

**Baldwin County
November 7, 2008 Meeting
Questions and Answers**

1. Why did the Alabama Department of Public Health (ADPH) begin an investigation into the occurrences of cancer diagnoses in Baldwin County?

Answer: Concerns from Baldwin County pertaining to an alleged increase in number of leukemia cases in children attending a local school.

2. What actions did ADPH take?

Answer: (a) ADPH collaborated with the Alabama Department of Environmental Management (ADEM). ADEM concluded there was no chemical contamination which would explain an increased number of leukemia cases in children attending the school. (b) Conducted interviews in 2005 with 7 individuals, 3 of whom had some connection to the school in question, with no further action taken.

3. What actions has ADPH taken since 2005?

Answer: (a) Consulted with Alabama Statewide Cancer Registry (ASCR) with the following results:

- i. Baldwin County was among counties with a higher incidence of leukemia, acute lymphocytic leukemia (ALL), and lymphoma in patients less than twenty years old for 2001-2005 when compared to the incident rate for Alabama (6.8 vs. 4.0, 4.9 vs. 3.0, and 2.9 vs. 2.3, respectively).
- ii. The same data showed a higher incidence rate for adults with bladder, kidney, and ovarian cancers when compared to Alabama (31.8 vs. 27.0, 20.5 vs. 19.1, and 21.8 vs. 18.9, respectively).
- iii. The preliminary data led to the selection of six cancers to be investigated further. ASCR Epidemiologist conducted a statistical analysis of Baldwin County data for 1996-2000 and 2001-2005 with a result of the twelve analyses performed, only two SIRs showed any statistical significance at 95% confidence interval level: bladder cancer in adults 2001-2005 and ovarian cancer (in females) 1996-2000.
 1. For 2001-05, residents of Baldwin County experienced 18% more diagnoses with bladder cancer than the average Alabamian with marginal significance [SIR 1.18, (1.01, 1.36)].
 2. On the other hand, for 1996-2000, Baldwin County resident females received 41% fewer diagnoses of ovarian cancer [SIR 0.59 (0.41, 0.81)] than females in all of Alabama.

(b) The state was provided an initial list of 57 names (some 25 children and 40 adults were referenced by the community) of residents or former residents of

Baldwin County which included children and adults with less common cancers, or cancers of unknown etiology.

i. Before standardized incidence ratios (SIRs) with a 95% confidence interval level could be obtained, interviews began.

ii. While conducting interviews to identify trends, additional names of cases were provided (increasing the total to approximately 69 individuals). The interviewee would then contact the cases they knew and ask them to call RATB to be interviewed as well.

iii. To date 56 interviews (specific to 52 individuals) have been conducted (4 of which were repeat interviews from 2005) with approximately 34 contacts who were not interviewed.

iv. External validation of a cancer diagnosis has been received for fifteen of the interviewees by reviewing a copy of medical records provided by the patient/proxy or death certificates presented by relatives.

v. The ASCR has identified 43 of the 52 individuals as being in the ASCR database. Of the 9 cases that were not matched to the ASCR, 3 of the cases were diagnosed prior to 1996 and therefore unavailable. Of the 6 remaining cases, 4 were to have occurred in 2007, a year for which the ASCR does not yet have complete data; and, 2 were to have occurred in 2006.

(c) Requested external review of project abstract and data tables by School of Public Health at the University of Alabama at Birmingham with the following results:

i.. Numbers of cancer diagnoses of children attending school in question are insufficient to conduct meaningful quantitative analysis.

1. Overall rates for childhood lymphomas, kidney cancer and ovarian cancer and their change over time are not particularly concerning and do not require any additional follow-up other than the usual surveillance.

2. The significant increase in bladder cancer is worth consideration.

3. How many interviews remain? When will these interviews be conducted?

Answer: There is no plan to conduct additional interviews because the ASCR data do not reveal excess cancers and the completed questionnaires do not provide analyzable data.

4. When will ALS patients be interviewed?

Answer: There is no plan to conduct interviews. There is no comprehensive statewide database to measure the incidence of ALS. We reviewed mortality data for ALS and the experience in Baldwin County is very similar to that in the US.

5. When will a report be available?

Answer: A report has yet to be drafted; a date for a final report has not been set.

6. When can data gathered be shared with the patients and community in general?

Answer: Alabama Administrative Code Rule 420-4-1 (7) protects epidemiological investigatory documents from discovery and asserts the information is confidential. Depersonalized aggregate data will be part of a final report.