For discussion on 14 June 2011

## LegCo Panel on Food Safety and Environmental Hygiene

# Extension of the Dengue Vector Surveillance Programme and Anti-mosquito Campaign 2011

#### **Purpose**

This paper briefs Members on the extension of the dengue vector surveillance programme with effect from January 2011, and the Anti-mosquito Campaign launched in February 2011 by the Food and Environmental Hygiene Department (FEHD).

## **Background**

2. Apart from causing nuisance to human beings, some species of mosquitoes may pose threat to public health as vectors of diseases, such as dengue fever, Japanese encephalitis and chikungunya fever. Since 2003, FEHD has put in place an enhanced dengue vector surveillance programme to monitor the distribution of *Aedes albopictus* at selected areas, evaluate the effectiveness of mosquito prevention and control work carried out by various parties, and provide surveillance information to the public and for making timely adjustments to our mosquito control strategies and measures. Moreover, FEHD has all along organised annual anti-mosquito campaigns on a territory-wide basis to heighten public awareness of the potential risk of mosquito-borne diseases, encourage community participation and promote concerted efforts of government departments concerned in anti-mosquito work.

## Findings of Dengue Vector Surveillance Programme in 2010 and 2011

- 3. Under the dengue vector surveillance programme, small plastic containers, known as ovitraps, are placed at selected locations for detecting the larval breeding rate of mosquitoes. Ovitrap index is the percentage of ovitraps that are found to have positive larval breeding result. Two different indices, namely Area Ovitrap Index (AOI) and Monthly Ovitrap Index (MOI), are recorded. AOI indicates the extensiveness of the distribution of Aedine mosquitoes in the surveyed area while MOI is the average of all AOIs of the same month, which reflects the distribution and activity of Aedes albopictus throughout the territory. Starting from 2004, the surveillance programme was extended to cover all major port areas. Port Ovitrap Index is enumerated every month together with Port Monthly Ovitrap Index (PMOI) which reflects the overall monthly situation of mosquito breeding in port areas. All the indices are announced each month on FEHD's website and through press release.
- 4. In 2010, the MOIs were in general lower than those in previous years (**Annex I**). The MOIs in the first quarter were maintained at a very low level ranging from 0% in January to 1.5% in March. In the following months, there had been a successive rise in the MOIs from 3.1% in April to 13% in July, which was the peak of the year. From then on, the MOIs had kept decreasing and fell to 0.1% in December. The monthly fluctuations in MOIs in 2010 were similar to the pattern in previous years.
- 5. In 2010, the highest AOI of 32% was recorded at Yuen Kong in May, followed by 25.9% at Diamond Hill in July and 25.5% at Central, Sheung Wan & Sai Ying Pun in May (**Annex II**). In total, 13 areas had been recorded with AOI reaching or exceeding the alert level of 20% for at least once. In response to these recordings, the district task force mechanism had been activated for a total of 15 times to step up the co-ordination of government efforts in mosquito control and to mobilise community participation in anti-mosquito efforts.

- 6. In 2010, the ovitrap indices of the seven groups of port areas were below 20%. The highest ovitrap index of 10.7% was recorded in the group of Cross Boundary Check Points on Land in June (Annex III). The PMOIs in 2010 ranged from the lowest of 0% (January and December) to the highest of 1.6% (June). The fluctuations in PMOIs showed a similar pattern as in previous years (Annex IV). FEHD works closely with other government departments and relevant organisations, including the Airport Authority, the Mass Transit Railway Corporation and freight forwarding companies, in strengthening the anti-mosquito work in port areas.
- 7. The MOIs for the first four months of 2011 have remained at very low levels, being 0%, 0.1%, 0% and 0.4% from January to April respectively. Similarly, in the port areas, the PMOIs were also very low, being 0.1% for January, 0% for February and March, and 0.1% for April. However, as in previous years, the AOIs of a number of areas have noticeably increased in May<sup>#</sup>. In particular, the AOI of So Kwun Wat has reached 25.9% and the district task force mechanism has been activated as a result.

## **Extension of the Dengue Vector Surveillance Programme**

- 8. In order to further strengthen the monitoring of the breeding of *Aedes albopitcus*, starting from January 2011, FEHD has expanded the scope of the dengue vector surveillance programme to cover a number of densely populated or frequently visited areas as well as those areas where local dengue fever cases had occurred in the past. As a result of this extension, a total of 44 areas are currently covered under the surveillance programme. The newly covered areas are Deep Water Bay & Repulse Bay, Shau Kei Wan & Sai Wan Ho, Hung Hom, Sheung Kwai Chung, So Kwun Wat and Sai Kung Town.
- 9. Besides, to ensure that anti-mosquito measures are taken promptly when the AOI of a particular area reaches the alert level of 20%, an ovitrap

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<sup>&</sup>lt;sup>#</sup> The MOIs for May 2011 are not yet available.

rapid alert system has been introduced since April 2011. The target groups of the system include the management offices of residential premises, social welfare facilities and schools that are situated within the 44 surveillance areas and they may subscribe to the system voluntarily. Whenever the AOI reaches 20%, subscribers to the system whose premises are situated within the surveillance area concerned will be individually notified by the relevant departments upon the publication of the AOI. Subscribers will be invited to post up specially designed alert notices in the common parts of their premises to draw the attention of occupants and staff to take mosquito preventive and control measures promptly.

### **Anti-mosquito Campaign 2011**

10. Effective mosquito control requires sustained efforts on the part of all parties concerned. In this regard, FEHD has launched a new Anti-mosquito Campaign in 2011 (the Campaign) in collaboration with other relevant government departments to maintain the momentum. Under the banner of "Prevent Japanese encephalitis and Dengue Fever Act Now!", the campaign has been / would be implemented in the following three phases:

Phase 1: 28 February 2011 – 25 March 2011

Phase 2: 26 April 2011 – 30 June 2011

Phase 3: 15 August 2011 – 7 October 2011

11. FEHD's pest control staff will step up inspection, control actions and publicity works during the Campaign. Breeding places for the mosquitoes will be eliminated or treated with larvicides. Potential breeding grounds and trouble spots identified by district pest control staff will also be covered. Special attention will be paid to areas in close proximity to residential premises, schools, construction sites, illegal cultivation sites, hospitals, waterfront public and private cargo working areas, cross boundary check points, typhoon shelters and cross boundary ferry terminals.

12. Community support is vital to the successful implementation of the campaign. We will make use of a wide range of promotional channels, such as FEHD's website, posters, leaflets, Announcements of Public Interest, VCDs and letters to target groups, to encourage community participation in our campaign. We will also organise a variety of events and activities, such as roving exhibitions at major shopping malls of housing estates, outreaching health talks, as well as games and theme exhibitions at the Health Education Exhibition and Resource Centre of FEHD. A "Guidebook on Control and Prevention of Mosquito Breeding" with illustrations on potential breeding places of *Aedes albopictus* and the methods to eliminate them has been uploaded to the FEHD's website for public access.

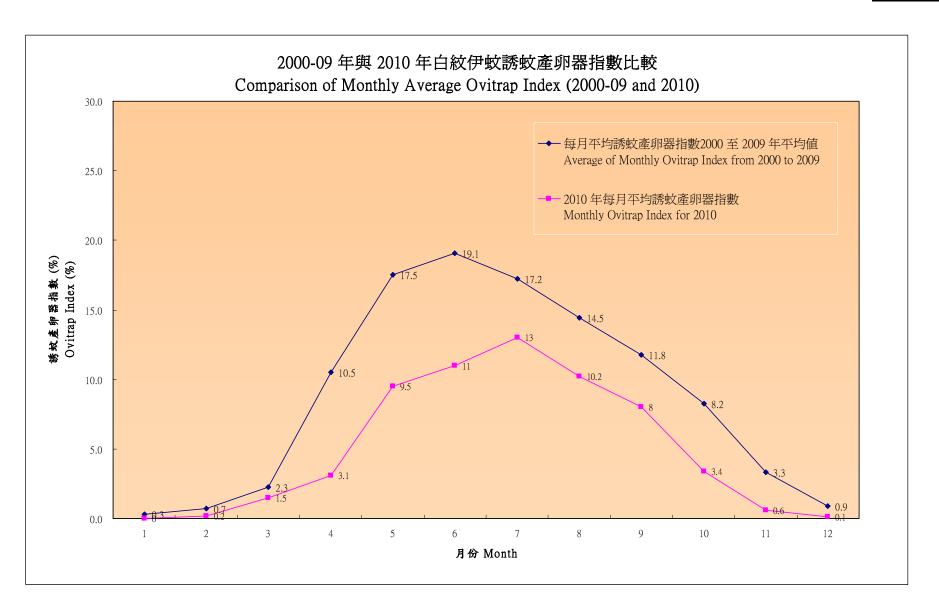
13. Relevant government departments will also play an active role in the Campaign through anti-mosquito activities in places under their charge and enlisting community support for the campaign through their networks. District Councils will also be invited to participate in the Campaign in organising anti-mosquito activities at the district level. The Anti-mosquito Plan for 2011 of the relevant government departments is at **Annex V**.

## **Advice Sought**

14. Members are invited to note and comment on the paper.

Food and Health Bureau
Food and Environmental Hygiene Department
June 2011

## Annex I



# Annex II

# Ovitrap Indices for 38 locations in 19 districts - 2010

	Locations	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC
	Locations	JAN 1		MAIX		I WIZI	OOK	002	AGG	OL.	00.		
	Chai Wan West	0.0%	0.0%	0.0%	0.0%	3.6%	20.0%	14.0%	20.0%	7.1%	7.4%	0.0%	0.0%
spur	North Point	0.0%	0.0%	0.0%	6.0%	7.4%	11.1%	5.8%	5.9%	1.8%	0.0%	0.0%	0.0%
elsi e	Wan Chai North	0.0%	0.0%	0.0%	0.0%	0.0%	5.6%	7.4%	9.3%	3.7%	1.9%	0.0%	0.0%
tside	Happy Valley	0.0%	0.0%	0.0%	1.8%	5.5%	7.3%	16.4%	3.6%	5.5%	1.8%	1.8%	0.0%
&Ou	Central, Sheung Wan and Sai Ying Pun	0.0%	0.0%	0.0%	3.8%	25.5%	11.5%	9.4%	9.4%	7.7%	0.0%	2.0%	0.0%
Hong Kong Island &Outside Islands	Sai Wan	0.0%	0.0%	0.0%	0.0%	12.7%	5.6%	9.3%	7.7%	9.4%	1.9%	0.0%	0.0%
lsl bu	Aberdeen and Ap Lei Chau	0.0%	0.0%	1.9%	1.9%	20.4%	5.6%	3.7%	5.8%	9.1%	0.0%	0.0%	1.8%
Zo	Pokfulam	0.0%	0.0%	3.6%	7.3%	12.7%	11.3%	20.0%	9.1%	3.6%	3.6%	0.0%	0.0%
Jouch	Cheung Chau	0.0%	2.8%	2.8%	0.0%	8.3%	0.0%	5.6%	8.3%	8.3%	2.9%	0.0%	0.0%
	Tung Chung	0.0%	0.0%	0.0%	8.6%	5.6%	8.3%	22.2%	16.7%	13.9%	2.8%	2.8%	0.0%
	Tsim Sha Tsui	0.0%	0.0%	0.0%	0.0%	6.9%	12.3%	24.1%	1.8%	5.4%	5.3%	0.0%	0.0%
	Mong Kok	0.0%	0.0%	1.7%	1.8%	5.5%	8.6%	12.1%	14.8%	5.3%	5.3%	1.8%	0.0%
	Lai Chi Kok	0.0%	0.0%	3.6%	3.6%	9.1%	7.3%	18.2%	9.1%	5.5%	1.8%	0.0%	0.0%
	Sham Shui Po East	0.0%	0.0%	0.0%	5.6%	5.7%	9.4%	19.2%	16.7%	7.7%	0.0%	0.0%	0.0%
<u>_</u>	Cheung Sha Wan	0.0%	1.8%	0.0%	7.4%	5.6%	9.1%	7.3%	3.6%	3.7%	0.0%	0.0%	0.0%
Kowloon	Kowloon City North	0.0%	0.0%	0.0%	3.7%	13.2%	12.7%	14.5%	11.5%	10.9%	1.9%	0.0%	0.0%
중	Ho Man Tin	0.0%	0.0%	0.0%	0.0%	0.0%	20.4%	12.7%	18.5%	14.5%	3.8%	0.0%	0.0%
	Wong Tai Sin Central	0.0%	0.0%	3.2%	1.6%	7.9%	11.1%	15.9%	11.1%	14.5%	11.3%	0.0%	1.6%
	Diamond Hill	0.0%	0.0%	1.9%	0.0%	7.3%	18.5%	25.9%	1.8%	10.9%	1.8%	0.0%	0.0%
	Kwun Tong Central	0.0%	0.0%	9.1%	8.9%	21.4%	21.4%	10.9%	14.3%	5.5%	1.8%	0.0%	0.0%
	Lam Tin	0.0%	0.0%	2.0%	0.0%	9.8%	5.6%	10.9%	9.4%	9.4%	0.0%	0.0%	0.0%

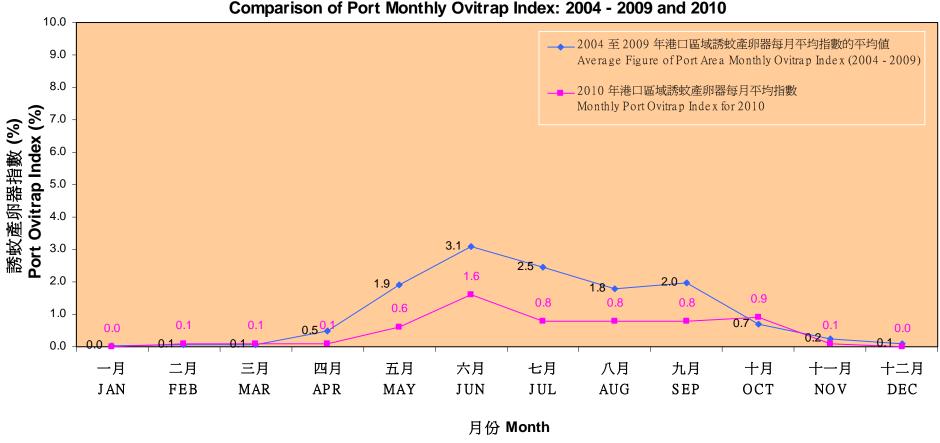
	Locations	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC
	Tseung Kwan O	0.0%	0.0%	1.7%	3.3%	11.7%	6.9%	1.7%	1.8%	6.7%	3.3%	0.0%	0.0%
ast	Ma On Shan	0.0%	0.0%	1.7%	0.0%	8.6%	17.2%	20.4%	17.9%	7.1%	7.1%	1.8%	0.0%
Ш	Lek Yuen	0.0%	0.0%	0.0%	0.0%	5.5%	14.5%	12.7%	23.6%	9.1%	7.3%	0.0%	0.0%
Territory	Tai Wai	0.0%	0.0%	0.0%	0.0%	9.4%	16.7%	13.0%	18.2%	12.7%	9.1%	0.0%	0.0%
× Te	Tai Po	0.0%	0.0%	0.0%	3.7%	9.3%	16.4%	18.9%	7.4%	9.1%	7.3%	1.9%	0.0%
New	Fanling	0.0%	0.0%	0.0%	1.9%	5.8%	13.5%	3.8%	16.4%	11.1%	3.8%	0.0%	0.0%
	Sheung Shui	0.0%	0.0%	1.8%	0.0%	7.3%	18.2%	22.2%	14.5%	12.7%	5.5%	1.9%	0.0%
	Tin Shui Wai	0.0%	1.8%	3.5%	12.5%	11.3%	12.5%	12.7%	11.1%	16.7%	3.5%	3.6%	0.0%
	Yuen Kong	0.0%	0.0%	8.0%	12.0%	32.0%	12.0%	4.0%	12.0%	4.0%	0.0%	0.0%	0.0%
st	Yuen Long Town	0.0%	0.0%	1.8%	3.6%	9.3%	1.9%	3.7%	5.6%	1.8%	0.0%	0.0%	0.0%
W <sub>e</sub>	Tuen Mun (S)	0.0%	0.0%	0.0%	0.0%	5.5%	12.7%	11.3%	7.3%	5.5%	1.8%	0.0%	0.0%
Territory West	Tuen Mun (N)	0.0%	0.0%	1.8%	1.7%	8.5%	11.9%	15.5%	1.7%	15.3%	5.2%	0.0%	0.0%
Ter	Tsuen Wan Town	0.0%	0.0%	3.3%	5.0%	10.0%	5.0%	13.3%	10.0%	1.7%	1.7%	0.0%	0.0%
New	Ma Wan	0.0%	0.0%	0.0%	0.0%	8.0%	4.0%	16.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Kwai Chung	0.0%	0.0%	1.8%	7.5%	14.5%	15.4%	15.7%	14.0%	13.2%	1.9%	5.5%	0.0%
	Lai King	0.0%	0.0%	0.0%	1.8%	7.3%	3.8%	1.9%	1.8%	5.6%	3.8%	0.0%	0.0%
	Tsing Yi	0.0%	0.0%	3.6%	5.3%	12.5%	7.0%	19.3%	12.3%	3.5%	5.3%	0.0%	0.0%
Mont	hly Ovitrap Index	0.0%	0.2%	1.5%	3.1%	9.5%	11.0%	13.0%	10.2%	8.0%	3.4%	0.6%	0.1%

Annex III

# **Results of Ovitrap Surveillance in Port Areas in 2010**

Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Hong Kong International Airport	0.0%	0.1%	0.1%	0.1%	0.4%	0.7%	0.7%	0.4%	0.5%	0.7%	0.1%	0.0%
Railway Cargoes Handling Areas	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	1.7%	3.3%	5.0%	1.7%	0.0%	0.0%
Cross Boundary Check Points on Land	0.0%	0.0%	0.7%	0.0%	5.0%	10.7%	0.0%	2.9%	1.4%	2.9%	0.0%	0.0%
Cross Boundary Ferry Terminals	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	2.9%	0.0%	0.0%	0.0%
Container Terminals	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Public Cargoes Working Areas	0.0%	0.0%	0.0%	0.0%	0.6%	8.3%	3.2%	3.8%	3.8%	3.2%	0.0%	0.0%
Private Cargoes Working Areas	0.0%	0.0%	0.0%	0.0%	1.7%	10.0%	3.4%	5.0%	3.4%	0.0%	0.0%	0.0%
Average PMOI	0.0%	0.1%	0.1%	0.1%	0.6%	1.6%	0.8%	0.8%	0.8%	0.9%	0.1%	0.0%

# 2004至2009年與2010年港口區域白紋伊蚊誘蚊產卵器指數比較 Comparison of Port Monthly Ovitrap Index: 2004 - 2009 and 2010



# Anti-mosquito Plan for 2011

Bureau/	Anti-mosquito Plan for 2011
Department	
Agriculture, Fisheries and Conservation Department (AFCD)	<ul> <li>Fish Farms and Fishermen</li> <li>To distribute anti-mosquito advisory leaflets to mariculturists at AFCD's licence renewal service counters, during regular farm inspections, and through the representatives in the Mariculturists Liaison and Support Group of the Red Tide Reporting Network.</li> </ul>
	To issue advisory letters together with anti-mosquito leaflets to fishermen associations.
	<u>Local Livestock Farms</u>
	• To issue advisory letters and publicity leaflets to livestock farmers and livestock associations to raise their awareness of anti-mosquito measures.
	• To inspect livestock farms for any potential mosquito breeding sites and remind farmers to take proper anti-mosquito measures during routine farm inspections.
	Government Wholesale Food Markets
	• To issue advisory letters and notices at regular intervals to market traders and cleaning contractors to remind them to keep the markets clean and to heighten their awareness of the importance in taking anti-mosquito measures.
	• To closely monitor the performance of the cleansing contractors and ensure that they will apply larvicide regularly to the market drains to prevent breeding of mosquitoes.
	To carry out special operations to clean market drains as and

Bureau/	Anti-mosquito Plan for 2011
Department	
	when necessary with a view to eliminating the mosquito breeding grounds.
	• To conduct cleaning exercises on regular basis with an aim to collect unused items from traders and remove abandoned articles for proper disposal.
	Cheung Sha Wan Wholesale Vegetable Market under
	<u>Vegetable Marketing Organization (VMO)</u>
	<ul> <li>VMO staff will continue to conduct regular inspections, surprise checks and cleansing of the wholesale vegetable market and issue advisory notices to VMO market users advising them of the importance of maintaining the cleanliness of the market and removal of stagnant water.</li> </ul>
	Wholesale Fish Markets under Fish Marketing
	Organization (FMO)
	• FMO staff will continue to conduct regular inspections, surprise checks and cleansing of all FMO markets and issue advisory notices to FMO market users advising them of the importance of maintaining the cleanliness of the market and removal of stagnant water.
	Country Parks
	• To regularly inspect and cleanse recreation sites, hiking trails and construction sites and carry out clearance of overgrown vegetation in these areas.
	• To put more effort in advising visitors to protect themselves against mosquitoes and other insect bites through verbal advices, leaflets, posters and warning signs.
	To level depressions which can hold water and remove water storage devices found in country parks to prevent mosquito breeding.
	To advise morning walkers not to keep containers in their

Bureau/ Department	Anti-mosquito Plan for 2011
	gardens and hillsides and remove any unauthorised planting sites and water storage devices found in country parks.
	Mai Po Nature Reserve and Hong Kong Wetland Park
	• To display posters at suitable locations in the Mai Po Nature Reserve (MPNR) and Hong Kong Wetland Park (HKWP) to alert staff of AFCD and World Wide Fund Hong Kong (WWFHK) to take measures to eliminate mosquito breeding grounds and to advise them and visitors to take preventive measures to avoid mosquito bites.
	To distribute anti-mosquito leaflets to visitors.
	• Staff of WWFHK and contractor of HKWP will eliminate stagnant water and mosquito breeding grounds in all their buildings, structures, boats, visitor facilities and gei wai bund areas in the MPNR and HKWP regularly.
Development Bureau	<ul> <li>The high-level Interdepartmental Working Group on Mosquito Prevention at Works Sites meetings will continue to closely monitor the situation at public works sites.</li> <li>To continue to liaise with Food and Environmental Hygiene Department (FEHD) to ensure effective anti-mosquito measures are undertaken by contractors at public works sites.</li> </ul>
Department of Health (DH)	General publicity activities on prevention of mosquito-borne diseases have continued in 2011 with enhancement during summer:
	(a) to liaise with Information Services Department to coordinate the broadcasting of relevant Television & Radio Announcements of Public Interest (APIs);

Bureau/ Department	Anti-mosquito Plan for 2011
	(b) to arrange media interviews on mosquito-borne diseases;
	<ul> <li>(c) to send out articles on mosquito-borne diseases to magazines and newspapers;</li> </ul>
	(d) to update and upload relevant information onto the Centre for Health Protection (CHP) website and 24-Hour Health Education Hotline; and
	(e) to distribute printed materials to various sectors including health sectors, public and private housing estates, public facilities of Leisure and Cultural Services Department (LCSD) and NGOs.
1	Preventive measures at boundary control points (BCPs) and health advice for travellers:
	(a) to continue mosquito breeding site monitoring and elimination at the airport, all sea & land BCPs, cargo handling facilities and cross-boundary conveyances by regular inspection and close liaison with relevant stakeholders including operators of the BCPs and conveyances, District Pest Control Teams and Pest Control Advisory Section of FEHD;
	<ul> <li>(b) to distribute leaflets and display of posters on anti-mosquito measures at all BCPs and cargo handling facilities;</li> </ul>
	(c) to upload updated health messages and outbreak news onto Travel Health Service website;
	<ul><li>(d) to organise health talks and give health advice for travel agents and tour guides with Travel Industry Council of Hong Kong;</li></ul>
	(e) to develop a new series of travel health pamphlets on mosquito-borne diseases including malaria, dengue

Bureau/ Department	Anti-mosquito Plan for 2011
	fever, yellow fever and Japanese encephalitis; and  (f) to host the first round of travel health exhibitions at the Hong Kong International Airport in July 2011.
	Other measures:  (a) to disseminate information on mosquito-borne diseases and health education messages through letters-to-doctor, press releases as well as the articles
	published in Communicable Diseases Watch; and  (b) to update the "Global Malaria Risk Summary" in 2011 by Scientific Committee on Vector-borne Diseases of CHP.
Education Bureau (EDB)	• EDB has jointly organised with FEHD a seminar on the dengue fever and Japanese encephalitis vectors for school personnel in May and alert schools within 100m of any positive traps identified in the Monthly Ovitrap Surveys to strengthen preventive measures against mosquitoes. Circulars will be issued to on the subject to schools, if necessary.
Food and Environmental Hygiene Department (FEHD)	• Since the coming into operation of the Public Health and Municipal Services (Amendment) Ordinance on 12 May 2006, 139 prosecutions (as at 30 April 2011) concerning the control of water and article likely to cause mosquito breeding have been taken out against persons responsible for the management of premises under section 27(3A) of the Public Health and Municipal Services Ordinance (Cap. 132). FEHD will continue to take enforcement actions against persons in breach of this legislation.
	• FEHD will continue to assist the Housing Department (HD) in taking enforcement action against households found with

Bureau/	Anti-mosquito Plan for 2011
Department	
	<ul> <li>FEHD will continue to convene district anti-mosquito task force meetings with the concerned departments/parties and provide necessary advice and assistance to them in formulating mosquito prevention strategies whenever situation warrants, such as when Area Ovitrap Index (AOI) reaches 20% or above.</li> </ul>
	<ul> <li>All FEHD District Environmental Hygiene Offices convened a special anti-mosquito task force meeting in March 2011 before the start of the rainy season to arouse relevant departments' awareness of the importance of mosquito control in venues under their ambits.</li> </ul>
	• FEHD has widened the scope of the dengue vector surveillance programme in the community to cover six additional areas with effect from January 2011, increasing the total number of areas under surveillance to 44.
	• FEHD has introduced an ovitrap rapid alert system since April 2011 targeting at the management offices of residential premises, social welfare facilities and schools that fall within the 44 areas of surveillance. Subscribers to the system will be notified immediately when the AOI of the area where their premises are located has reached the alert level of 20%. They will also be requested to post up specially designed alert notices in the common parts of their premises.
	Publicity and Education Activities in 2011
	• The 2011 diary on anti-mosquito measures was uploaded to FEHD's website in late November 2010.
	<ul> <li>Outreaching talks on anti-mosquito prevention and control have been organised for students, teachers, property management, home for elderly and construction site management, etc.</li> </ul>

Bureau/	Anti-mosquito Plan for 2011
Department	
	AOI, Monthly Ovitrap Index (MOI) and Port Ovitrap Index (POI) have been released to the press on a monthly basis.
	<ul> <li>Anti-mosquito exhibitions have been held from February to March and would be held from April to June and from August to October 2011 at Health Education Exhibition and Resource Centre.</li> </ul>
	● The slogan "Prevent Japanese Encephalitis and Dengue Fever Act Now" (齊來把蚊滅 預防日本腦炎登革熱) of the Anti-mosquito Campaign 2011 and other anti-mosquito messages are promulgated through the following channels:
	(a) television and radio APIs;
	(b) publicity materials e.g. posters, pamphlets, banners and diaries;
	(c) VCDs and letters to target groups e.g. construction sites management, public / private housing estates management;
	(d) FEHD's homepage and hotline;
	(e) games / competition;
	(f) talks on anti-mosquito measures;
	(g) roving exhibitions;
	(h) public buses; and
	(i) a broadcasting van.
	Territory-wide Anti-mosquito Campaign 2011
	• The territory-wide Anti-mosquito Campaign has been / would be implemented in three phases as follows:
	Phase 1: 28 February 2011 – 25 March 2011 Phase 2: 26 April 2011 – 30 June 2011

Bureau/	Anti massuita Dlan fan 2011
	Anti-mosquito Plan for 2011
Department	
	Phase 3: 15 August 2011 – 7 October 2011;
	• The Campaign aims at –
	(a) heightening public awareness of the potential risk of dengue fever, Chikungunya fever, Japanese encephalitis and other mosquito-borne diseases;
	(b) encouraging community participation and forging close partnership among government departments concerned in anti-mosquito work; and
	(c) eliminating potential mosquito breeding sites.
	Territory-wide Thematic Anti-mosquito Operations in 2011
	• April 2011. A three-week thematic operation targeting at village houses, cross boundary check points, passenger and cargo/container terminals and problematic spots was launched between 1 April and 19 April 2011 to sustain the momentum after completion of Phase I of the Anti-mosquito Campaign 2011.
	• <b>July</b> – <b>August 2011.</b> Thematic operation will be launched between 11 July and 5 August 2011 targeting at old tenement buildings, cross boundary check points, passenger and cargo/container terminals, open space in the vicinity of pig farms and problematic spots after completion of Phase II of the Anti-mosquito Campaign 2011.
	• October – November 2011. A 40-day thematic operation will be launched between 17 October and 25 November 2011 targeting at passenger and cargo/container terminals, village houses, old tenement buildings, cross boundary check points, open space in the vicinity of pig farms, sites with gathering of migratory birds and problematic spots after completion of Phase III of the Anti-mosquito Campaign 2011.

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Government Property Agency	• For properties under GPA's purview, the relevant Property Management Agents (PMAs) are required to take the following anti-mosquito measures:
(GPA)	(a) to put up relevant posters/notices to arouse awareness of occupants/residents and solicit their support to guard against mosquito-transmitted diseases;
	(b) to conduct daily inspection of areas where water may accumulate, e.g. drain holes, sand traps and gully traps, etc.;
	(c) to apply larvicide to all drains once a week;
	(d) to conduct pest control at all common areas once to twice a month;
	(e) to remind nearby construction sites to take anti-mosquitoes measures;
	(f) to closely contact with FEHD to apply larvicide to nearby areas; and
	(g) to remind officers in joint-user office buildings to prevent accumulation of water in relation to office plants.
	• When the AOIs recorded by FEHD have risen above the alert level, respective PMAs will step up the anti-mosquito measures as follows:
	(a) to brief their cleaning staff about anti-mosquito measure;
	(b) to increase the frequency of inspection to potential mosquito breeding grounds, e.g. roof;
	(c) to remove water from roof and open area after rain;
	(d) to clear drains and surface channels to prevent

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	blockage;  (e) to remove stagnant water; and  (f) to fill up any defective ground surface.
Home Affairs Department (HAD)	<ul> <li>To assist the dissemination of anti-mosquito message, for example, by distributing anti-mosquito leaflets and posters and facilitating community talks and exhibitions.</li> <li>To carry out ad hoc maintenance, such as grass cutting, along village footpaths and access roads maintained by HAD.</li> </ul>
Housing Department (HD)	<ul> <li>Promotional / Publicity and Educational Programmes</li> <li>To enrich and update the general knowledge in environmental hygiene and prevention of mosquito breeding in estates for staff members of HD and cleansing operatives, with a seminar on "Prevention of Mosquito Breeding in Estate 2011" to be held on 22 June 2011 with the support from FEHD and DH.</li> <li>Tenants will continuously be encouraged to report mosquito breeding blackspots through the Housing Authority Hotline.</li> <li>Inspection guidelines and checklist have been provided to frontline management staff for guidance.</li> <li>Community education against mosquito breeding will be stepped up through promotional posters, notices and leaflets, estate newsletters, Estate Management Advisory Committee</li> </ul>
	meetings and video segments/messages posted onto the Housing Channel through the LCD monitor installed at the G/F lift lobbies of public rental housing (PRH) blocks.

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	Roving carnivals will be carried out across PRH estates on public hygiene and epidemic prevention.
	Enhanced Anti-mosquito Actions
	• Estate management offices have been instructed to mobilise necessary resources and work closely with FEHD for the implementation of the territory-wide Phase I Anti-mosquito Campaign 2011 held from 28 February 2011 to 25 March 2011 and the Phase II campaign from 26 April 2011 to 30 June 2011.
	<ul> <li>Anti-mosquito Special Cleansing Squads set up in all PRH estates will continue to carry out daily inspection of gullies, surface channels, hill slopes, flower beds etc. to eliminate accumulation of stagnant water at potential mosquito breeding blackspots.</li> </ul>
	<ul> <li>Mosquito catching apparatuses have been placed at strategic points of PRH estates located in areas with relatively high AOI.</li> </ul>
	• Estates within districts with AOI over 10% will be alerted to step up anti-mosquito measures. In addition, under the rapid alert system implemented in April 2011, those estates within districts with AOI at alert level of 20% or above will be required to put up a special eye-catching notice at the G/F lift lobby of each estate block to alert tenants and solicit their cooperation and support to step up anti-mosquito measures in the estates.
	<ul> <li>Regular inspections in PRH estates will continue to be conducted by HD, in conjunction with FEHD and District Councils, to monitor the effectiveness of the anti-mosquito measures.</li> </ul>
	Overgrown vegetations on flower beds and slopes will be pruned from time to time. Larvicide will be sprayed over

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	manholes and surface channels. "Key hole" of sand pit will be covered with adhesive tapes or plastic plugs.  Maintenance work such as clearing of blocked drains and paving of uneven ground will be sped up.
	<ul> <li>All building contractors of HD will be demanded to clear up any stagnant water in construction sites and keep the sites clean. Cleansing contractors will also be required to strengthen their efforts in keeping PRH estates and work sites clean.</li> </ul>
	<ul> <li>Use of fog guns for killing adult mosquitoes will be conducted when there is an urgent need to reduce the risk of further transmission of vector-borne diseases and/or there is an extensive mosquito problem.</li> </ul>
	Enforcement Action
	• HD will strengthen enforcement actions under the 'Marking Scheme for Estate Management Enforcement in public housing estates' and call for tenants' cooperation. Five penalty points will be allotted to households for committing the offence of "causing mosquito breeding by accumulating stagnant water" under the Scheme.
Lands Department	To have a regular programme of inspection and, if necessary, of cleaning of fenced-off Government sites.
	• To conduct grass cutting and tidy up government land site blackspots; apply larvicidal oil or pesticide as and when necessary and take action to level the uneven ground where stagnant water is easily accumulated.
	To clear identified hillside illegal cultivation blackspots to eliminate mosquito breeding grounds.

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	<ul> <li>To prosecute offenders of illegal cultivation.</li> <li>To carry out grass cutting and tidy up the fenced-off government land sites within 100m radius of the locations having AOI index.</li> <li>To conduct joint operation with other departments in fighting against mosquito-borne diseases.</li> </ul>
	<ul> <li>To distribute government posters and pamphlets through District Lands Offices to educate the general public.</li> <li>To remind government departments that allocated sites should be kept in a clean and tidy condition and that grass cutting should be performed regularly.</li> <li>To issue letters to tenants (Short Term Tenancy) and licensees (Government Land Licences) in assisting the Government in mosquito prevention.</li> </ul>
Leisure and Cultural Services Department (LCSD)	<ul> <li>Carry out mosquito control operations at LCSD venues, involving special anti-mosquito operations and special cleansing operations.</li> <li>Continue to operate over 345 mosquito trapping devices at around 170 LCSD venues.</li> <li>Conduct roving exhibitions on prevention of dengue fever at LCSD venues.</li> <li>Display and distribute anti-mosquito publicity materials including banners, posters and leaflets.</li> <li>Step up enforcement action on littering at LCSD venues.</li> </ul>