

Building Epidemiologic Capacity in Wisconsin

February 2005

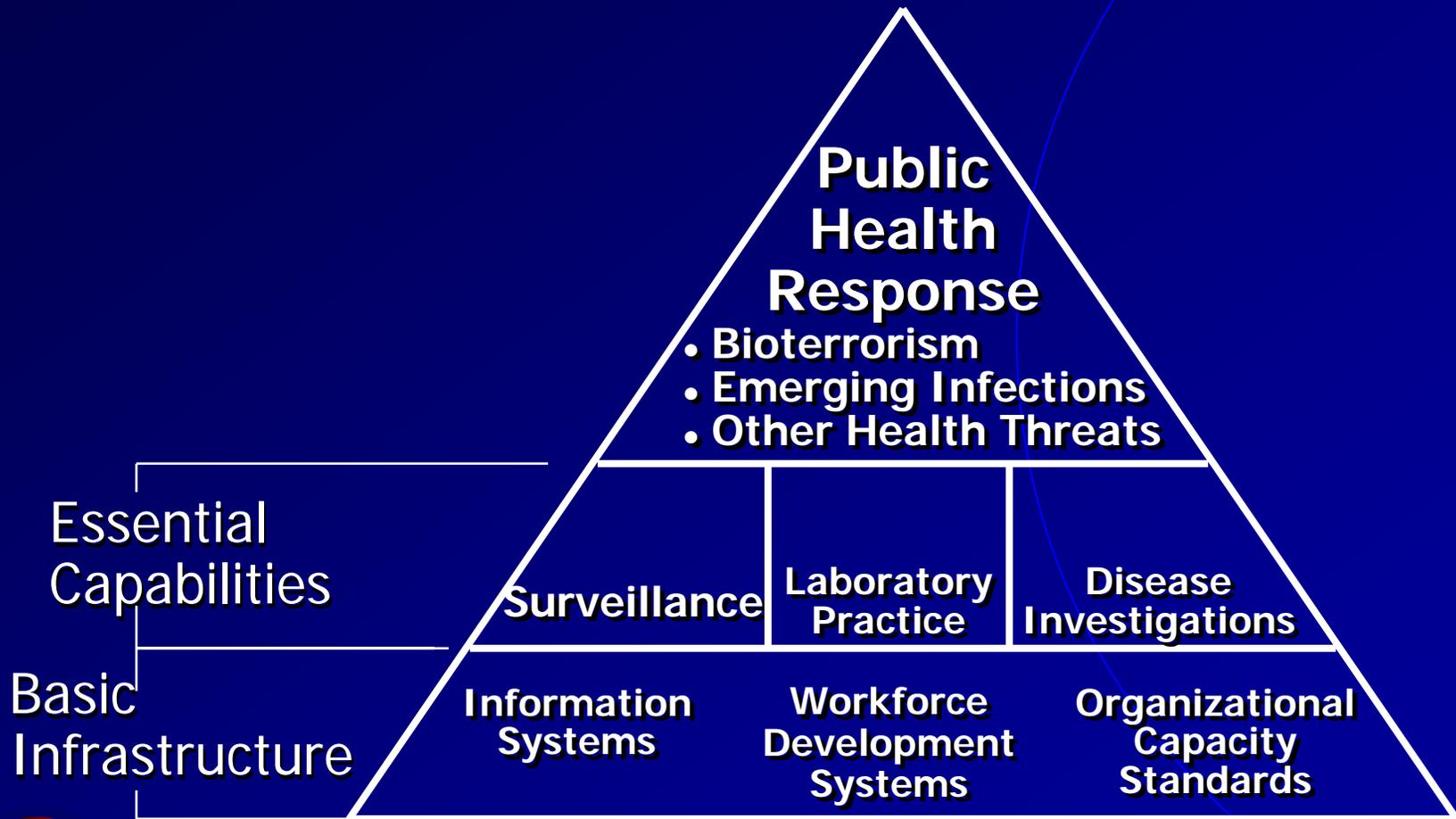
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Assuring Public Health Preparedness and Response



A lack of epidemiologists...

- Multiple reports (GAO, CSTE, ASTHO, CDC) have identified a lack of qualified epidemiologists in public health across the nation



A lack of epidemiologists...

- Despite the recent funding for bioterrorism and emergency preparedness, CSTE's 2004 report showed that "The current number of epidemiologists is far below the perceived 'estimate of need' to provide essential services of public health across epidemiology program areas"

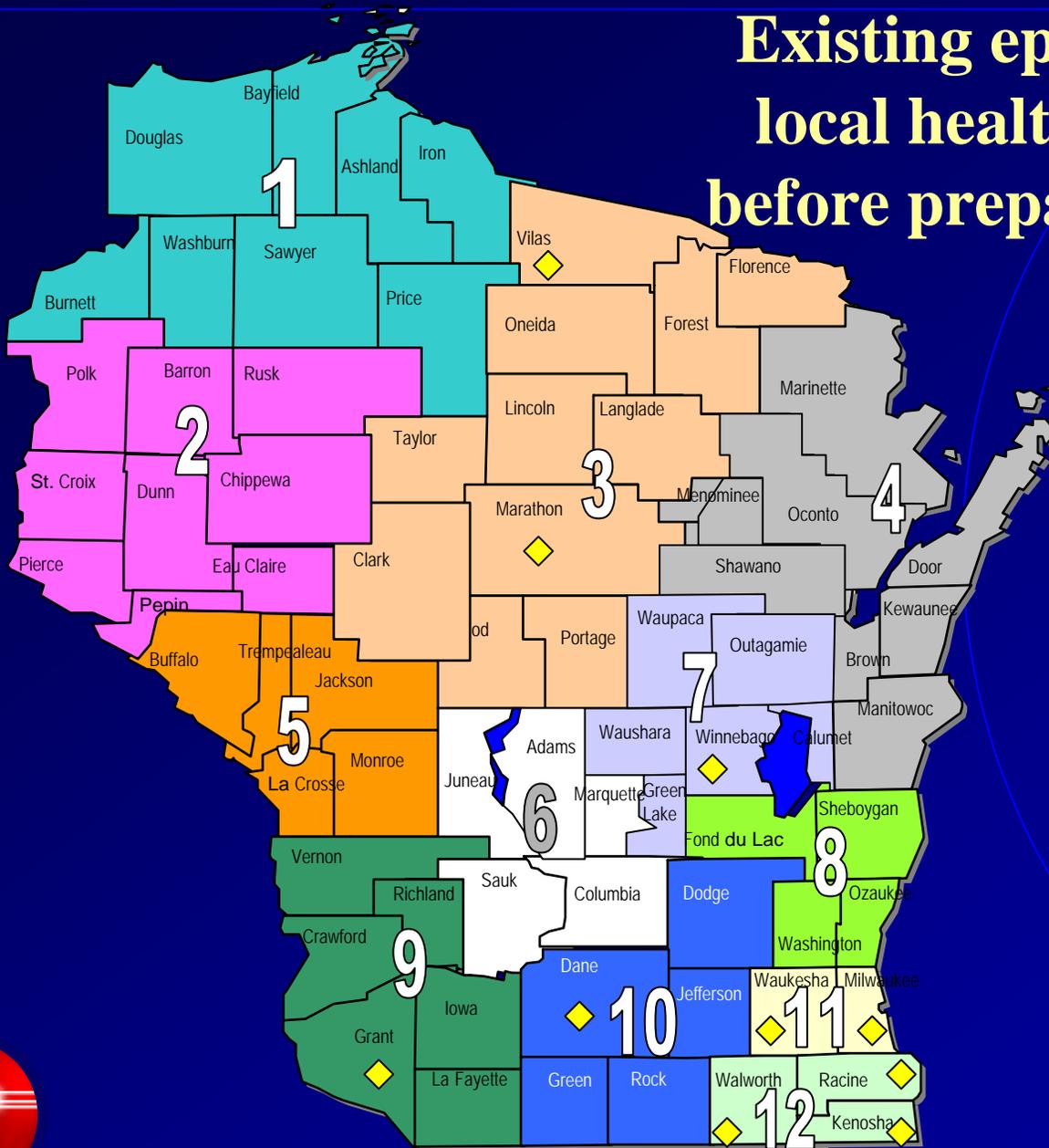
(CSTE, 2004 National Assessment of Epidemiologic Capacity: Findings and Recommendations,
<http://www.cste.org/assessment/eca/pdf/files/ecafinal05.pdf>)



**Problem: insufficient
epidemiologic capacity at
local level in WI**



Existing epidemiologists in local health departments, before preparedness funding



Public Health in Wisconsin

- State public health has central office and five regional offices
- “Home rule” state means that local public health departments are independent, and funded by local government
- There are 96 local and 12 tribal health departments



Public Health in Wisconsin

- State public health provides guidelines, assistance, has control over multi-jurisdictional issues
- State public health has epidemiologists in all specialties at main office in Madison WI; none in regional offices



Public Health in Wisconsin

- Local public health is funded by local boards of health
- Funding is a combination of board pass-through from state tax dollars returned to local government, grants, and contracts
- Local health departments are not equally funded throughout state

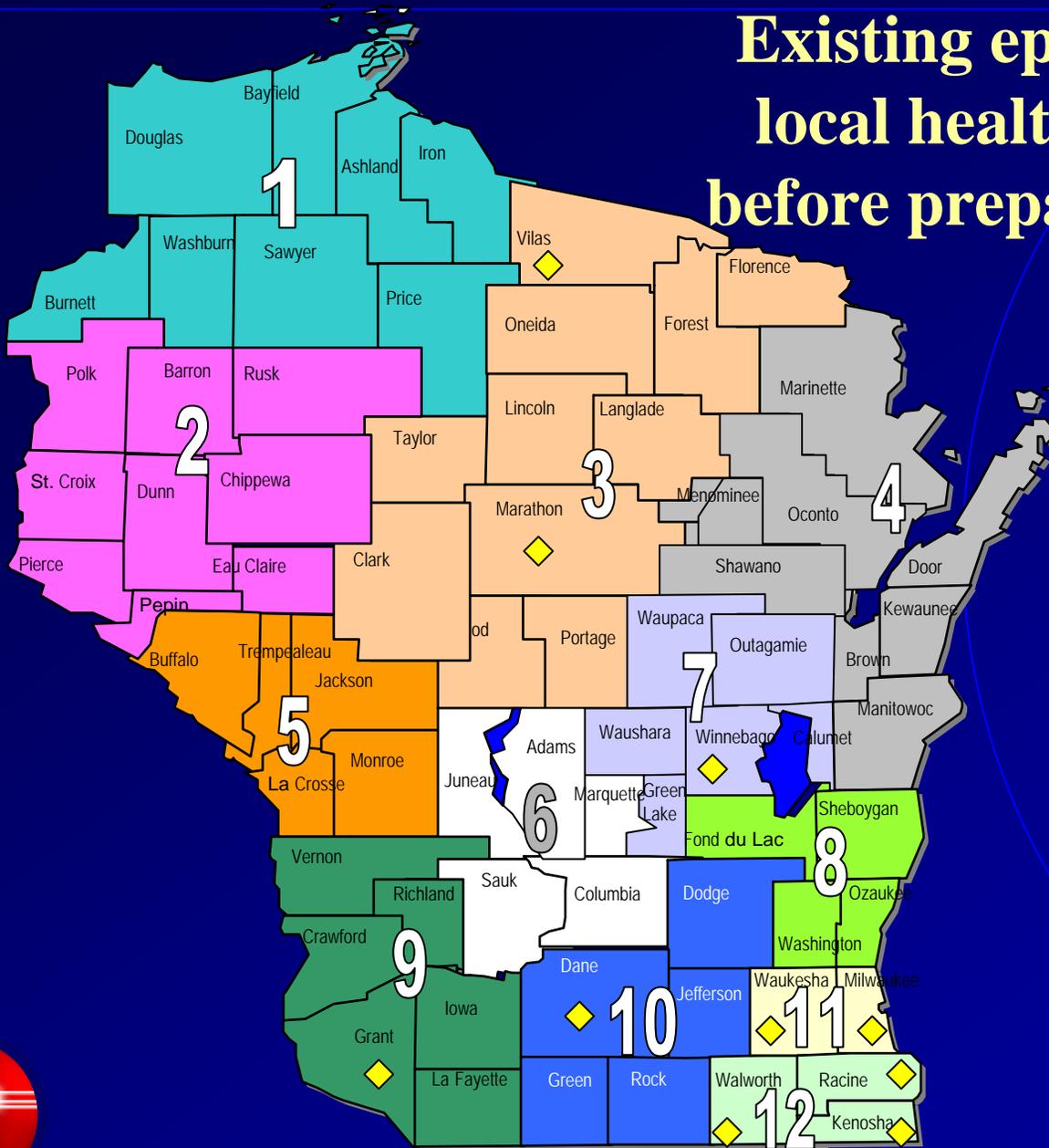


Wisconsin has a budget deficit

- Like many states, Wisconsin has spent the last few years on a very tight budget
- Hiring is generally frozen, with few positions filled if they become vacant, and very few new hires are allowed
- Governor ran on a platform of decreasing size of government - goal is to cut 10,000 jobs from state service in six year term



Existing epidemiologists in local health departments, before preparedness funding



How to address shortage of epidemiologists?

- Can't hire as state employees
- Local funding is variable and federal grants not trusted by local entities as a lasting source of funds



How to address shortage of epidemiologists?

- Hire through consortia
- Educate those already in place
- Coordinate and collaborate to maximize the capabilities of the few



Hiring



Wisconsin's Public Health Emergency Preparedness (PHEP) Funding Distribution

- WI received approximately \$15 million in bioterrorism and emergency preparedness funding
- Funding is allocated to 12 public health consortia (voluntary groupings of local and tribal health departments) using a formula which includes population, number of separate entities, and area



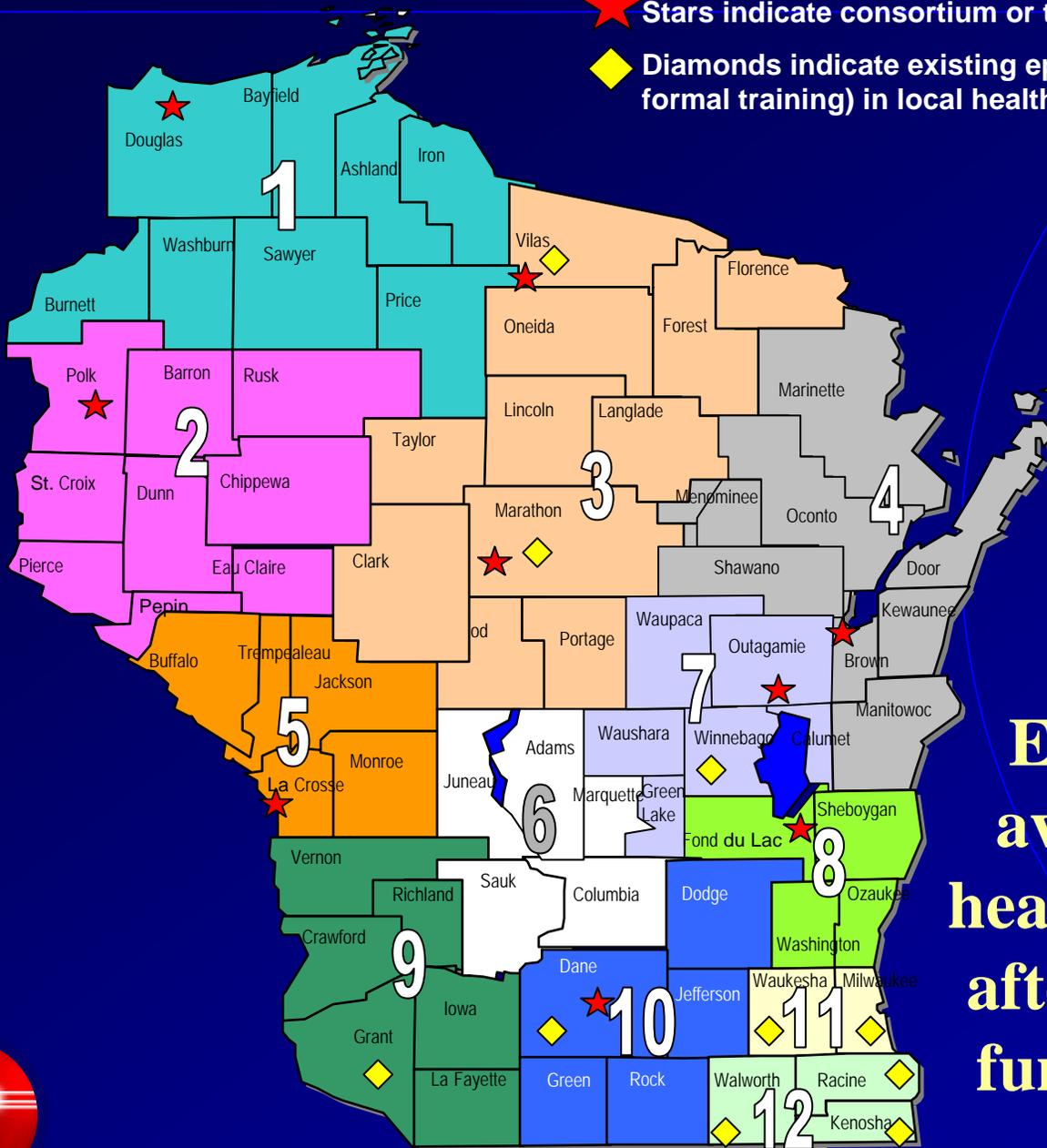
Use of PHEP Funding to Hire Epidemiologists

- \$1,200,000 per year allocated for epidemiologists in the 12 consortia in 2004 and 2005
- Nine consortia have hired full- or part-time epidemiologists (all at least masters-prepared, though not all in epidemiology)
- One consortium still planning to hire half-time epidemiologist



★ Stars indicate consortium or tribal epidemiologist

◆ Diamonds indicate existing epidemiologists (with or without formal training) in local health departments



Epidemiologists available to local health departments, after preparedness funding for hiring



Education of Existing Staff



Education of Existing Staff

- CDC and state staff provided “Epi in Action” course to more than 100 local health department (LHD) staff in southeast part of state (paid by PHEP funds)
- Course will be repeated this spring, with intermediate course to be given in fall 2005 (paid by PHEP funds)



Education of Existing Staff

- One consortium contracted with LHD staff to complete the CDC “Principles of Epidemiology” self-study course, with \$250 paid on presentation of certificate of completion
- 24 staff completed the course and were certified



Education of Existing Staff

- One consortium delegated epidemiology duties to experienced PHN and sanitarian staff, who were then given work time to complete the “Principles of Epidemiology” course
- Result is 6 staff trained in five rural counties

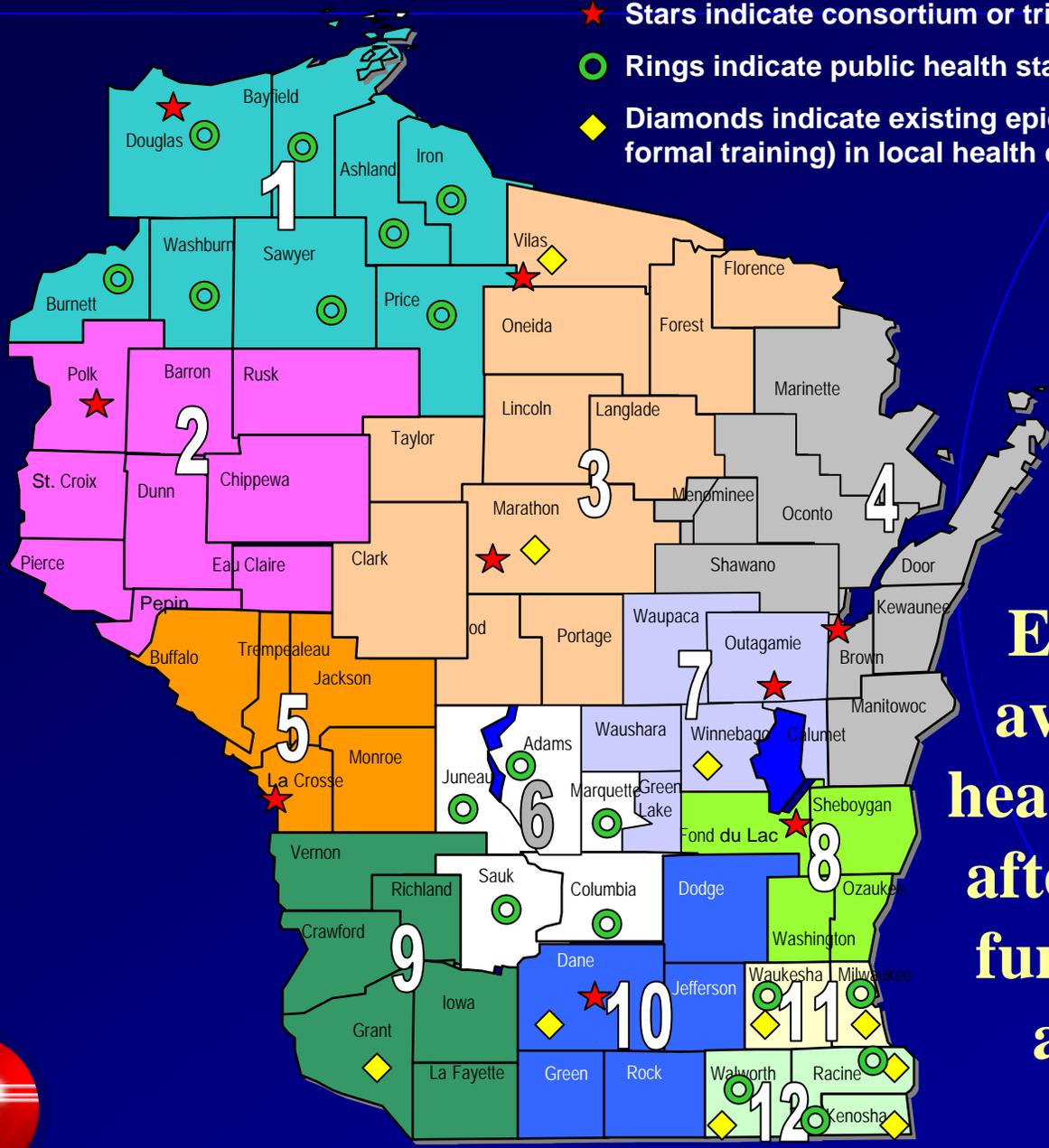


Education of Existing Staff

- Newly-hired epidemiologists have been providing training throughout their consortia
- State staff provide education for local health officers and staff on how to use epi skills in daily work, using local data
- Contract with UW-La Crosse provides two week-long courses in beginning epi skills each year (paid for by PHEP funds)



- ★ Stars indicate consortium or tribal epidemiologist
- Rings indicate public health staff with CDC epi training
- ◆ Diamonds indicate existing epidemiologists (with or without formal training) in local health departments



Epidemiologists available to local health departments, after preparedness funding for hiring and education



Coordination and Collaboration



Coordination and Collaboration

- Funding to consortia is performance-based, with identified objectives and deliverables
- Four epidemiology objectives were identified for 2005 contract year: two standard and two of consortium's choice



Coordination and Collaboration

- Teleconferences are allowing consortia epi staff to collaborate on data elements, collection methods, and analysis for their common objectives
- Wisconsin Epi Network is in early stages of getting all public health epidemiologists to talk with each other and, we hope, to collaborate (meeting 3/4/05)



What's next

- Need to address education of existing employees at state level; as reported by CSTE, many of our epidemiologists have no formal training in epidemiology
- Collaboration is an ongoing process that needs much encouragement
- Issues of authority and access to epi staff for LHD's



How to Assess the Impact of Increased Epi Capacity?

- Surveys on staff self-assessment of abilities
- Evaluation of LHD annual reports
- Evaluation of response to outbreaks
- ?



Thanks to:

- CDC for public health preparedness funding
- Herb Bostrom, Interim Administrator for WI Division of Public Health
- Jeff Davis, MD, Chief Medical Officer and State Epidemiologist for Communicable Diseases and Preparedness, WI DPH
- All the epi's and state, LHD, and consortia staff who have worked so hard to build epi capacity in Wisconsin



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