# An Assessment of the Feasibility of Conducting Future Epidemiological Studies at USMC Base Camp Lejeune.

http://www.atsdr.cdc.gov/sites/lejeune/docs/feasibility\_assessment\_Lejeune.pdf

Frank J. Bove, Sc.D

Perri Zeitz Ruckart, MPH

Division of Health Studies, ATSDR

# ATSDR Science Advisory Panel on Camp Lejeune, 2005

Panel recommended that ATSDR

- identify cohorts with potential exposure
  - adults who lived on base
  - adults who worked on base
  - children who lived on base (including pregnancies)

 address feasibility of issues involved in planning future studies at the base

### H.R. 4986: National Defense Authorization for FY 2008 (Section 315)

- Enacted January 28, 2008
- Requires ATSDR to develop a health survey
- Requires the Navy to send health surveys to all individuals possibly exposed to contaminated drinking water at Camp Lejeune
- Survey should begin one year after enactment

#### **Data Sources Reviewed**

- Defense Manpower Data Center (DMDC)
  - personnel data on active duty and employees
- ATSDR 1999-2002 survey participants
- DOD Education Activity microfiche tapes
  - high school transcripts, other grade level data
- Naval Health Research Center (NHRC)
  - Career History Archival Medical and Personnel System ("CHAMPS")
- Camp Lejeune family housing records

### **DMDC Active Duty Personnel Data**

- partial last name (before 1977)
- full name (1977 onward)
- social security number
- date of birth
- sex and race/ethnicity
- home state of record

- unit code available starting in June 1975
  - can be used to identify base location
- occupational specialty
- pay grade
- dates and years of service
- marital status

### **DMDC Active Duty Personnel Data**

- 210,222 Marines and Navy personnel stationed at the base anytime, 6/75 – 12/85
  - 198,805 Marines; 11417 Navy
  - 8,214 women (3.9%)
  - 30% married
  - 95% enlisted; 5% commissioned officers
  - 25% African American; 4% Hispanic
  - Average tour length is 3 years
  - 88% under the age of 55 in 2007

### DMDC Civilian Employee Personnel Data

- full name (12/81 onward)
  - name not available before 12/81
- social security number
- date of birth
- sex and race/ethnicity
- home state of record

- occupational code and location of occupation (December 1972 onward)
- employee start date (June 1974 onward)
- years of service
- pay grade

## DMDC Civilian Employee Personnel Data

- 8,085 civilians employed at the base anytime, 12/72–12/85
  - -3,687 women (45.6%)
  - 21.7% African American
  - Half were employed for 5 years or more
  - 80% aged ≥55 years in 2007

### ATSDR 1999-2002 Survey

- Telephone survey of parents who
  - had a child born during 1968-1985, and
  - resided on base anytime during the pregnancy
- Conducted to identify potential birth defects and childhood cancers for the current case-control study
- Parents of 12,598 children were interviewed
  - slightly more than half of the respondents were the mother
- About 4,000 of the Marines/Navy personnel in this survey are not in the DMDC database because they left the base before 1975
- Includes dependents (spouse, child) who are not in the DMDC databases

### ATSDR 1999-2002 Survey

#### Data available

- Most survey respondents (either the mother or father) provided his/her social security number
- Full name, date of birth, and address at time of survey are available for both parents and the index child
- Dates the parents lived on base

### DOD Education Activity Records

- 1940s through 1979
  - data cartridges are severely damaged and most cannot be read
  - data prior to 1974 and for 1979 could not be read
- 1980 onward
  - plastic reels can be read
- During 1974-1984, annual graduating class ranged from 78 to 132 students

### **DOD Education Activity Records**

#### Available data

- high school transcripts
  - student's name
  - date of birth
  - gender
  - social security number for some students
  - a parent's name and address on base
- non-graduates
  - name
  - address
  - date of birth