



**Ship Sanitation Inspection and Issuance of
Ship Sanitation Certificate**

VECTOR CONTROL ON SHIPS

Learning Objectives

After completing this topic you will be better able to:

- Understand the relationship between the IHR and vector control on a ship
- Know the risks associated with vectors, the role of vector surveillance and control
- Know the steps to do an on-board inspection and suggested areas to be inspected
- Be able to verify the Integrated Pest Management Plan has been implemented



VECTOR CONTROL ON SHIPS



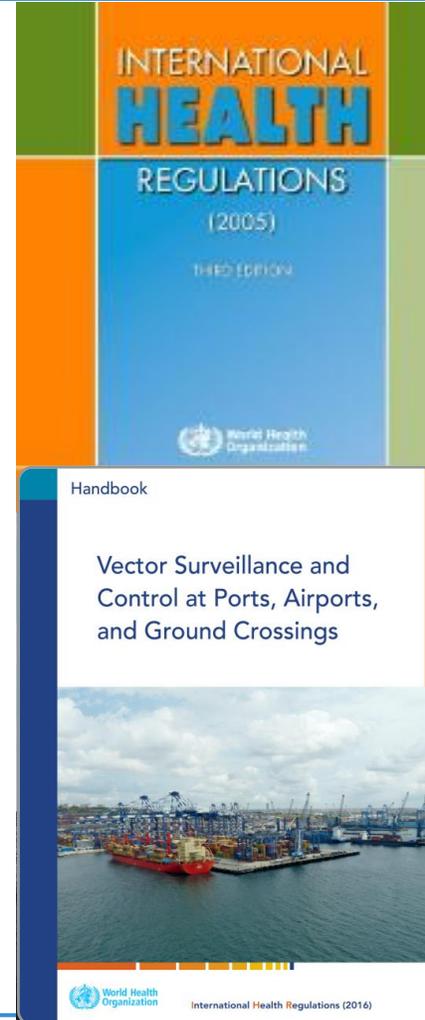
Challenges and vector-borne risks for international public health

- Rapid spread of diseases: Dengue, Zika, chikungunya, malaria, plague...
- Pandemic risk: Introduction of vectors into non-endemic areas.
- Socio-economic impact: Vector-borne diseases lead to high healthcare costs and disrupt trade and tourism.

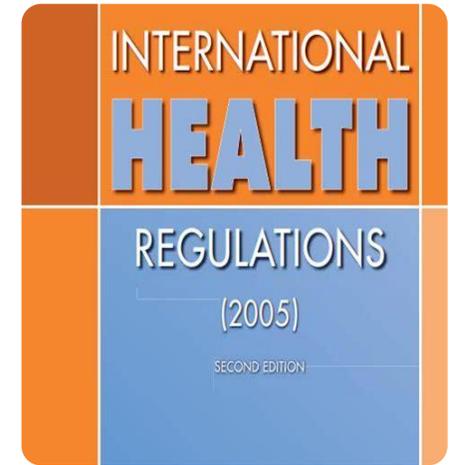
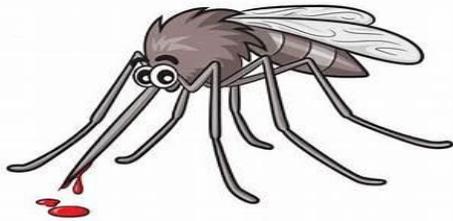


International regulatory framework

- World Health Organization (WHO): Guidelines for vector management.
- International Health Regulations (IHR 2005): Obligation for States to prevent the cross-border spread of diseases.
- International Maritime Organization (IMO): prevention of vector transport and recommendations on the Safe Use of Pesticides in Ships (IMO, 2010)
- International Maritime Dangerous Goods Code
- International Maritime Fumigation Organisation Code of Practice, International Maritime Fumigation Organisation (IMFO)



Legal Framework – IHR (2005)



ANNEX 5
ANNEX 3

**Vector and vector
borne diseases**

Articles:
20,22, 24, 27

Risks caused by vectors on ships

HEALTH RISK

- Vector borne diseases (i.e, Malaria, Dengue, Zika, Yellow Fever, Lipospirosis)
- Contamination of food products

ENVIRONMENTAL RISK

- The destruction of the goods on board the ships at the level of the containers invaded by pest specimens of organic matter) (i.e, Asian Gypsy Moth)
- The destruction of equipment by rodents (material damage)



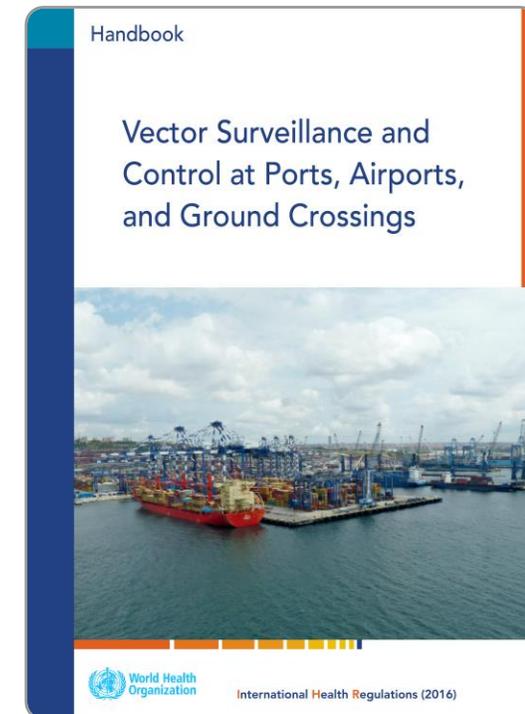
The objective of Vector Surveillance and Control according to the IHR (2005)

VECTOR SURVEILLANCE

- Prevent vector-borne diseases
- Understand the range and importance of species (bio-ecology)
- Determine areas at risk and prioritize areas of intervention
- Choose control methods;
- Initiate control operations
- Evaluate control methods

VECTOR CONTROL

- **Reduce** the risk of the spread of pathogen vectors and harmful vectors



Methods for controlling vectors in the areas most frequently contaminated by vectors on board ships



PREVENTIVE

DEFENSIVE

OFFENSIVE

Hygiene Measures



Environnement Planning

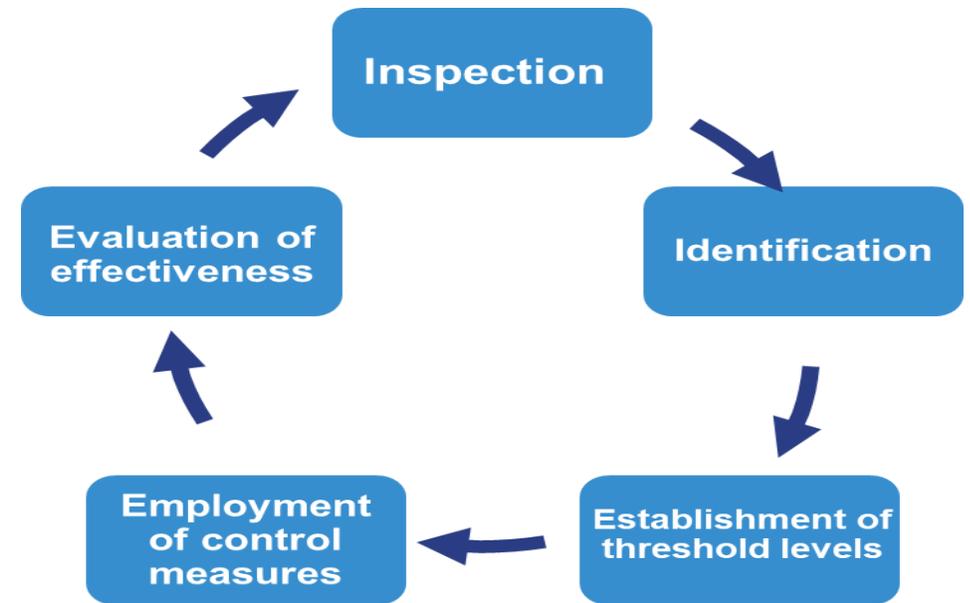


PREVENTIVE

What is an integrated Pest Management Plan?

An Integrated Pest Management (IPM) plan is an effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. This documented process/programme of controlling pests consists of **five steps** these include :

1. Inspection,
2. Identification,
3. Establishment of threshold levels,
4. Employment of control measures
5. Evaluation of effectiveness.



An Example of an Integrated Pest Management (IPM) plan on ships

- Prevention of access of mosquitoes to the ship: screen/self-closing doors, windows, ramp, cabin balconies, etc.,
- Placement of light sticky traps close to ship openings including windows, doors, etc.
- Documented passive and active surveillance for mosquitoes and conditions favorable to support mosquitoes infestations.
- Elimination of standing water indoors and at the open decks. all water collections on board that could act as breeding sites for mosquitoes.
- Application of vector control measures if mosquitoes are found, follow-up inspections and recording of actions and results.
- Availability of insecticides for commonly found pests on board including mosquitoes
- Recording of insect bites and complains from travelers.
- Evaluation of application of integrate pest mangement.

Handbook for Inspection of Ships and Issuance of Ship Sanitation Certificates

- **AREA 13:**
Other systems and areas

13.1 Overall vector management system				
13.1.1 <input type="checkbox"/>	No rat-proof guard.	Place rodent-proof guard to prevent rodents from boarding ships via the mooring lines.	<input type="checkbox"/>	
13.1.2 <input type="checkbox"/>	No integrated vector management plan.	Develop an integrated vector management plan.	<input type="checkbox"/>	
13.1.3 <input type="checkbox"/>	No vector control inspection records and logs available (including pesticide application).	Conduct routine surveillance on vectors and reservoirs; for example, deploy and check rodent traps and other devices.	<input type="checkbox"/>	
		Develop vector control inspection records and logs, including pesticide application logs.	<input type="checkbox"/>	
13.2 Standing water				
13.2.1 <input type="checkbox"/>	Evidence of standing water in different areas of the ship's open spaces (e.g. lifeboat covers, bilges, scuppers, awnings, gutters, air-treatment plants) that can hold insect larvae. Evidence of depressions or culverts that can collect standing water.	Implement operational procedures to control public health risks to crew and passengers, and communities that could be affected by ships and cargoes arriving in ports.		<input type="checkbox"/>
13.2.2 <input type="checkbox"/>	Evidence of live vectors or their larvae in standing water inside lifeboats.	Eliminate standing water and apply vector control measures.	<input type="checkbox"/>	



Inspection steps on board ships

Review control:
certificate, previous inspection reports, IPM

Inspection areas: Gally, provisions, bars, cabins,
hospital, engine room, storage facilities
Verify actual locations
on monitoring traps against the locations identified in the pest
control logs.

Ensure pesticides are not stored in a food area and are
properly organized and stored in a secure area.

Ensure pest control supplies such as baits, traps and sprays
are sufficient in order to respond to a possible infestation.





Case Study in Tangerang Med Port

The control and monitoring of vectors critical component of ship sanitation



PERINTER
ESTABLISHED 1983

TANGER MED PORT

Description of the Ship and the Voyage

- Ship: XXX
- Flag: XXX
- Gross Tonnage: 29,795
- Net Tonnage: 11,799
- Number of containers on board: 8000
 - Port of Departure: XXX
 - Port of Destination: Tanger med (Morocco)

ROYAUME DU MAROC
Ministère de la Santé
Délégation de La Province Faha Anjra
Contrôle sanitaire aux frontières
Port Tanger-Med
Tanger



المملكة المغربية
وزارة الصحة
مديرية إقليم الفاس الجديدة
المراقبة الصحية للحدود
ميناء طنجة المتوسطي
طنجة

Maritime Declaration of Health

To be completed and submitted to the competent authorities by the masters of ships arriving from foreign ports.

Submitted at the port of TANGER MED Date [REDACTED]

Name of Ship or inland navigation vessel [REDACTED] IMO Number 9983437

Arriving from (Last port) * ONNE, NIGERIA Sailing to (Next port) DAKAR, SENEGAL

Nationality / Flag of vessel LIBERIA Master's Name [REDACTED]

International Gross Tonnage (GT) 29796 International Net Tonnage (NT) 11799

Has ship / inland navigation vessel visited an affected area identified by World Health Organization? NO

Port and date of visit (affected area) N/A

Number of crew members on board** 20 Number of passenger on board** NIL

Health Questions	YES	NO
1. Has any person died on board during the voyage otherwise than as a result of an accident? If YES, state particulars in attached schedule. Total number of deaths....		✓
2. Is there on board or has there been during the international voyage any case of disease which you suspect to be of an infectious nature?		✓
3. Has the total number of ill persons during the voyage been greater than normal / expected? How many ill persons?		✓
4. Is there any sick person on board now? If YES, state particulars in attached schedule.		✓
5. Was a medical practitioner consulted? If YES, state particulars of medical treatment or advice provided in attached schedule.		✓
6. Are you aware of any condition on board which may lead to infection or the spread of disease?		✓
7. Has any sanitary measure (e.g. quarantine, isolation, disinfection or decontamination) been applied on board? If YES, specify type, place and date.		✓
8. Have any stowaways been found on board? If YES, where did they join the ship (if known)?		✓
9. Is there a sick animal or pet on board?		✓

Note: In the absence of a surgeon, the Master should regard the following symptoms as grounds for suspecting the existence of disease of an infectious nature
a) fever, persisting for several days or accompanied by prostration, decreased consciousness, glandular swelling, jaundice, cough or shortness of breath, unusual bleeding or paralysis
b) with or without fever: any acute skin rash or eruption, severe vomiting (other than sea sickness); severe diarrhoea, or

Entomological and Epidemiological investigation

- Pre-arrival document check: No declaration of any public health event on board.
- Authorization: Ship cleared to berth and started terminal operations.
- During operations: Stevedores observed a **significant number of insect larvae** on board. Findings:
 - Presence of containers with leachate and larvae on board.
 - 15 containers containing organic matter were unloaded, causing larvae emergence.
 - Ship's captain failed to report the health event according to IHR (2005).



Measures Implemented on board and ashore of the ship (Integrate pest management)

- Inspection of all holds to locate problematic containers.
- Suspension of unloading operations.
- Vessel placed under isolation.
- Sample collection for larvae identification.
- Operation of cleaning and disinsection
- Turning over infested containers on board to prevent the spread of the vector.
- Immediate disinsection of all the terminal, specifically the areas where containers unloaded from the vessel were stored



laboratory result and assessment risk

- Coordination meeting with all stakeholders for decision-making after receiving laboratory confirm that the result is Larvae of the black soldier fly (Hermetia illucens)
- Decision to clean, disinsect the ship and all contaminate container
- Issue of evident report with red stamp in sanitation certificate with all measures taken on board ship




SHIP SANITATION CONTROL EXEMPTION CERTIFICATE / SHIP SANITATION CONTROL CERTIFICATE
CERTIFICAT D'EXEMPTION CONTRÔLE SANITAIRE DE NAVIRE / CERTIFICAT DE CONTRÔLE DE NAVIRE

At the time of inspection the holds were unladen/ides with 1 CONTAINER zones de cargaison (tonnes de cargo)
 Name and address of inspecting officer: BICH TANGER-MED.....

Ship Sanitation Control Exemption Certificate Ship Sanitation Control Certificate

Areas (systemes services) inspecte/ Secteur, systeme et services inspectés	Evidence found/ Signes constatés	Sample results/ Résultats de l'analyse des échantillons	Documents reviewed/ Documents examinés	Control measures applied/ Mesures de lutte appliquées	Re-inspection date/ Date de réinspection	Comments regarding conditions found/ Remarques concernant les conditions observées
Galley/cuisine	NONE		Management plan for food safety <input checked="" type="checkbox"/> Cleaning schedule <input checked="" type="checkbox"/>			
Pantry/cambuse	NONE		Management plan for vector control <input checked="" type="checkbox"/> Ship store declaration <input checked="" type="checkbox"/>			
Stores/Entrepôt de stockage	NONE		Dangerous goods manifest <input checked="" type="checkbox"/> Cargo declaration <input checked="" type="checkbox"/>			
Holds/cargotage/cargaison	NONE					
Quarters/quarters	NONE					
-crew/poste d'équipage	NONE		Crew effects declaration <input checked="" type="checkbox"/>			
-officers/poste des officiers	NONE		Crew list <input checked="" type="checkbox"/>			
passengers/cabine des passagers	NONE		Passenger list <input checked="" type="checkbox"/>			
-deck/Post	NONE					
Potable water/Eau potable	NONE		Water safety <input checked="" type="checkbox"/> Analysis report <input checked="" type="checkbox"/>			
Sewage/Eaux usées	NONE		ISPP <input checked="" type="checkbox"/>			
Balms/bains	NONE		Balms water management certificate <input checked="" type="checkbox"/>			
Solid & medical waste/hold and medical waste	NONE		Garbage management certificate <input checked="" type="checkbox"/> Garbage record book <input checked="" type="checkbox"/>			
Standing water/Eaux stagnantes	NONE					
Tagging room/salle des machines	NONE		ISPP <input checked="" type="checkbox"/> ISAF <input checked="" type="checkbox"/>			
Medical facilities (services médicaux)	NONE		Medical log <input checked="" type="checkbox"/> Declaration list <input checked="" type="checkbox"/> Medical Chest Certificate <input checked="" type="checkbox"/>			



Rapport des signes constatés
Evidence Report Form

Nom de l'agent et numéro OMI ou numéro d'enregistrement / Name of the authority
GREEN BAY

Nom de l'autorité délivrante/ Name of issuing authority
PORT TANGER MED

Date effective de l'inspection (J./J./) / inspection date (J./J./)
08/09/2025

Date du CSN mentionné (J./J./) / date of referred SSC (J./J./);
29/03/2025

CSN délivré au port de/ SSC issued in the port of:
TANGER MED PORT

Précisez les secteurs ayant été inspectés/ indicate areas have been inspected

<input checked="" type="checkbox"/> Quartiers/Quarters	<input checked="" type="checkbox"/> Cuisines, office et zones de service/Galley, pantry, service area	<input checked="" type="checkbox"/> Zone de stockage/Stores	<input type="checkbox"/> Installations dédiées aux enfants/child-care facilities
<input checked="" type="checkbox"/> Installations médicales/Medical care	<input checked="" type="checkbox"/> piscines/spas/ swimming pools, spa	<input checked="" type="checkbox"/> Déchets solides et médicaux/solid and medical waste	<input checked="" type="checkbox"/> Compartiments machines/engine room
<input checked="" type="checkbox"/> Eau potable/ potable water	<input checked="" type="checkbox"/> Eaux usées/sewage	<input checked="" type="checkbox"/> Eau de ballast/ Ballast water	<input checked="" type="checkbox"/> Cales de cargaison/ cargo holds
<input checked="" type="checkbox"/> Autre (lingerie, lave-linge, etc...)/ Other (laundry and washing machines)			

Evénement sanitaire détectés à bord / Detected health event on board
 Oui/ Yes Non/ No

Code Signe / Evidence code	Signes constatés (brève description, conformément à la Check-list OMS ; s'écrit un trait sous chaque signe constaté afin de s'assurer que les items sont clairement séparés) / Evidence found (brief description according to who checklist ; draw a line under each item of evidence to ensure items are clearly separation)	Mesure à mettre en œuvre/ measures to be applied	requis	remplis	Mesure mise en œuvre avec succès (tampon et signature de l'autorité en charge de la réinspection)/ Measure successfully performed (stamp and signature of reinspection authority)
12-6-2	-Evidence of vectors and reservoir found ONLY ON DECK BAY-06, 10/14	Perform disinfection ,disinsection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

DATE: **08 SEPT 2025**
 Signature: **Abdelrahman**

Conclusion

- **Vector control at points of entry and on ships is crucial to protecting global public health.**
- **A combination of regulatory frameworks, monitoring tools and preventive measures is required.**
- **International collaboration and continuous monitoring are required to reduce health risks.**

THANK YOU