



# **HEALTH SURVEILLANCE: Across the Continuum of Care**

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Colonel Kenneth Cox, USAF, MC, SFS  
*Director, Force Health Readiness  
Deployment Health Support Directorate*  
Force Health Protection Conference  
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# Outline

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- Background
- Service Member Life Cycle
- Recruit Health Assessment
- Annual Health Assessment
- Individual Medical Readiness
- Deployment Associated Assessments
- Medical Evaluation Board Findings
- Challenges





# The President's Directive (PRD-5)

***“The Departments of Defense and Veterans’ Affairs are directed to create a Force Health Protection Program. Every soldier, sailor, airman, and marine will have a comprehensive, life-long, medical record of all illnesses and injuries they suffer, the care and inoculations they receive, and their exposures to different hazards. These records will help us prevent illness, and identify and cure those that occur.”***



# DoD Policy Guidance

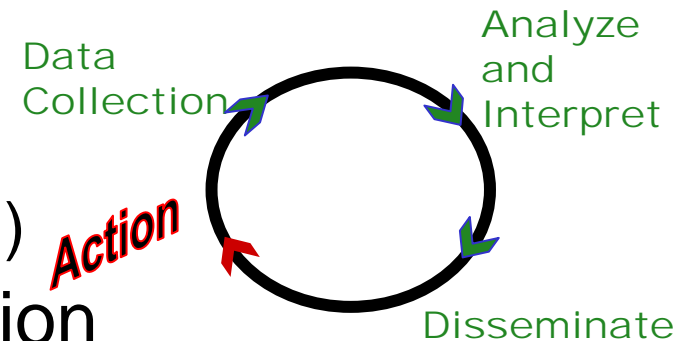
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- DoDD 6200.4, *Force Health Protection*
  - Measures to promote healthy and fit armed forces ready for all activities and operations
- DoDI 6490.2, *Comprehensive Health Surveillance*
  - Conducted throughout military careers, across all duty locations and encompassing risk, intervention, and outcome data
- DoDI 6025.19, *Individual Medical Readiness*
  - *Six core elements*



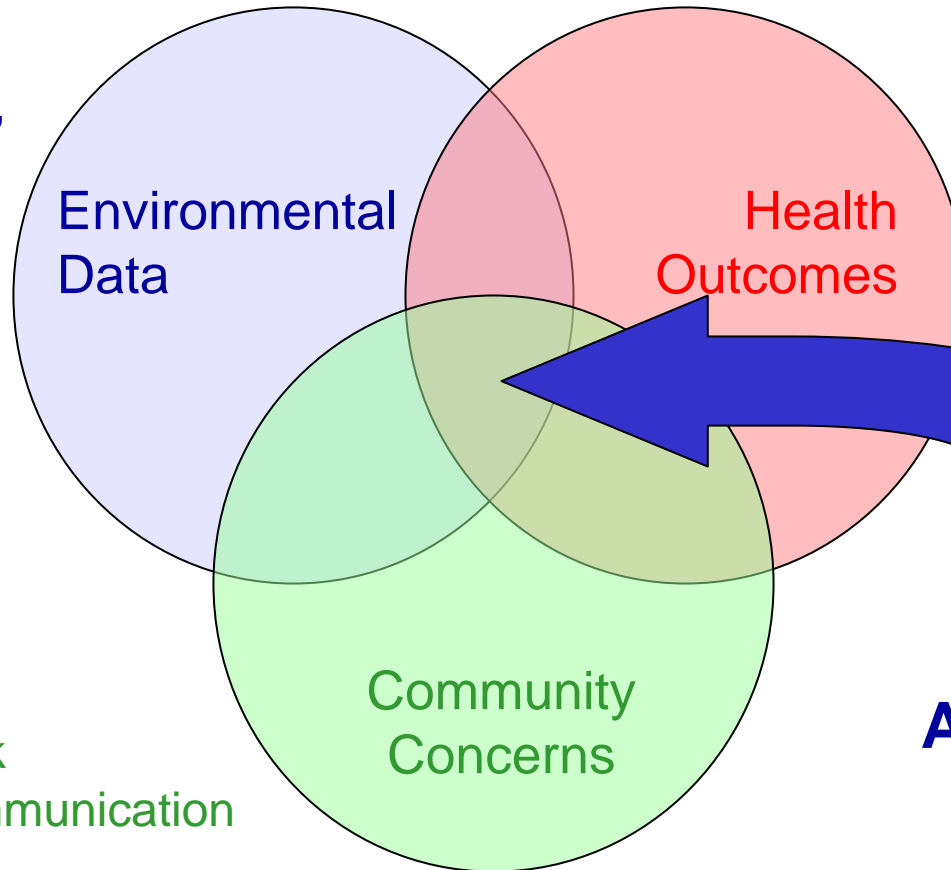
# Comprehensive Health Surveillance

- Timely data flow
  - 'Accurate' data
- } **Field Responsibility**
- Appropriate analyses and interpretation with a goal of actionable information
  - Timely reporting to decision makers
    - Forward field unit
    - Intermediate command levels
    - 'Rear' top-level (AF, DoD, etc.)
  - Appropriate action/intervention
  - Continuous monitoring for effectiveness



# Health Assessment Process

Environ Science,  
Industrial Hygiene,  
Entomology, etc.



Public Health,  
Preventive Med,  
Epidemiology,  
Biostatistics, etc.

Risk  
communication

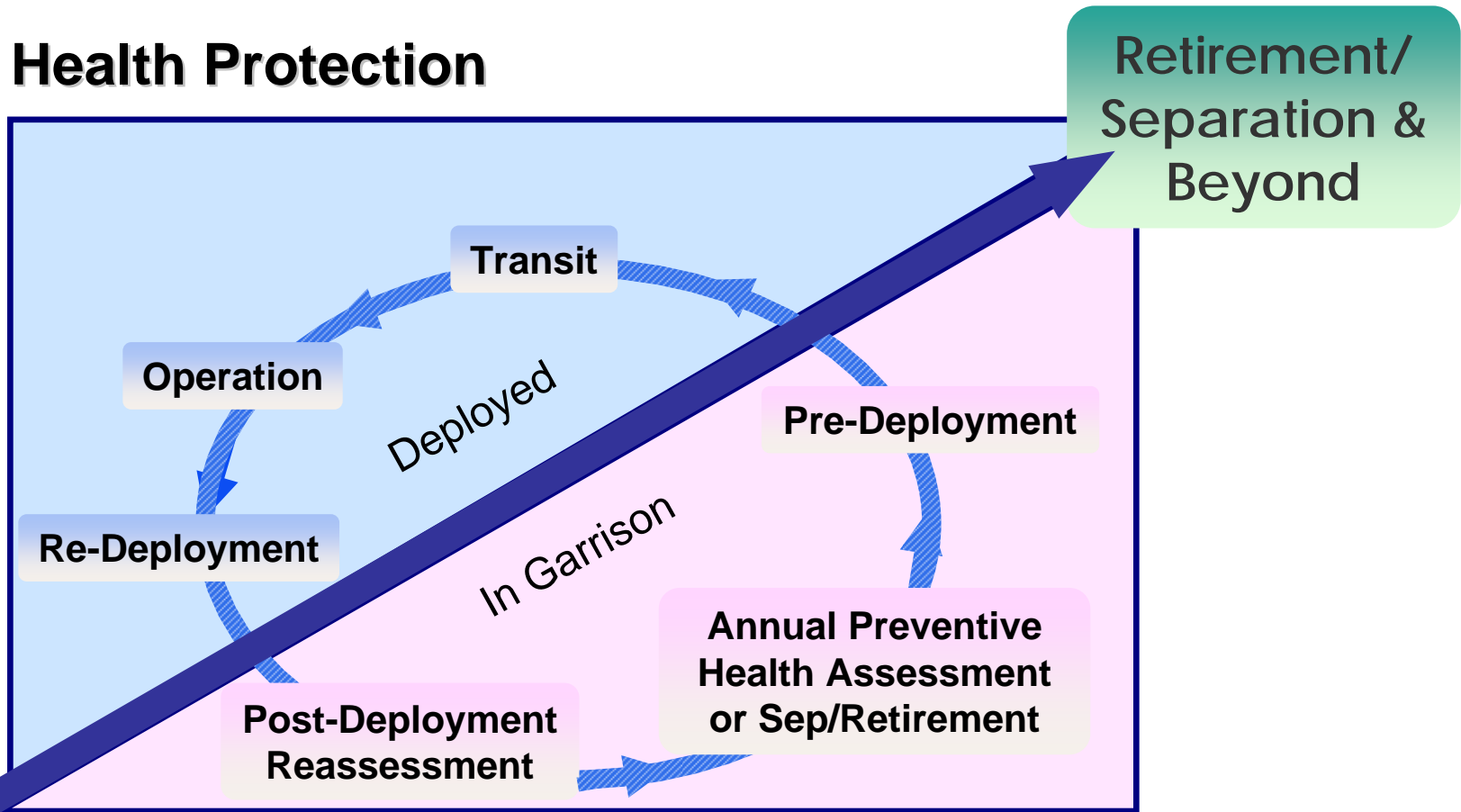
**Health  
Assessment**



# Service Member Life Cycle

## Health Assessment Opportunities

### Force Health Protection



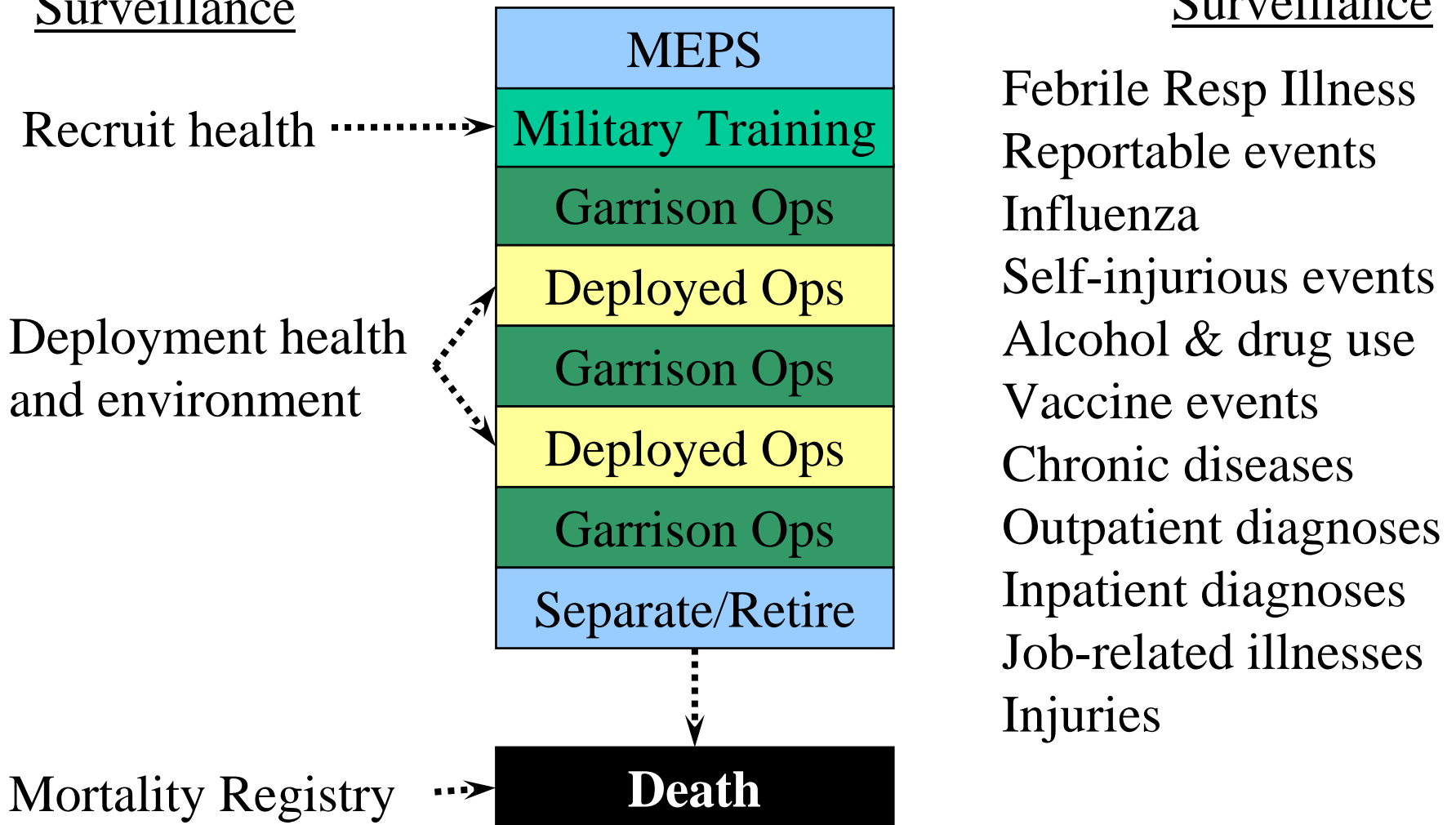
Accession

Population Health

# Surveillance Programs for the Military Life Cycle

Episodic Surveillance

Continuous Surveillance





# Recruit Health Assessment

## Health Assessment Review Tool-A

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- Collect and maintain electronic baseline demographic, medical, psychosocial, occupational, and other health risk data on all recruits and officer accessions at the time of initial military training
  - Takes 20-30 minutes to complete
- Purpose
  - Improve understanding of the health status and risk factor profiles of service members at the time of entry into the military
  - Enhance development of optimal individual and population-level intervention and prevention programs to enhance Force Health Protection and readiness.
- Web-based and stand-alone versions
  - Data becomes part of electronic health record



# Annual Health Assessments

## Periodic/Preventive Health Assessment (PHA)

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- Replaces outmoded every 5-yr physical with tailored annual assessment
  - Self-report using Health Assessment Review Tool (HART)-R/F/P
  - Review medical records and DD Form 2766
  - Review all IMR requirements, correct gaps
- Identify personal health risks (occ, lifestyle, etc.), educate, and provide a blueprint for improved health (manage &/or prevent)



# Individual Medical Readiness (IMR)

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- Key FHP concept
  - Monitoring & optimization of vital health protection parameters
- Purpose: ensure healthy, fit fighting force
- Definition: the extent to which an individual service member is free from health-related conditions that could limit their ability to participate in military operations in austere settings
- Technique:
  - Monitor key IMR indicators
  - Assign overall IMR classification to individuals
  - Provide actionable reports to commanders
  - Follow DoD-level metrics

**Are You  
Medically  
Ready to  
Deploy?**



# Deployment Associated Surveillance

Predeployment	Intradeployment	Postdeployment
<ul style="list-style-type: none"><li>• Self-assessment with DD Form 2795</li><li>• Archive pre-deploy serum sample</li><li>• Individual medical readiness</li><li>• Periodic Health Assessment (PHA)</li></ul>	<ul style="list-style-type: none"><li>• Monitor health events</li><li>• Monitor exposures<ul style="list-style-type: none"><li>• Occupational</li><li>• Environmental</li></ul></li><li>• Self-assessment with DD Form 2796 prior to leaving operational area</li><li>• Separation exam</li></ul>	<ul style="list-style-type: none"><li>• Archive post-deploy serum sample (&lt;30d)</li><li>• TB test (risk-based)</li><li>• Postdeploy health <u>re</u>assessment (90-180d) with DD Form 2900</li><li>• Health care utilization</li><li>• Periodic Health Assessment (PHA)</li></ul>

Routine Public Health Surveillance  
(communicable dz, mortality, etc.)

# In-theater Continuous Surveillance

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- Casualty Reports (hostile injuries/deaths)
  - Personnel Component
  - Medical Component (AFIP Mortality Surveillance)
- Disease and Non-battle Injury Reports
  - Patient encounter modules (PEM) or web data entry
- Reportable Medical Events
- Joint Patient Tracking Application
- Medical Air Transport Reports (TRAC<sup>2</sup>ES)
- Other (Safety Reports, Trauma Registries, etc.)
- Occupational/Environmental Exposure Reports



# Post-deployment Health Assessment Key Results

## January 1, 2006 – July 24, 2006

	Health (Excellent, Very Good, Good)	Medical/ Dental Problems	Currently on Profile	Mental Health Concerns	Referral Indicated for any reason
<b>Active Duty</b> (N=89,336)	<b>92%</b>	<b>22%</b>	<b>7%</b>	<b>5%</b>	<b>18%</b>
<b>Reserve Components</b> (N=40,830)	<b>91%</b>	<b>42%</b>	<b>11%</b>	<b>7%</b>	<b>26%</b>

**NOTE:** Service members' responses on DD Forms 2796 submitted since 01 Jan 06, all operations/deployments.

### Most common reasons for referral:

- Dental (annual exam, cleaning, caries)
- Musculoskeletal (orthopedics)
- Mental health

Data Source: Defense Medical Surveillance System, Army Medical Surveillance Activity

As of 24 July 2006



# Post-deployment Health Re-Assessment Key Results

## September 1, 2005 – July 11, 2006

	Health (Excellent, Very Good, Good)	Medical/ Dental Concerns	Environ- mental Concerns	Mental Health Concerns	Referral Indicated for any reason
<b>Active Duty</b> (N=62,613)	<b>87%</b>	<b>48%</b>	<b>17%</b>	<b>31%</b>	<b>21%</b>
<b>Reserve Components</b> (N=12,973)	<b>77%</b>	<b>73%</b>	<b>43%</b>	<b>52%</b>	<b>54%</b>

**NOTE:** Service members' responses on DD Forms 2900 submitted since 01 Sep 05, all operations/deployments.

### Most common concerns reported:

- Sleep / fatigue problems
- Back pain

Data Source: Defense Medical Surveillance System, Army Medical Surveillance Activity

As of 11 July 2006



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# Medical Evaluation Boards (MEB)

## Snapshot of Diagnoses Among Service Members Completing MEBs (8 June – 7 July 2006)

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		<u>Number of Members</u>	<u>% of Total</u>
<b>Musculoskeletal System</b>		<b>630</b>	<b>46%</b>
<b>Mental Disorders</b>		<b>140</b>	<b>10%</b>
	PTSD	43	
	Depression	31	
	Bipolar disorder	19	
	Schizophrenia	13	
	Other	34	
<b>Injury and Poisoning</b>		<b>102</b>	<b>7%</b>
<b>Respiratory System</b>		<b>88</b>	<b>6%</b>
	Asthma	76	
	Other	12	
<b>Nervous System and Sense Organs</b>		<b>85</b>	<b>6%</b>
<b>Symptoms, Signs, Ill-Defined Conditions</b>		<b>74</b>	<b>5%</b>
<b>All 14 Other Major Categories</b>		<b>253</b>	<b>18%</b>





# Remaining Challenges

## Closing the Gaps

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- Integrating exposure data with health event surveillance
  - Particulate matter exposure cohorts
- Extending continuous surveillance systems, e.g. recruit health
- Monitoring variations over time for individual health assessments, i.e., linking HART-A, HART-R, DD 2795/2796/2900
  - Validating self-assessment tools, timing, and processes
- Reserve Component health event data
- Integrating VA and other external sources to monitor health events and mortality in retirees and those who have separated from military service



# Discussion & Questions

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## Backup Material



# HART-A Domains

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- General Information
- Overall Health
- Dental
- Chronic Disease
- Exercise and Fitness
- Nutrition
- Tobacco Use
- Alcohol
- Family History
- Clinical Preventive Services
- Reproductive Health
- Injuries
- Mental Health
- Other
  - Seat belts-Anger-Financial



# Standardized DoD IMR Definitions

Element	Definition
PHA	Current PHA (overdue if not done by last duty day of month following due month).
Dental	Class 1 or 2 (fail if Class 3 or 4).
Immunizations	Current for all total force required vax.
Med Equip	1 pair gas mask inserts (if needed)
Med Readiness Labs	DNA on file, HIV current (within 24 months). G6PD for Navy & AF (Army planning policy).
Deployment Limiting Conditions	Per Service-specific standards guidelines.

