




		EMLc	ATC codes: N05AD01
Indication	Schizophrenia or other primary psychotic disorders	ICD11 code: 6A4Z	
INN	Haloperidol		
Medicine type	Chemical agent		
List type	Core (EML) Complementary (EMLc)		
Formulations	Parenteral > General injections > IM: 5 mg per mL in ampoule Oral > Liquid: 2 mg per mL (EMLc) Oral > Solid: 2 mg ; 0.5 mg (EMLc) ; 5 mg		
EML status history	First added in 1977 (TRS 615) Changed in 1979 (TRS 641) Changed in 1987 (TRS 770) Changed in 2007 (TRS 950) Changed in 2009 (TRS 958) Changed in 2013 (TRS 985)		
Sex	All		
Age	Also recommended for children		
Therapeutic equivalence	Medicines within the same pharmacological class can be used		
Therapeutic equivalence limitations for EMLc	The square box does not apply for the listing of haloperidol on the EMLc		
Patent information	Patents have expired in most jurisdictions Read more about patents . 		
Wikipedia	Haloperidol 		
DrugBank	Haloperidol 		

Summary of evidence and Expert Committee recommendations

The 18th meeting of the Expert Committee had noted the potential importance of chlorpromazine and haloperidol for a variety of disorders in children, but requested a review of the entire section. The Department of Mental Health and Substance Abuse, WHO, reviewed the section and submitted applications for (1) the deletion of chlorpromazine and haloperidol from the EMLc, (2) an increase in the minimum age for the use of fluoxetine, and (3) the inclusion of clozapine on the complementary list for the treatment of resistant schizophrenia in adults. Expert reviews were prepared by Dr Kuruvilla Prasad Mathews and Mr Andrew Gray. Psychosis is rare in childhood, with the prevalence estimated to be as low as 1.6 per 100 000 (1, 2). However, subclinical psychotic experiences (including delusions or hallucinations) are much more common. These more common conditions (which affect 6% of 11-year-olds) are usually benign and, in 75–90% of cases, spontaneously remit over time (3). Psychosocial interventions are the treatment of preference in the first instance. Children on chlorpromazine and haloperidol are prone to sedation, extrapyramidal syndrome, withdrawal dyskinesia and tardive dyskinesia (4, 5). Various guidance documents suggest that pharmacotherapy has a very limited role in the management of childhood mental disorders, and especially behavioural disorders, before puberty. Even for unresponsive cases, medication may be considered only after specialist consultation (6). WHO does not recommend using pharmacotherapy for behavioural problems except for attention deficit hyperactivity disorder (ADHD) after a first trial with psychological interventions (7). The Expert Committee recognized that the indications for using chlorpromazine and haloperidol are very rare in children. Adverse events from these medicines may be more frequent in children than in adults. However, the

Committee recognized the importance of ensuring that treatment is available for these severe psychiatric disorders in children and also noted that the application did not fully review all treatment options. The Expert Committee therefore requested a specific review of the evidence for the benefits and risks of each medicine in the paediatric population and decided to make no changes to the list until such reviews had been considered. References: 1. Burd L, Kerbeshian J. A North Dakota prevalence study of schizophrenia presenting in childhood. *J Am Acad Child Adolesc Psychiatry*. 1987;26(3):347-50. <http://dx.doi.org/10.1097/00004583-198705000-00012> PMID:3496327 2. Gillberg C. Epidemiology of early onset schizophrenia. In: Remschmidt H, editor. *Schizophrenia in children and adolescents*. Cambridge: Cambridge University Press; 2001. pp. 43-59. 3. van Os J, Linscott RJ, Myin-Germeys I, Delespaul P, Krabbendam L. A systematic review and meta-analysis of the psychosis continuum: evidence for a psychosis proneness-persistence impairment model of psychotic disorder. *Psychol Med*. 2009;39(2):179-95. <http://dx.doi.org/10.1017/S0033291708003814> PMID:18606047 4. Correll CU, Kane JM. One-year incidence rates of tardive dyskinesia in children and adolescents treated with second-generation antipsychotics: a systematic review. *J Child Adolesc Psychopharmacol*. 2007;17(5):647-56. <http://dx.doi.org/10.1089/cap.2006.0117> PMID:17979584 5. Wonodi I, Reeves G, Carmichael D, Verovsky I, Avila MT, Elliott A, et al. Tardive dyskinesia in children treated with atypical antipsychotic medications. *Mov Disord*. 2007;22(12):1777-82. <http://dx.doi.org/10.1002/mds.21618> PMID:17580328 6. WHO Mental Health Gap Action Programme (mhGAP). Geneva: World Health Organization; 2012 (http://www.who.int/mental_health/mhgap/en/, accessed 27 November 2013). 7. mhGAP intervention guide for mental, neurological and substance use disorders in nonspecialized health settings (mhGAP-IG). Geneva: World Health Organization; 2010 (http://www.who.int/mental_health/publications/mhGAP_intervention_guide/en/, accessed 21 March 2014).

