





# Clinical Institute Withdrawal Assessment for Alcohol – Revised (CIWA-Ar): description, strengths and knowledge gaps<sup>11</sup>

### Purpose

The Clinical Institute Withdrawal Assessment for Alcohol – Revised (CIWA-Ar) is a clinician rating tool for assessing and monitoring alcohol withdrawal.



# Clinical Institute Withdrawal Assessment for Alcohol – Revised (CIWA-Ar)

Nausoa & Vomiting	Tromor	
Nausea & Vomiting	Tremor	
Ask "Do you feel sick in the stomach? Have you vomited?" <ul> <li>No nausea and no vomiting</li> <li>Mild nausea with no vomiting</li> <li>Mild nausea, with dry retching</li> <li>Intermittent nausea, with dry retching</li> <li>Constant nausea, frequent dry retching &amp; vomiting</li> </ul>	<ul> <li>Arms extended, elbows slightly flexed &amp; fingers spread.</li> <li>No tremor</li> <li>Not visible, but can be felt fingertip to fingertip</li> <li>Moderate</li> <li>Moderate</li> <li>Severe, even with arms not extended</li> </ul>	
Tactile Disturbances	Auditory Disturbances	
<ul> <li>Ask "Have you any itching, pins &amp; needles sensations, any burning, any numbness or do you feel bugs crawling under your skin?"</li> <li>0 None</li> <li>1 Very mild itching, pins &amp; needles, burning or numbness</li> <li>2 Mild itching, pins &amp; needles, burning or numbness</li> <li>3 Moderate itching, pins &amp; needles, burning or numbness</li> <li>4 Moderately severe hallucinations</li> <li>5 Severe hallucinations</li> <li>6 Extremely severe hallucinations</li> <li>7 Continuous hallucinations</li> </ul>	<ul> <li>Ask "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?"</li> <li>Not present</li> <li>Very mild sensitivity</li> <li>Moderate sensitivity</li> <li>Moderately severe hallucinations</li> <li>Severe hallucinations</li> <li>Extremely severe hallucinations</li> <li>Continuous hallucinations</li> </ul>	
Paroxysmal sweats	Visual Disturbances	
<ul> <li>Observation during assessment.</li> <li>No sweat visible</li> <li>Barely perceptible sweating, palms moist</li> <li>Beads of sweat obvious on forehead</li> <li>Drenching sweats</li> </ul>	<ul> <li>Ask "Does the light appear to be too bright? Is its colour different? Does it hurt your eyes? Are you seeing things you know are not there?"</li> <li>Not present</li> <li>Very mild sensitivity</li> <li>Mild sensitivity</li> <li>Moderate sensitivity</li> <li>Moderately severe hallucinations</li> <li>Severe hallucinations</li> <li>Extremely severe hallucinations</li> <li>Continuous hallucinations</li> </ul>	
Anxiety Headache, fullness in the head		
<ul> <li>Ask "Do you feel nervous?"</li> <li>No anxiety, at ease</li> <li>Mildly anxious</li> <li>Moderately anxious or guarded so anxiety is inferred</li> <li>Equivalent to acute panic, states as seen in delirium or acute schizophrenia reactions</li> </ul>	<ul> <li>Ask "Does your head feel different? Does it feel as though there is a band around your head?" Do not rate for dizziness or light headedness.</li> <li>Not present</li> <li>Very mild</li> <li>Mild</li> <li>Moderate</li> <li>Moderately severe</li> <li>Severe</li> <li>Very severe</li> <li>Extremely severe</li> </ul>	
Agitation	Orientation	
<ul> <li>Not accounted for by cold symptoms or allergies.</li> <li>Normal activity</li> <li>Somewhat more than normal activity</li> <li>Moderately fidgety &amp; restless</li> <li>6</li> </ul>	<ul> <li>Ask "What day is this? Where are you? Who am !?"</li> <li>Orientated &amp; can do serial additions: Ask person to perform serial addition of 3s up to 30, e.g., 3,6,9</li> <li>Cannot do serial addition or is uncertain about date</li> <li>Disoriented by date by no more than 2 calendar days</li> <li>Disoriented for place and/or person</li> </ul>	
7 Paces back & forth during most of the interview or constantly thrashes about	TOTAL SCORE	



## Administrator, Rater, Scoring and Interpretation

Administrator:	Clinician/Worker		
Rater:	Clinician/Worker		
Scoring & interpretation:	The CIWA-Ar comprises ten questions.		
	Nine question	s are scored from 0-7, and one question (orientation)	
	is scored from 0-4. A total score is calculated by summing responses		
	to all 10 questions. The minimum total score possible is 0, and the		
	maximum total score possible is 67 (i.e. total score range: 0-67).		
	CIWA-Ar score interpretation		
	Score	Interpretation	
	0-9	Mild withdrawal – not normally requiring additional	
		medication	
	10-20	Moderate withdrawal	
	20 & above	Severe withdrawal	

### Resources

Tool citation:	Sullivan, J., Sykora, K., Schneiderman, J., et al. Assessment of alcohol withdrawal: the revised Clinical Institute Withdrawal Assessment for Alcohol (CIWA-Ar). British Journal of Addiction, 1989. 84(11): 1353-1357. <sup>[5]</sup>
Copyright:	May be downloaded and used with appropriate citation.
Training & manual:	None found.
Other:	None found.



#### Knowledge Gaps

The CIWA-Ar has been widely mentioned in policy and guideline documents for monitoring withdrawal from alcohol. Several concerns have been raised in the literature regarding the CIWA-Ar:

- Clients eligible for screening:
  - The CIWA-Ar is not a screening tool for those most at risk of alcohol withdrawal, rather it detects withdrawal symptoms in those at a known elevated risk and quantifies their severity<sup>[2, 6]</sup>
  - The CIWA-Ar requires verbal responses and it has not been recommended for use if a patient is cognitively impaired or has communication difficulties,<sup>[2]</sup> for example, when there is a language barrier<sup>[7]</sup> or where a reliable history cannot be provided.<sup>[7]</sup>
- Interpreting results:
  - Qualitative description of certain withdrawal symptoms may be prone to some misinterpretation and may result in falsely elevated scores;<sup>[8]</sup> as well as overlooking symptoms associated with medical comorbidities.<sup>[2,9]</sup>
- Implementation fidelity:
  - Clinicians/workers may have a poor understanding of the CIWA-Ar protocols and its limitations.<sup>[10]</sup> There is a need to ensure that patients are first screened for problem drinking and risk of withdrawal prior to administering the CIWA-Ar.<sup>[6]</sup>



#### References

- Fischer, J.A., Roche, A.M., and Duraisingam, V. Clinical Institute Withdrawal Assessment Alcohol (CIWA-Ar): description, strengths and knowledge gaps. 2021, National Centre for Education and Training on Addiction (NCETA), Flinders University: Adelaide, South Australia. (overview citation)
- Eloma, A.S., Tucciarone, J.M., Hayes, E.M., and Bronson, B.D. Evaluation of the appropriate use of a CIWA-Ar alcohol withdrawal protocol in the general hospital setting. The American Journal of Drug and Alcohol Abuse, 2018. 44(4): 418-425.
- 3. Bakhla, A.K., Khess, C.R., Verma, V., et al. *Factor structure of CIWA-Ar in alcohol withdrawal.* Journal of Addiction, 2014. DOI: https://doi.org/10.1155/2014/745839.
- 4. Higgins, J., Bugajski, A.A., Church, D., et al. *A psychometric analysis of CIWA-Ar in acutely ill and injured hospitalized patients.* Journal of Trauma Nursing, 2019. 26(1): 41-49.
- Sullivan, J.T., Sykora, K., Schneiderman, J., Naranjo, C.A., and Sellers, E.M. Assessment of alcohol withdrawal: the revised Clinical Institute Withdrawal Assessment for Alcohol scale (CIWA-Ar).
   British Journal of Addiction, 1989. 84(11): 1353-1357.
- 6. Williams, K. and Mitchell, M. *Inpatient alcohol withdrawal: time to prevent the preventable?* Journal of General and Internal Medicine, 2013. 29(1): 7–9.
- 7. Knight, E. and Lappalainen, L. *Clinical Institute Withdrawal Assessment for Alcohol–Revised might be an unreliable tool in the management of alcohol withdrawal.* Canadian Family Physician, 2017. 63(9): 691-695.
- 8. Spiegel, D.R., Kumari, N., and Petri, J.D. Safer use of benzodiazepines for alcohol detoxification. Current Psychiatry, 2012. 11(10): 10–16.
- Nuss, M.A., Elnicki, D.M., Dunsworth, T.S., and Makela, E.H. Utilizing CIWA-Ar to assess use of benzodiazepines in patients vulnerable to alcohol withdrawal syndrome. The West Virginia Medical Journal, 2004. 100(1): 21–25.
- 10. Chen, C., Thompson, C., and Leveno, M. *Clinical Institute Withdrawal Assessment (CIWA) Protocol: misunderstandings, misuse, and misadventures.* Quality Improvement Research in Pulmonary and Critical Care Medicine, 2018: A1484–A1484.

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