



<b>Title</b>	<b>Fetal Alcohol Spectrum Disorders (FASD): Systematic Reviews of Prevention, Diagnosis, and Management</b>
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<b>Reference</b>	HSAC Report 2008; 1(9). ISBN 978-0-9582973-3-2 (online), 978-0-9582973-4-9 (print)

## Aim

To systematically review interventions to reduce the burden of fetal alcohol spectrum disorders (FASD) and related diagnostic and management strategies; and to briefly overview the literature on the economics of FASD.

## Conclusions and results

Prevention programs and prenatal screening for FASD were evaluated in detail. However, the interventions assessed varied widely, and the studies were generally of poor to fair methodological quality. While a few prevention strategies appear to have a beneficial effect on reducing alcohol consumption in pregnant women (eg, alcohol prohibition and intensive alcohol rehabilitation), issues surround the interpretation of these results as regards potential biases and the implementation of these strategies in the New Zealand setting. Two screening tools (TWEAK and T-ACE) have been specifically designed for prenatal settings. All identified publications reported that these tools were at least as effective as other general screening tools and were generally shorter and easier to administer.

A limited review of high-level evidence was conducted for postnatal screening, diagnosis, and management of FASD. Very little high-level evidence was available for these strategies. Hence, it was not possible to identify those suitable for implementation in New Zealand. The 4-Digit Diagnostic code was the most commonly used diagnostic criteria worldwide. The literature showed broad agreement on the need for a multidisciplinary team (eg, pediatricians, psychologists, psychiatrists, occupational therapists, speech therapists) to ensure optimum management. Since specific disabilities experienced by those with FASD vary, each individual requires a personalized management program.

Assessment of the published economic evidence suggests that FASD represents a significant economic burden (1.6 to 2.4 million New Zealand dollars per child over their lifetime). However, it is not appropriate to comment on

the costs of individual strategies assessed in the identified studies since this review did not formally assess the effectiveness of these strategies. Given the extent of the economic burden of FASD, simple and relatively low-cost prevention strategies would likely represent significant value for money from a societal perspective.

## Methods

A systematic method was used for literature searching, study selection, data extraction, and appraisal. The literature search used the MEDLINE, EMBASE, Scopus, and PsychInfo databases and the Cochrane Library. Health technology assessment databases and clinical practice guideline sites were also searched. Bibliographies of included papers were examined for relevant studies. NHMRC dimensions of evidence, levels of evidence, and quality assessment criteria were used to evaluate each of the included studies. Searches were limited to English-language publications prior to July 2008.