



Role of the Deployed Industrial Hygiene Officer for the Navy Environmental Health Center

May 2006



NAVY MEDICINE
World Class Care... Anytime, Anywhere



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Disclaimer

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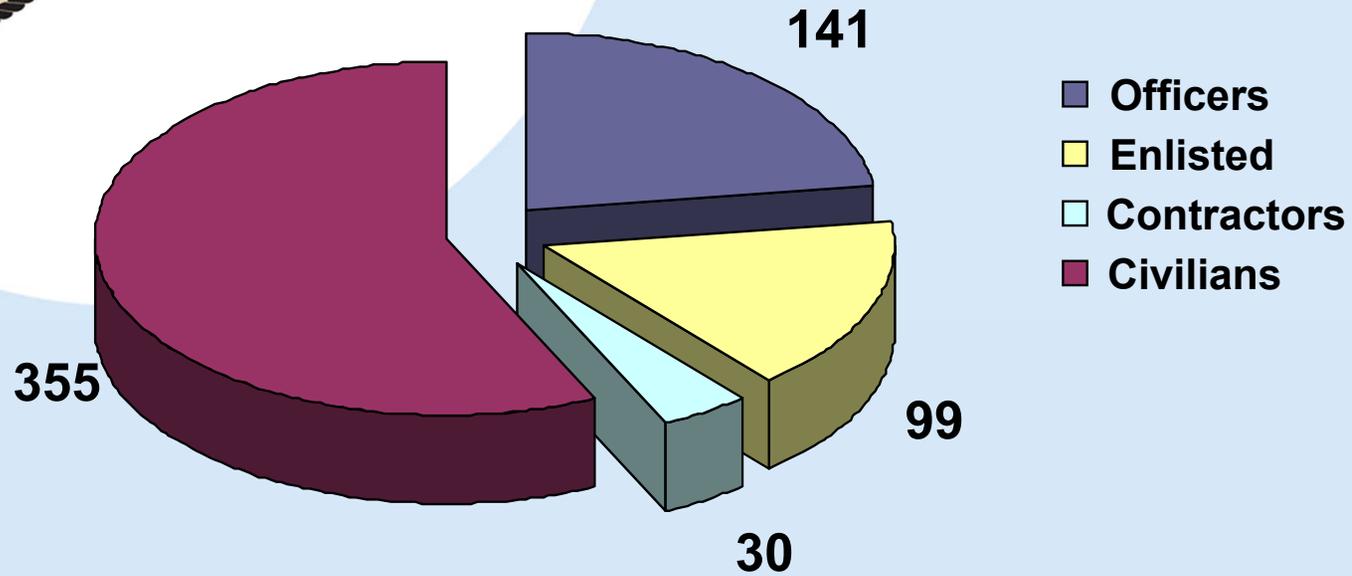
History of NEHC

- 1967: Naval Ordnance Systems Command Environmental Health Center
- 1970: Naval Ordnance Environmental Health Center (NOEHC), NAVORD
- 1971: Navy Industrial Environmental Health Center (NIEHC).
- 1974: Naval Environmental Health Center
- 2002: Commanding Officer of NEHC designated Deputy Chief, Bureau of Medicine and Surgery, for Environmental Health
- 2005: Re-aligned under the Navy Medicine Support Command (NMSC) as an echelon 4 command.





Personnel Strength



**Total Assigned Personnel as of
April 2006: 625**



Depth of Capabilities

- Preventive Medicine
- Environmental Health
- Occupational Medicine
- Industrial Hygiene
- Entomology
- Microbiology
- Biochemistry
- CBRE Detection, Monitoring, and Assessment
- Audiology
- Epidemiology
- Health Promotion
- Health Risk Assessment
- Health Risk Communication
- Industrial Toxicology
- Reproductive Hazard Assessment
- Cancer Cluster Investigations
- Submarine Atmosphere Assessment



Readiness Support Team Directorate

CAPT Ann Fallon, MC

■ Functional Areas (Departments)

- **Occupational and Environmental Medicine**
CAPT Garry Rudolph, MC
- **Population Health** CAPT Jim Lamar, MC
- **Expeditionary Preventive Medicine**
CAPT Mike Henderson, MSC
- **Industrial Hygiene** CDR Jerry Formisano, MSC
- **Environmental Programs** Ms. Yvonne Walker, GS-14



Industrial Hygiene Department

CDR Jerry Formisano, MSC

- Functional Teams (Divisions)
 - Operating Forces
 - Acquisition Technical Support
 - MEDOSH



Industrial Hygiene Department

- **Providing design solutions to identified health risks for all DoD personnel exposed to chemical or physical stressors**
- **Support to the Fleet, Shore commands, and Marine Corps units**
- **Support to higher echelons to enable data-driven policy and decision-making**



IH PRODUCTS AND SERVICES

- BUMED (M3B3 Support)
- CNO (N09) Support
- FDPMU Training Support
- DOEHRS
- NOED
- Submarine Support
- HMIRS Management
- WSESRB
- CIHLs
- Joint Strike Fighter
- TYCOM Support
- SME for Lead, Beryllium, Mold, Ergonomics, Indoor Air Quality
- Asbestos contracts for analysis and proficiency



Joint Strike Fighter ESOH IPT



***Identify, define, and resolve life cycle
environmental, safety,
and occupational health concerns.***

Draft Updated 11/03



Future Carrier Program ESOH IPT



MISSION: Meeting carrier life cycle ESOH requirements by assessing cost impacts; minimizing programmatic and personnel risks; and improving operational superiority and affordability through deliberate and early planning, timely execution, and partnership with industry. Draft Updated 11/03



Submarine Materials Review



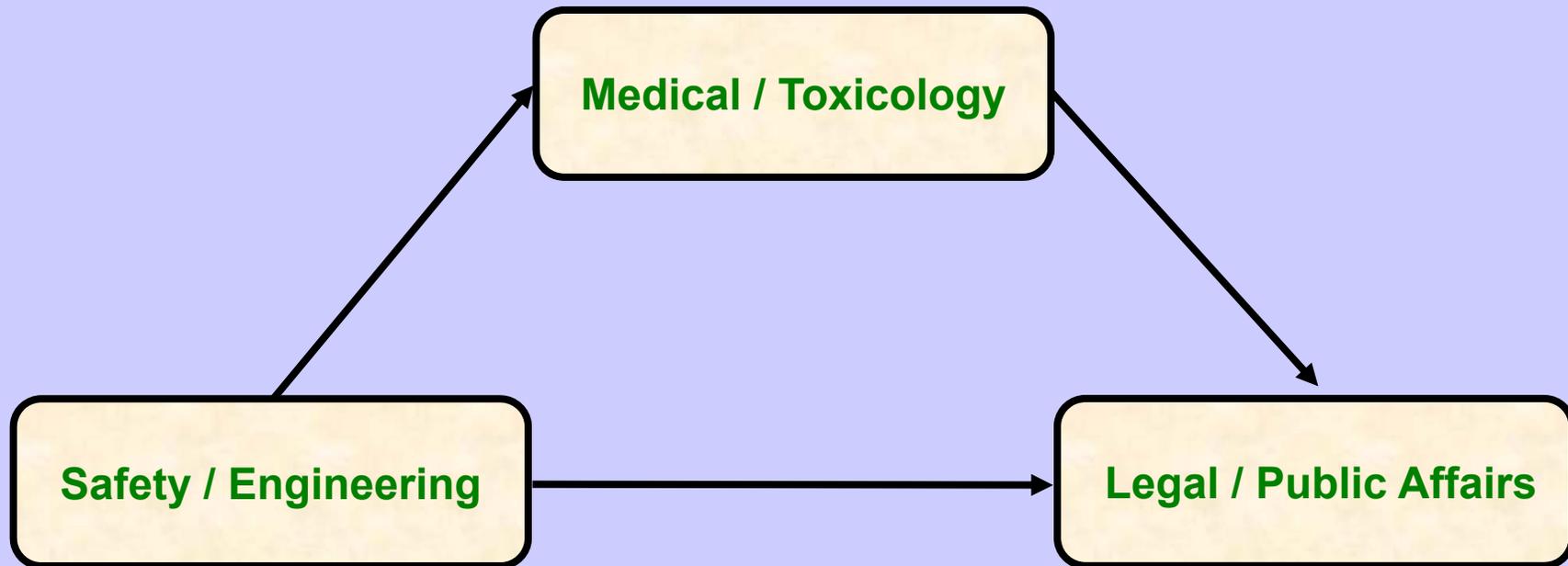
- **Compounds**
- **Atmosphere**
- **New Construction**
- **Maintenance**
- **Special Ops**



Draft Updated 11/03



Industrial Hygienist Role



Draft Updated 11/03



Expeditionary Preventive Medicine (EPM) Department

- **Functional Teams (Divisions)**
 - **Readiness, Operations and Logistics**
 - **Doctrine and Training**
 - **Science and Technology**



Expeditionary Preventive Medicine

- **Forward Deployable Preventive Medicine Units (FDPMU)**
 - **Joint FHP asset assembled from worldwide NEHC assets**
 - **Provides state-of-the-art detection and “real-time” on-site analytical and assessment capability for environmental contaminants, disease outbreaks, pathogenic organisms, disease vectors, and CBR agents and contamination**
 - **Teams are typically comprised of 13 members with four components: Prev Med, Chemical/Radiation, Microbiology, and Disease Vector.**
 - **Deploy within 96 hours of official validation**
 - **Deployed 22 FDPMUs since 2002 to OIF, Haiti, GITMO, Katrina, Pakistan and Tsunami Relief with 252 personnel**



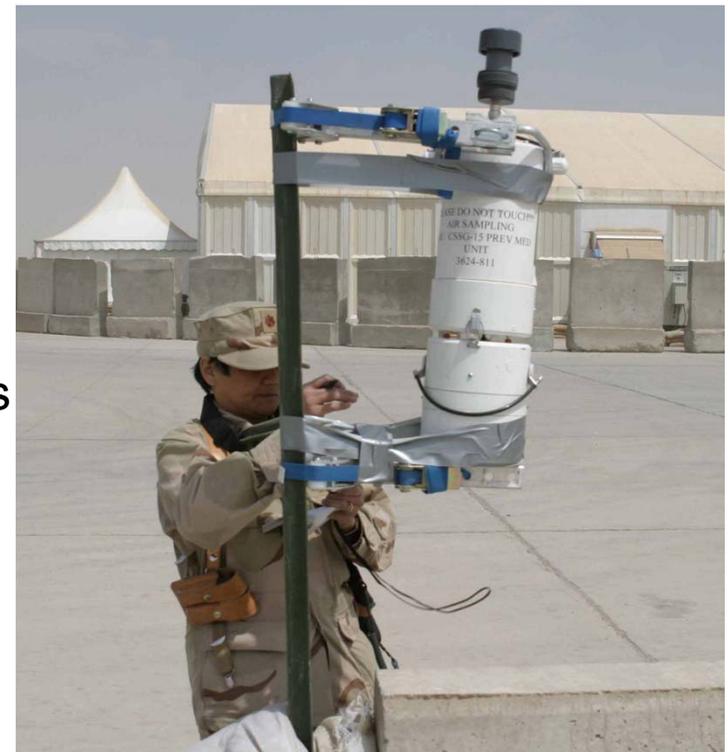


Forward Deployable Preventive Medicine Unit



What is the FDPMU

- Joint service asset
- Specialized preventive medicine support to forward deployed U.S. forces and JTF Commanders
- Mobile, agile, rapidly deployable with state-of-the-art detection and diagnostic equipment yielding real-time analytical capabilities
 - Small Footprint
 - Self-sustaining consumables for up to 60-days
- Flexibility to task organize to meet any contingency from small-scale humanitarian support to major theater war
- Adaptable to operate from fixed or mobile land bases to maritime platforms
- Requires BOS and C⁴ integration with in-theater operations

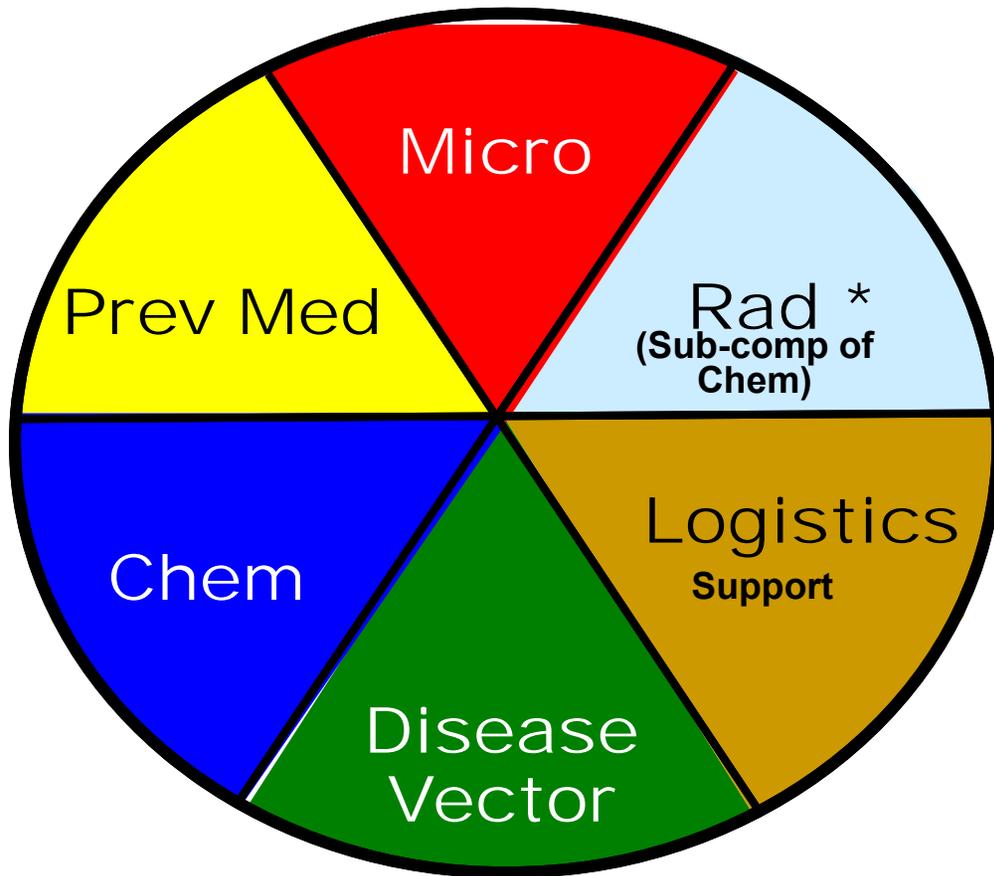




Forward Deployable Preventive Medicine Unit



Components – Weight and Cube



Manning Structure	Weight	Cube
1 Micro 1 Lab Tech 1 Biochem #	325	500
1 PMO 1 EHO 2 PMTs	500	65
1 IHO 2 PMTs 1 Biochem #	4470	525
1 Ento 2 PMTs	2030	180
1 Gen Duty HM 1 PMT °	3810 68130 (CESE)	675 8713 (CESE)
1 IHO * 1 RHO #	1505	210
13 Total	83770	10868

Available as augmentees only
 ° Primary assignment to DV Comp

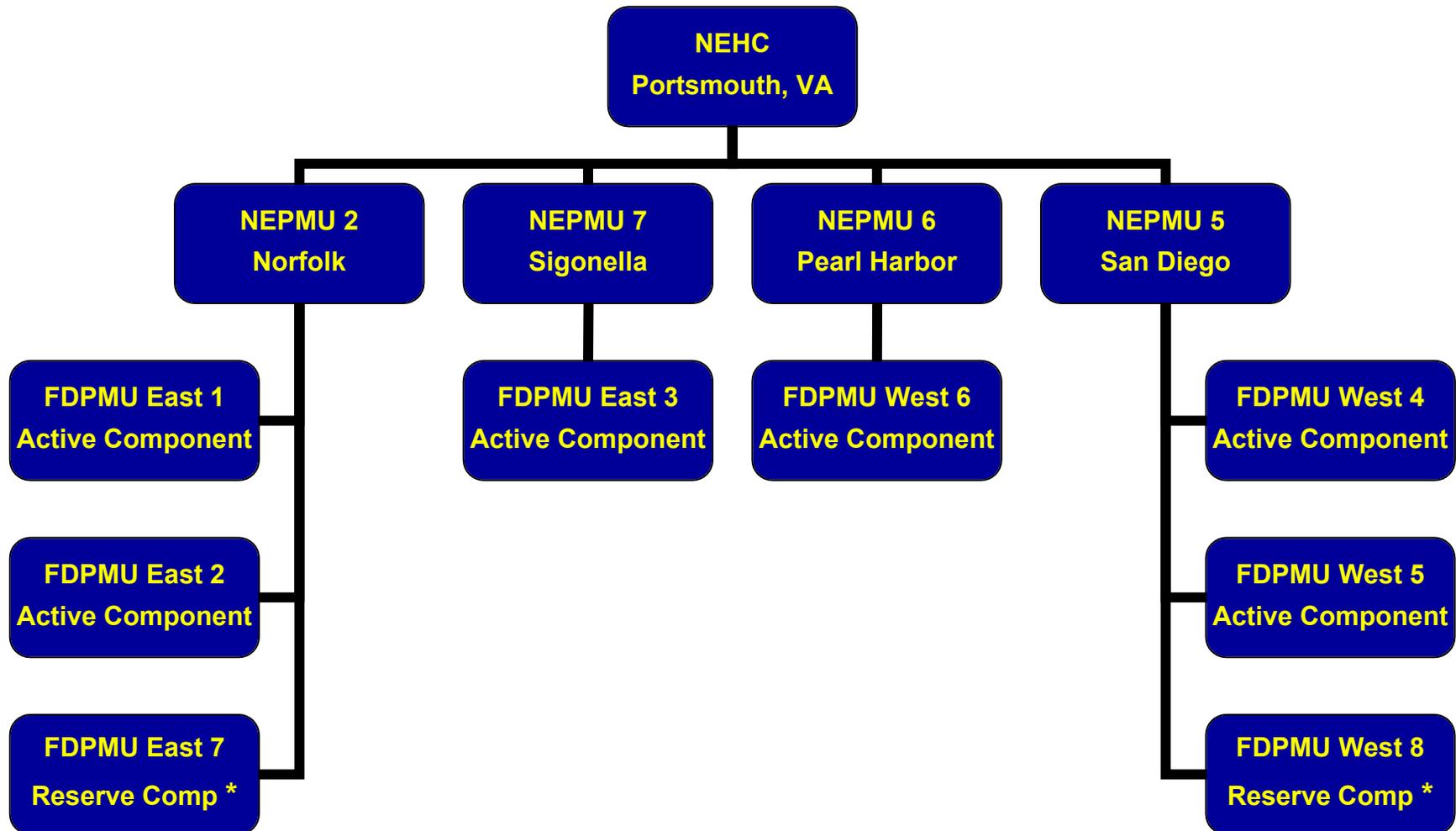
* Chem Comp IHO dual-hatted



Forward Deployable Preventive Medicine Unit



Current Worldwide Command Configuration



UNCLASSIFIED



Forward Deployable Preventive Medicine Unit



FDPMU Primary Mission

“To provide Force Health Protection by rapidly assessing, preventing, and controlling health threats in a theater of operations and enhancing organic Preventive Medicine assets”



UNCLASSIFIED



IHO Role

- **Connecting Professional Disciplines**
- **Deciphering Complex Issues**
- **Immediate Answers, Immediate Response**
- **Flexibility and Adaptability**



Forward Deployable Preventive Medicine Unit



FDPMU Evolution

- **MMART → 1970's-1999**
 - Involved basic Preventive Medicine and Vector Control
- **FDL (Forward Deployable Lab) → 1990-1998**
 - Microbiology Lab (designed in response to Gulf War)
- **PM-MMART (Preventive Medicine – Mobile Medical Augmentation Readiness Team) → 2000-2003**
 - Enhanced Deployment Medical Surveillance functions and Prev Med deployment teams - 6 teams
 - Incorporated FDL and CBR Analytical Capability
- **FDPMU → 2004 and beyond**
 - Navy's Level III Deployable Preventive Medicine Capability and Disease Medical Surveillance Platform – 8 teams
 - Pursuing warfighter validation to become Navy Program of Record



Upcoming EPM Operations

- **USNS Mercy Deployment – May 06**
- **Two FDPMU Intermediate Training Courses – May/June 06**
- **Two FDPMU Operational Readiness Evaluation Courses – July/August 06**
- **Battle Skills Training Course – May 06**
- **Sea Breeze Exercise July/Aug 06**
- **OIF 06-08: Four FDPMU Teams deploying ISO GWOT (each for 6 months)**



NEHC Support to Joint Force Health Protection Transformation



“The Military Departments shall employ flexible, modular, scalable, and interchangeable medical capabilities, logistics, and information management / technology systems to ensure that the best possible medical and rehabilitative care is delivered to support military operations anywhere in the world”... . Paul Wolfowitz



Forward Deployable Preventive Medicine Unit



Recent Deployments....

- **Combat Operations Support:**
 - **OIF I: 3 teams**
 - **OIF II: 4 teams**
 - **OIF 04-06: 4 teams**
- **Humanitarian Assistance/Disaster Relief Support**
 - **Hurricane Ivan: Sept 2004**
 - **Tsunami in SE Asia: Jan – May 2005**
 - **Hurricane Katrina: Sept 2005**
 - **Earthquake in Pakistan: Oct 2005**
- **Other**
 - **OEF Detainee Ops: 4 teams from Jan 02 - May 04**
 - **Haiti: Mar-Jun 04**

Steady State: 25-40% NEHC personnel deployed



Forward Deployable Preventive Medicine Unit



Force Health Protection Efforts.....

Capabilities Offered

- Provides rapid detection of CBR, or environmental hazards - minimize casualty flow
- Provides endemic, infectious disease assessment
- Conducts medical and disease vector surveillance operations
- Supports First Responders with on-site and deep reach back analytical, consultative capabilities
- Provides realistic CBR / WMD medical scenario training and exercises

Operational Risk Communication Expertise

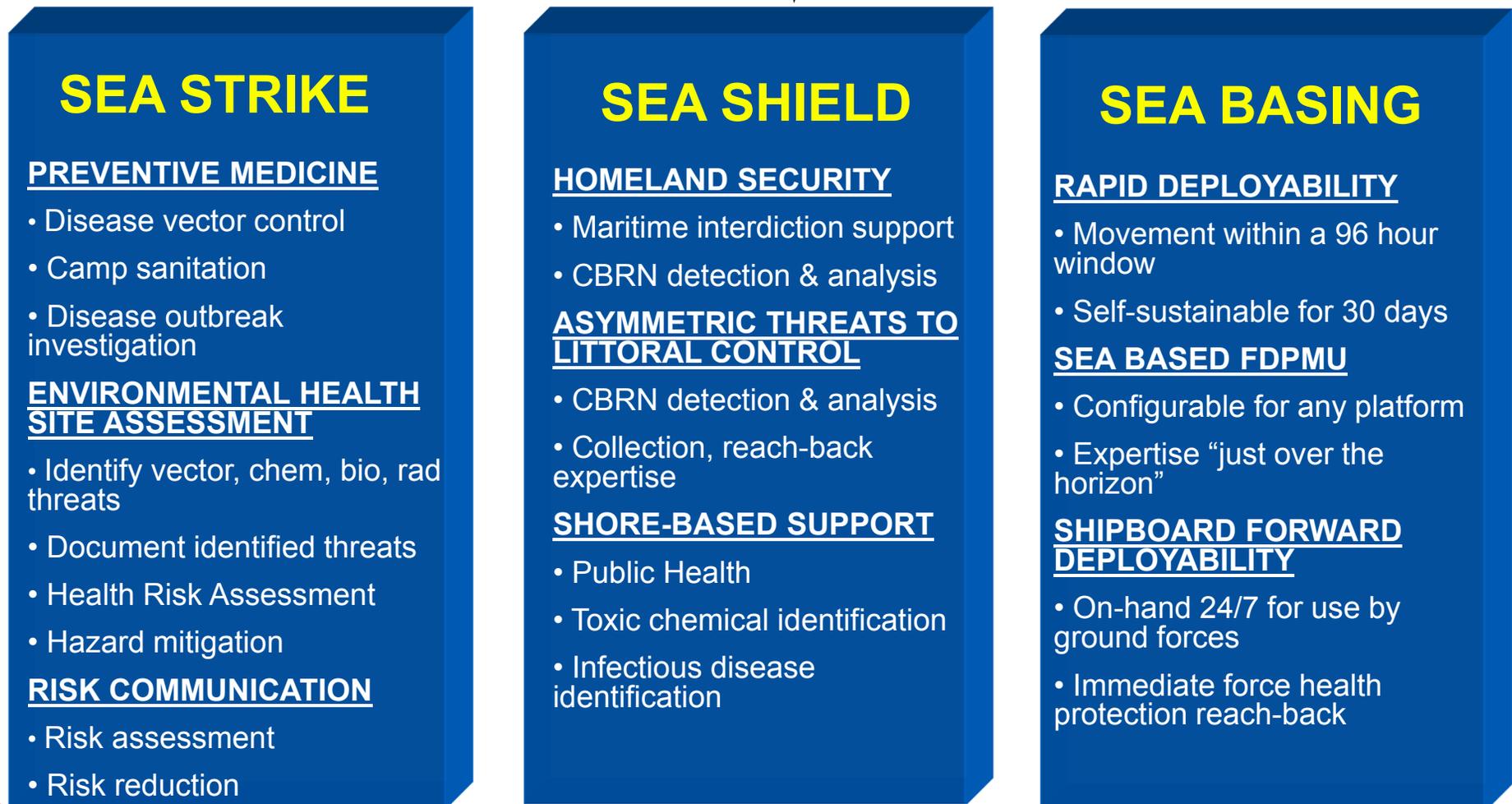
- Communicates health threats to theater commanders and surgeons – other field personnel
- Assesses hazards, evaluate risk management options, provide recommendations for controls or threat reduction
- Connects Risk Com to existing Operational Risk Management Plans



Forward Deployable Preventive Medicine Unit



The FDPMU as a U.S. Navy Asset....





Master Training Plan....

Navy Training System Plan (NTSP)

- Provides external funding for required team training and quotas for critical courses

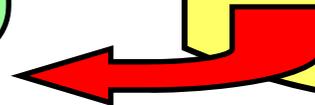
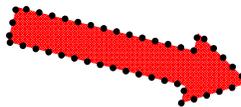


Unit Level Sustainment

- Compliments FDPMU Trng Prgm
- Individual, component, team focus
- Mix of didactic and field exercises

FDDMU Training Program

- **Unit Level Requirements**
 - Battle Skills
 - FPAE PAT program, QA/QC
- **Basic Course**
 - Orientation, Equipment, TTX
- **Intermediate Course**
 - EHSA, Risk Com, Sampling
- **ORE / Advanced Course**
 - Deployment certification
 - Full Scale Exercise scenario driven





IHO Role Summary

- **Presenting Science in a Military Setting**
- **Transferring IH professional Skills to a Deployed Environment**
- **Increased Need for Adaptable, Capable Scientists for Immediate Response**
- **New and Evolving Training**



Questions?

