

**Prevention and Control of Viral Hepatitis
transmitted via Enteric Route– consensus of the
*Scientific Working Group on Viral Hepatitis
Prevention***

*Scientific Working Group on Viral Hepatitis Prevention
Department of Health
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The Scientific Working Group on Viral Hepatitis Prevention advises the Director of Health on all issues relating to viral hepatitis prevention

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Background

1. In May 1998, the Department of Health published its third public health report (thereafter referred to as the *Report*) covering the subject of viral hepatitis¹. The Scientific Working Group on Viral Hepatitis Prevention (SWGVHP) was consulted in the course of the research. The SWGVHP further studied the *Report* at its 11th and 12th meeting on 19 June 1998 and 25 September 1998.

2. Using the *Report* as the framework, the SWGVHP had, through consultation with all members, developed consensus on the situation of the enteric forms of viral hepatitis in Hong Kong. It also provided recommendations on various aspects of their prevention and control in the local setting. Hepatitis A and hepatitis E are the main forms of the infection in this category. This report presents a summary of the consensus developed.

An Effective Prevention and Control Programme

3. In addressing the prevention and control of enteric hepatitis, three essential components were identified by SWGVHP: (a) an afferent mechanism for the collection of data that monitors both disease situation and control mechanism; (b) an efferent or operation arm that supports the conduct of the strategies; and (c) a coordinating mechanism to link the two. Based of this understanding, the Group had reviewed the *Report* on the strategies for enteric hepatitis.

¹ Public Health Report no.3. Viral Hepatitis & Liver Cancer and Unintentional Injuries in Children. Hong Kong: Department of Health, 1998.

Strengthening the Clinical and Laboratory Surveillance of Viral Hepatitis

4. The afferent mechanism is contributed by a disease notification system, seroprevalence studies, food surveillance and other relevant research activities. The Department of Health is responsible for a large part of the afferent system. The *Report* has made four broad recommendations, covering promotion of notification, development of population based survey, and the exploration of linkage with the clinical information system.

5. Currently viral hepatitis is notifiable by law, a mechanism maintained by the Department of Health. Medical practitioners are required to report acute viral hepatitis, which are classified into A, B, non-A-non-B and unclassified, through an examination of the serology. Hepatitis E is included as non-A-non-B viral hepatitis. Hepatitis E serology is not sufficiently standardised yet for surveillance purpose. It is proposed that ***a mechanism be in place to allow the classification format be reviewed from time to time.***

6. A majority of the notification has been made through the public sector. Correlation is inferred by the observed correlation between reported incidence and laboratory confirmation. The exact notification pattern and the completeness of reporting from private sector are not clearly known. SWGVHP recommends ***to strengthen the notification system by encouraging medical practitioners to report acute hepatitis cases, extend surveillance network, integrate the laboratory surveillance mechanism to increase the sensitivity of the surveillance programme.***

7. An effective surveillance mechanism involves collection of data, its analysis and subsequent dissemination. ***There should be direct feedback to the reporting practitioner, and also the dissemination of results of analysis and trends regularly to health care providers, academics and those participating in the prevention programmes.***

An Integrated Approach to Environmental Hygiene

8. In the context of enteric hepatitis, environmental hygiene implies the maintenance of water quality, food hygiene, and the cleanliness of premises. Two recommendations have been put forward in the *Report* (labelling of bivalves and law enforcement). The Environmental Protection Department has been monitoring the river, marine and beach water quality, whereas Water Supplies Department looks after the quality of drinking water. Food surveillance is undertaken by the Urban Services Department and Regional Services Department, supported by Department of Health and the Government Laboratory. ***The SWGVHP considered that environmental hygiene should be addressed as an all-inclusive process integrating both the afferent and efferent arms of prevention and control.***

9. On the afferent mechanism, Polymerase Chain Reaction (PCR) has been used regularly in the detection of hepatitis A virus in imported and local shellfish. This is a research tool while its application as a routine surveillance mechanism has yet to be explored. ***It is necessary that such research efforts be sustained.***

10. Law enforcement is considered an important component of the efferent mechanism. So far control has been exerted on imported food, while there are difficulties in controlling the hygienic standard of food from the Mainland, food sold in local premises, and considering the certification of food at its source. SWGVHP considers the promotion of environmental hygiene as the whole chain of activities beginning with the preparation at the source, ending with its delivery through the mouth of an individual. As such, ***the legal provision and its enforcement would need to be reviewed as soon as possible and from time to time.***

Addressing Epidemic Control

11. Epidemic control implies more than the operation of an efferent process, but requires also the input of a good afferent mechanism, plus a coordinating programme. The key role played by the Department of health is acknowledged. Case-control studies would need to be conducted to enhance our understanding of the epidemiology

of enteric hepatitis in Hong Kong. *The SWGVHP considers the establishment of an epidemic control mechanism crucial, which the Department of Health must develop with an anticipatory approach.*

Focusing Education efforts on Prevention

12. Prevention is clearly the main theme of the efferent system. Public education is the one area which has attracted most attention in the *Report*, both in terms of the need to focus on the media and to specify the correct message. Currently public education is undertaken by Department of Health, Urban Services Department, Regional Services Department, academic institutes and community organisations. These are regularly packaged as a component of promotion of healthy eating and hygienic habits. *A coordinated approach by all agencies involved is advised.*

13. The need for targeting selected communities has been highlighted in the *Report*. The targeting of foodhandlers constitutes one strategy in the prevention of spread of viral hepatitis from an infected person, while that on travellers aims at reducing the exposure to the virus in endemic countries. The SWGVHP proposed that these approaches should be integrated with the respective health programmes. *Activities for travellers should be integrated with efforts in promoting travellers' health, while the focus on food-handlers become part and parcel of the programme on promoting environmental hygiene.*

14. The SWGVHP noted the rapid pace in the development of hepatitis A vaccine. There are currently limited data on the use of combined vaccines and the application of hepatitis A vaccine in newborns. *Vaccination against hepatitis A is advocated for personal protection while its role as a public health strategy should be further examined in light of scientific findings.*

Initiation of and Support for Research

15. The *Report* has proposed research in selected areas, for example, operational study on record linkage, population based sero-prevalence surveys, and cost-benefit studies on hepatitis A vaccination. ***The SWGVHP recommends that research be conducted to tie in with the prevention and control strategies under the afferent, efferent and coordination mechanism. The development of a research agenda would therefore need to be prioritised.***

Need for Coordinating Mechanisms

16. Both the afferent and the efferent systems have been developed by different parties in the Government, the community and academic institutions, but little on a coordinating mechanism to bring all together. Neither has this been discussed in the *Report*. Coordination mechanisms play the central role in linking the afferent and efferent systems so as to achieve the objectives of effective prevention and control. ***There is the need for mechanisms to be in place for reviewing the situation, monitoring the conduct of control strategies, and deciding on the response and changes in a timely manner. The mechanism also provides a natural platform for initiating and linkage with research activities.***

SWGVHP Secretariat
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