's attention toward you and reduce the hallucination or delusion.
<b>Offer help</b>	Try to help resolve the issue that is troubling the person. For example, if the person is accusing you of stealing their wallet, offer to help look for it (check all the person's usual hiding places).
<b>Reduce triggers</b>	<p>Eliminate clutter and lock unused areas to reduce potential hiding places. Before emptying garbage cans, look for objects that should not be discarded, or that the person may look for later. If a particular item is commonly misplaced, consider replacing the item before the person notices that it is missing.</p> <p>Avoid whispering in front of the person living with dementia, when possible. Whispering can provoke and worsen the person's paranoia.</p>
<b>Record potential patterns</b>	<p>Keep a journal to record the circumstances around which the delusions or hallucinations occur. Do they happen at a particular time of day? In a particular room in the house? With certain objects or people?</p> <p>If it appears as though something is triggering the person's delusions or hallucinations, try avoiding these situations or people. When avoidance isn't possible, offer distractions by involving the person in a comforting activity just moments prior to when the delusions or hallucinations usually occur.</p> <p>Take note of how you respond and if this approach was successful.</p>

# Delusions, Hallucinations and Visual Mistakes

## Strategies for responding continued

<b>Maintain a daily routine</b>	Routines help reassure the person by providing a sense of the familiar. Maintaining aspects of the daily routine, such as meal times, a walk in the afternoon, and bedtime, can provide a sense of security.
<b>Change the environment</b>	Try to eliminate shadows and glare by increasing consistent lighting around the home. Use colours deliberately to create contrast between objects.
<b>Ignore it</b>	When the delusion or hallucination is not causing harm or distress to the person or anyone else, you can simply choose to ignore it.
<b>Investigate suspicions</b>	The person living with dementia may actually be a victim of theft. Do a thorough search for the missing object and consult with those involved in the story before drawing conclusions.
<b>Consult a physician</b>	The delusion could be caused by a physical or mental illness, or medication interactions or side effects. Your physician may prescribe medication to control or lessen the symptoms of paranoia. Have the person checked for a possible fall or vision changes.

Remember that delusions, hallucinations, and visual mistakes are the result of the disease; they are not willful or intentional. And although some of the accusations can be hurtful, try not to take them personally. It is important not to argue with a person with dementia or try to convince them that their perception is not real. The person's perception is part of their own reality; try to accept it and meet the person where they are at.

## The Alzheimer Society of B.C.

### Support groups

The Alzheimer Society of B.C. can help connect you with a support group in your local community. A provincial tele-support group is also available.

Contact your nearest resource centre and speak with a Support and Education Coordinator for more information about what support groups are available nearest you.

### Call the First Link® Dementia Helpline

A confidential province-wide support and information service for anyone with questions about dementia and local programs.

- Phone **1-800-936-6033**
- [www.alzheimerbc.org](http://www.alzheimerbc.org)