SYLLABUS
Cancer Prevention Epidemiology - EPID 615A
Fall 2019

Time: Tuesday 9:00 am – 11:50 a.m.
Location: Drachman Hall A-119

Instructor: Leslie Dennis, MS, PhD
Professor of Epidemiology & Biostatistics
1295 N. Martin, Drachman Hall, A230
Tucson, AZ 85724
Telephone: 626-6408
ldennis@email.arizona.edu

Office Hours: By Appointment via email
Teaching Assistant: None

Catalog Description: An overview of the current issues and methods in cancer epidemiological studies. Issues and methods used in cancer surveillance, international studies, observational studies, and intervention trials will be covered.

Course Prerequisites or Concurrent:
Epidemiology: Epidemiology 573A (Basic Principles in Epidemiology)
Or permission of instructor with a course in Cancer Biology

Course Objectives and Expected Learning Outcomes:
This course will expand on basic concepts and principles of epidemiology discussed in 573A and apply them to cancer epidemiology studies.

Course Objectives Upon completion of this course students will be able to:

- Describe cancer as a public health problem in terms of magnitude, person, time, and place.
- Explain the basic concepts in cancer epidemiology, including study design and analytical methods used in the study of exposure-cancer associations.
- Evaluate the strengths and limitations of different cancer studies using epidemiological principles to consider bias.
- Formulate an opinion for or against an exposure-cancer hypothesis by evaluating existing published literature on the topic.

Learning Outcomes (Competencies Obtained): Core MPH competencies that will be addressed during this course from the 22 CPEH required competencies include parts of 1,4, 18 & 19.

Epidemiology MPH Program (in-person) specific Competencies Covered: are listed below:
Partially addresses: (1) Search, describe and summarize findings from the scientific literature to describe the epidemiology of a public health problem, identify health disparities and identify risk factors.
- Assessment: The course assignments require searching, describing and summarizing the scientific literature to either describe a cancer or defend an argument (view point) using a minimum of 5 published articles (not website links) to support the argument.
Additionally, the student will need to summarize the incidence, mortality, survival histology, staging and risk factors for one cancer site and formally present to the class.

**MS Epidemiology Competencies:**

(2) Critique & synthesize appropriate literature & research findings to address a research question.
- Assessment: Through most course assignments that require searching, describing and summarizing the scientific literature to defend an argument (view point) using a minimum of 5 published articles (not website links) to support the argument. Additionally, the student will need to summarize the incidence, mortality, survival histology, staging and risk factors for one cancer site and formally present to the class.

(5) Describe public health surveillance systems and their underlying data sources.
- Covered: 2 weeks focus on describing national and state cancer surveillance programs.
- Assessment: 25-30% of course assignments require students to use these sources to describe incidence, mortality, survival and racial/ethnic distribution of 3-5 cancer sites.

(7) Organize and deliver clear presentations of research findings in varying professional formats to diverse audiences.
- Assessment: Each student will need to summarize the incidence, mortality, survival histology, staging and risk factors for one cancer site and formally present to the class.

**PhD Epidemiology Competencies:**

(4) Evaluate the integrity, comparability, and limitations of data to make inferences related to analyses and results.
- Partially covered and assessed by looking at the Arizona State Cancer registry and the data it collects: 3-hour presentation by Arizona Department of Health Sciences (ADHS) & review of their data in Assignment #2.

(6) Organize and deliver clear presentations of research findings in varying professional formats to diverse audiences.
- Assessment: Each student will need to summarize the incidence, mortality, survival histology, staging and risk factors for one cancer site and formally present to the class.

**Course Notes:** No course notes will be provided. Handouts and articles will be posted on D2L.

**Required Textbook:** None

**Recommended Textbooks for students continuing in cancer etiology:**


**Readings** for educational purposes will be posted on D2L
Most topic readings are described below for that class. Read prior to the class. **Check D2L website for updates on readings, especially for later classes.**


**Course Requirements**

Students are expected to attend each class and participate in class discussions. The smaller class size allows for a good deal of interaction.

If you miss more than one week, you will need to attend make-up seminars (with the instructor’s agreement on the specifics) and write up, along with submitting any Assignments on time. See below for Attendance requirements.

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercise must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity.

**Written Assignment Instructions:** Assignments should begin with your name, EPID 615A, date and the assignment number or title on lines 1 & 2.

- **All written assignments must be typed using a word processor, spell-checked, double-spaced without additional spacing (not the Microsoft default), using Arial font 11 or 12 with 1 inch margins. If turned in Word, then the Instructor can provide feedback using tracked changes.**
- **They should be written in scientific form. Thus label tables starting with Table 1 and a descriptive (stand-alone) title. Tables should fit in the page limitations.**
- **Cite all references using the reference format of the Journal of the National Cancer Institute both in the text and in the reference section at the end of the write-up (typically page 4). Students are responsible for looking up & understanding this format. It is recommended that you review an article published JNCI along with the journals instructions for formatting.**
- **All assignments are required to be completed on or before the due date and are to be submitted via D2L prior to 9am on the date due unless otherwise specified. On occasion you may want to additionally bring a copy to class.**

Written assignments that are turned in late will result in a lower grade; the grade will drop 20% each week late (thus 9:10am on the due date will be worth up to 80% of assignment points) for up to 2 weeks, then the grade will be 0%.

**Grading/Student Evaluation:**

1. **Class Participation = 34% (102 pts):**
   a. Each class period will have several readings. Students are expected to read all assigned papers and contribute significantly to discussions related to the readings and lecture. There will be 2 points for each hour of class for 6 points for the day as we only meet once a week. Points are a combination of attendance, physical and mental (i.e., not on phone texting or searching the web on your computer or completing homework for other courses) and discussion, except for a few select sessions described in b and c.
   b. Arriving consistently after 8:59 am may result in loss of attendance points.
   c. Arriving after 9:20 will result in the loss of 2 attendance points, as will absence (> 5 minutes) during non-breaks, or completing assignments for other classes or other non-course related computer work. If you have medical reasons for longer unscheduled breaks, please talk to the instructor or confidentially to Chris Tisch.
d. For any unassigned speaker hours, cancelled speakers, vacant student presentations slots or absences over one week (see below), students will instead review Cancer Prevention & Control (CPC) seminars in person or taped CPC seminars. Cancellations or changes in the schedule will be posted on D2L. Attending or watching fall 2019 CPC seminars fall if you are concurrently enrolled in EPID696B (CPC seminar) are not allowed. Such student will need to review older CPC presentations or other approved seminars or grand rounds.

e. For student presentations, all students are expected to attend on time, ask questions and complete an evaluation form for each presentation (40 minutes of class time). Students will also write a couple sentences/bullet points and what they might add to their presentation after seeing other presentations. One presentation form will be turned in for each student.

f. You will receive 2 points attendance for your own presentation that will be recorded here and thus show on D2L as 104 points.

**Outside Seminar Summary**

For each hour not filled, you will review on your own a one-hour video of a seminar or go to a live seminar from CPC seminars (or other seminars posted on the University of Arizona Cancer Center’s website that are approved by the instructor). If you are enrolled in CPC seminar this semester, then you cannot use current CPC seminars.

A benefit is that the student may choose the topics/seminars they want to review. For each video, you need to list at the top of the page:

- the title,
- the speaker and
- the date of the video and
- a working link to the video.

For live cancer seminars during the semester, you need to include the title, speaker, date and a flyer or email announcement regarding the seminar.

The write-up will include the following:

- Write 1-4 sentences on the aim or hypothesis of the talk;
- Describe in 3-6 sentences their findings and conclusions;
- Write 2-4 sentences on what you learned;
- What new question did this seminar spark for you (add why if you need to)?

The write-up for each 1-hour seminar should be a maximum of one doubled spaced typed page. See above for detailed instructions for Written Assignments above. These are each worth 2 points all due by Monday 1pm 12/2/19.

The summary should be

- at least 150 words
- no longer than 1 page
- submitted to D2L before class time for which it is due. Use the posted template.

**Class Attendance/Participation:** Regular participation is required. Class Discussions are very important. Prior permission from the course instructor should be received for any absence unless in emergency situations. Any absences beyond 1 week will require make-up seminars relevant to the topic/speaker. Such make-up seminars must be approved by the instructor. You cannot use a seminar as a make-up seminar if you are enrolled in such seminar for class credit. This includes taped CPC and other AZ Cancer Center taped seminars; those recommended (approved) are posted on D2L.

All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion. Extensions in due dates pre-approved by the UA Dean of Students (or Dean’s designee) will be honored. These need to be identified to the instructor before week 2 of the course.
2. Written Assignments = 40% (120 pts):
   Assignments typically start with 100 words to state your argument in the first paragraph. Each Assignment should be a maximum of 3 doubled-spaced typed pages including text and any tables (not including references) using 1 inch margins and Arial font 11 or 12. Beyond 3 pages will not be graded. On an additional page, cite all references using the reference format of the Journal of the National Cancer Institute. See above for formatting instructions for written assignments above. A minimum of 5 journal references (not websites or web journals or book chapters) in addition to those provided should be used in write-up, plus 1 additional journal reference for every internet reference you use. Make sure to follow these guidelines, not doing so will affect your grade.

   Position papers should define your argument (view) in the first paragraph with <100 words. Then the rest of the space is used to defend your argument and use a minimum of 5 journal references, plus 1 additional journal reference for every internet reference you use. (For example: if you reference 3 internet sites, then you need a minimum of 8 journal articles as references.)

   Most students cannot write assignments in a concise one-page summary, typically one page summaries are not complete and reflect so in the grade.

3. Student Presentations = 26% (78 pts):
   Students need to present on a cancer topic that has not been covered in class, typically a body site. Topics will be requested via Assignments 1 and 2. If nobody else requests your topics then Dr. Dennis will email you that you can choose your topic by the Friday after Assignment 2 is due (9/13/2019), otherwise based on your ranking and write-up for Assignment 2, the instructor will assign topic (and randomize the choices when needed).

   Cancer sites not covered in class include anal, bladder, bone and joint, brain (adult), brain (children), breast (male), endometrial, esophagus, gallbladder, kidney, larynx, leukemia, leukemia in children, liver, non-Hodgkin’s lymphoma, multiple myeloma, ovary, pancreas, stomach, testis and thyroid. Other topics –suggest in writing as part of Assignment 1 or 2 to the instructor.

   A presentation in class is required that includes the following:
   - Describe the cancer – histology, subtypes as relevant, other medical characteristics
   - How is it diagnosed, what is the treatment (you may want to use the ACS website)?
   - Describe the cancer – US incidence, mortality, and survival
   - What is the cancer incidence/mortality for the US by race and/or ethnicity?
   - What is the cancer incidence/mortality for countries of the world? Is the disease different in different countries – particularly are there countries that have much higher or much lower rates?
   - What are the known risk factors, and what are the suspected risk factors?
   - Cancer control or prevention for this site
   - Implications for public health recommendations and/or future studies
     - Presentation should be about 30 minutes; Minimum of 28 to max of 32 minutes, plus about 10 minutes for questions/discussion. Talk at the Society of Epidemiological Research (SER) are timed at 12-15 minutes and they stop you if not done.
       - As an experiment with a slightly larger class this year, I will take volunteers to record their Presentation in VoiceThread instead of in-class. VoiceThread adds your talking points to each slide. It also allows other students to ask questions. It may take more time to prepare but you can make sure your time is within the time limit and can re-record your talk for each slide as many times as you want before turning in. These would be Due on 11/5/19. Other students would have until 11/19/19 to review and ask questions (so make sure to have a Question slide).
     - Everyone ask questions
   Make sure to add some relevant rates from SEER*Stat in your presentation in context and reference them. Be sure to reference at least 5 key papers (along with any websites) from which you obtain the information. The instructor will randomly assign presentation dates and times; students may switch
times with other students only if they both email the instructor by October 1, 2019. See D2L for more details and for the drafted grading form for the presentation. NOTE: 2 pts of the 78 will be recorded under student presentation-attendance.

4. Required Make-ups for classes missed beyond the first 3 hours = required for final grade.
   For each hour of class missed beyond the first 3 hours (one week), the student will need to view one additional seminar for each hour missed assigned by the Instructor based on the topics missed. The student will also need to turn in a write-up as described in #1 above for Outside Seminars. If the student has already viewed the assigned video as their elective seminar above, then they will replace their elective seminar. The point is to discourage missing class but to allow the student to continue rather than dropping the class. If not turned in by 11-26-19, this will be a loss of 2 points per hour missed or 6 points per week.

Grading Scale:
   A: 90-100%
   B: 80-89.9%    D: 60-69.9%
   C: 70-79.9%    E: <60%

No exams. One presentation (#3 above) and seven 2-3 page written assignments (#2 above).

Course Schedule: see attached and updates on D2L

Classroom Behavior: Expected behavior is to allow for respectful exchange of ideas: these include being respectful towards your fellow student and instructor(s) when communicating in class, via Discussion boards and email to foster a positive learning environment. This includes not using cell phones and other mobile devices in class (other than during breaks). This specifically means not doing so during outside speaker presentation and student presentations. Doing so may decrease participation points.

Communications: You are responsible for reading emails sent to your UA account from your instructor and the announcements that are placed on the course web site. Information about readings, news events, your grades, assignments and other course related topics will be communicated to you with these electronic methods. The official policy can be found at: https://www.registrar.arizona.edu/personal-information/official-student-email-policy-use-email-official-correspondence-students

University Course Policies: https://academicaffairs.arizona.edu/syllabus-policies
These policies include Threatening Behavior Policy, Accessibility and Accommodations, Code of Academic Integrity, and Nondiscrimination and Anti-Harassment Policy

Syllabus Changes: Information contained in the course syllabus, other than the grade and absence policies, may be subject to change with reasonable advance notice, as deemed appropriate by the instructor.

UA Smoking and Tobacco Policy:
The purpose of this Policy is to establish the University of Arizona’s (University) commitment to protect the health of University faculty, staff, students, and visitors on campuses and in its vehicles. The official policy can be found at: http://policy.arizona.edu/ethics-and-conduct/smoking-and-tobacco-policy

Plagiarism: Plagiarism can occur when a student copies text word-for-word (direct quoting should rarely be used in epidemiology) instead of paraphrasing and correctly referencing materials used for preparing a written assignment. This includes fictitious or incorrect references. If plagiarism is detected on an assignment, it will result in automatic failure for that assignment.
A second offense or plagiarism of the final manuscript will result in automatic course failure. All these actions will be reported to the Program Director, the Dean of the College of Public Health, and the Dean of Students. This policy is in place for this class because scientific writing is a fundamental skill at both the undergraduate and graduate level in this field, and for this course. If you feel you are unsure as to what might constitute plagiarism, there are numerous resources at the University of Arizona, including the writing lab, to help you understand and avoid plagiarism.

Plagiarism & Cheating: What counts as plagiarism or cheating?
- Copying and pasting information from a website or another source.
- Copying and pasting information from a website or another source, and then revising it so that it sounds like your original idea.
- Doing an assignment/essay/take home test with a friend and then handing in separate assignments that contain the same ideas, language, phrases, etc.
- Asking someone else the answers to the assignments then using those answers.
- Quoting a passage without quotation marks or citations, so that it looks like your own.
- Paraphrasing a passage without citing it, so that it looks like your own.
- Hiring another person to do your work for you, or purchasing a paper through any of the on- or off-line sources.

The Epidemiology Program faculty members reserve the right to check assignments or papers with TurnItIn for plagiarism.

Classroom civility: In this interactive course it is expected that students and the instructor will:
- use respect (including disagreeing respectfully) both when posting and responding to posts
- listen to discussions/posts and involve others
- resist the temptation to dominate discussion by waiting for others to contribute
- consider everyone’s opinions to be “valid” or at least interesting or a reference point for examining one’s own opinions; allow thinking broadly, “outside the box”
- appreciate a small amount of tension (too much “sameness” means dull discussion)
- stay focused on the subject (anyone can raise the possibility that discussion is getting too tangential, that too much time is being spent on a small issue, that other issues are being neglected. Others can challenge this and defend spending more time.)

Recommended Learning Strategies
To be an effective learner in this course the following are strongly encouraged:
1. Continuously monitor the course outline. The course outline includes all deadlines for the course. Do not expect to be reminded of any of the due dates on the course outline. Unless otherwise notified, students are accountable for meeting all deadlines as listed on the outline.
2. Check the course website regularly for announcements.
3. Read all recommended readings.
4. Participate in class discussion.
5. Ask questions.
6. Answer questions.
7. Use the discussion boards.
8. Listen to your classmates; their insights are an important source of learning in this course. A general rule of thumb is to let at least two other people have a chance to say something before you speak again

Gender Pronoun Guideline
It is already UA policy that class rosters are provided to instructors with a student’s preferred name. Students may share their preferred name and pronoun with members of the teaching staff and fellow students, as desired, and these gender identities and gender expressions will be honored in this course. As the course includes group work and in-class discussion, it is critical to create an educational environment of inclusion and mutual respect. In this class, to be inclusive of all gender identities and
expressions, students will be referred to by their first or last names, the pronoun of their choice, or by default, the pronoun “they”.

**Content Warning**
This course addresses topics including sexually transmitted infections (STIs) and sexual active practices that could be associated with risk of certain cancers, often leading to valuable discussions on topics such as confounding and causal pathways. Course material could include content that is explicit in its depiction of number and type of sexual partners. Such materials will be used, specifically, for the topic on infectious causes of cancer (see schedule). Please contact the instructor to discuss any content-related concerns, as alternative materials may be available
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Title</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>1</td>
<td>Tuesday</td>
<td>Introduction to Epidemiology, how does it help us view cancer research</td>
<td>Leslie Dennis</td>
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<td></td>
<td>August 27</td>
<td>Cancer Statistics: SEER and ACS</td>
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<td>2</td>
<td>Tuesday</td>
<td>Cancer Biology</td>
<td>Jorge Gomez</td>
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<td>September 3</td>
<td>Cancer Disparities</td>
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<td>3</td>
<td>Tuesday</td>
<td>Cancer Registries</td>
<td>Georgia Yee &amp; Chris Newton from AZ Dept of Health Services, Arizona Cancer Registry</td>
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<td>September 10</td>
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<td>4</td>
<td>Tuesday</td>
<td>Intervention Trials for Cancer Prevention Hodgkins Lymphoma: Disease Overview</td>
<td>David O Garcia 9-10am Gianna Mattio (Student presentation)</td>
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<td>September 17</td>
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<td>5</td>
<td>Tuesday</td>
<td>Cancer among Firefighters</td>
<td>Jeff Burgess 9-10am Leslie Dennis</td>
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<td>September 24</td>
<td>Overview of Cancer Types</td>
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<td>6</td>
<td>Tuesday</td>
<td>Improve adherence to healthy lifestyle behaviors</td>
<td>Tracy Crane 9-10:30 Heidi Hamann 11-12am</td>
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<td>October 1</td>
<td>Increasing access to evidence-based supportive care for cancer patients and families</td>
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<td>7</td>
<td>Tuesday</td>
<td>Screening for Cancer &amp; Colon cancer</td>
<td>Peter Lance</td>
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<td>October 8</td>
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<td>8</td>
<td>Tuesday</td>
<td>Skin cancer</td>
<td>Leslie Dennis</td>
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<td>October 15</td>
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<td>9</td>
<td>Tuesday</td>
<td>Infectious Causes of Cancer</td>
<td>Heidi Brown, Leslie Dennis</td>
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<td>October 22</td>
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<td>10</td>
<td>Tuesday</td>
<td>3-4 Student Presentations</td>
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<td>October 29</td>
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<tr>
<td>11</td>
<td>Tuesday</td>
<td>3-4 Student Presentations</td>
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<td>November 5</td>
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<tr>
<td>12</td>
<td>Tuesday</td>
<td>3-4 Student Presentations</td>
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<td>November 12</td>
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<td>13</td>
<td>Tuesday</td>
<td>3-4 Student Presentations</td>
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<td>November 19</td>
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<tr>
<td>14</td>
<td>Tuesday</td>
<td>TBA (Week of Thanksgiving)</td>
<td>Student Presentations if needed</td>
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<td>November 26</td>
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<tr>
<td>15</td>
<td>Tuesday</td>
<td>Nicotine products and cancer TBA</td>
<td>Judith Gordon 9-10:20 TBA</td>
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<td>December 3</td>
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<tr>
<td>16</td>
<td>Tuesday</td>
<td>Breast cancer metastases Wrap up</td>
<td>Janet Funk 9-10:15 Leslie Dennis</td>
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<td></td>
<td>December 10</td>
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Break typically around 10:20am for 10-20 minutes depending on whether or not there are 2 speakers.
Course Assignments (8/26/19 order subject to change)

**Papers:** are limited to 3 pages double-spaced including text (and any tables) with 1 inch margins using Arial font 11 or 12. References follow on a 4th page. References should be formatted in the text and on the 4th page as references using the style required by the Journal of the National Cancer Institute (JNCI).

**Position papers** should define your argument (view) in the first paragraph with <100 words. Then the rest of the space is used to defend your argument and use a minimum of 5 journal references, plus 1 additional journal reference for every internet reference you use. (For example: if you reference 3 internet sites, then you need a minimum of 8 journal articles as references.)

Due on the day they are posted under:

**Week 1** 8/27/19
**Introduction to Epidemiology & Cancer Statistics (SEER and ACS)** Leslie Dennis, MS, PhD

**Readings on D2L:** – read 3 lectures in detail if you have not taken CPH/EPID 573A

CC_lec – a lecture on case-control study designs, notes as review of 573A

Articles used to develop lecture

Cohort – a lecture on cohort study designs as a review of 573A

RCT lecture – a lecture on randomized clinical trial study designs as a review of 573A

**Assignment 0:** Go over SEER forms to complete for data and SEER*Stat access

Read: [http://seer.cancer.gov/data/access.html](http://seer.cancer.gov/data/access.html)

Start to complete forms from here: [https://seer.cancer.gov/seertrack/data/request/](https://seer.cancer.gov/seertrack/data/request/)

Email back your signed copy ASAP to SEER & email copy to Dr. Dennis.

**Week 2** 9/3/19
**Cancer Biology & Cancer Disparities** Jorge Gomez, MD, PhD

Recommended reading list will be posted on D2L.

**Assignment 1 (15 pts):** Maximum of 3 pages with Tables. Pick 3 cancers you are interested in. Write 2 sentences to less than half a page for each cancer about why you are interested in that cancer. Pick cancers not covered in class that you are proposing for your presentation. If you are thinking about a very specific topic, make this the broader cancer area that has data reported by SEER. Also, describe the incidence, mortality and survival rates of each cancer based on the US SEER data in a Table. (Only need the SEER reference for this assignment).


But for pulling rates use:

Note what SEER registries the data you present are based on. See example below:
Table 1- Example. Incidence, mortality and 5-year survival rates for 3 cancers based on US data available from the Surveillance, Epidemiology, and End Results (SEER) Program, SEER Cancer Statistics Review 1912-2016 for all races and both males and females

<table>
<thead>
<tr>
<th>Invasive Cancer Rates</th>
<th>Incidence per 100,000*</th>
<th>Mortality per 100,000**</th>
<th>Five-year Relative Survival Percent 2009-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colon cancer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>27.1</td>
<td>14.2***</td>
<td>63.4</td>
</tr>
<tr>
<td>Females only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24.8</td>
<td>11.9***</td>
<td>63.5</td>
</tr>
<tr>
<td>Melanoma</td>
<td></td>
<td>2.5</td>
<td>92.2</td>
</tr>
<tr>
<td>Prostate cancer (males only)</td>
<td>109.5</td>
<td>19.2</td>
<td>98.0</td>
</tr>
</tbody>
</table>

* Based on the SEER 21 areas, age adjusted to the 2000 US standard population
** Based on National Center for Health Statistics, age adjusted to the 2000 US standard population
***Mortality only available for colon and rectum combined

Reference

Week 3 9/10/19
Arizona Cancer Registry

Review SEER statistics
Review/read prior to class
http://www.cdc.gov/cancer/dcpc/resources/features/CancerResearch/
http://www.cdc.gov/cancer/dcpc/data/
Overview of SEER at http://www.seer.cancer.gov/about/

Suggested Additional Readings:
Schottenfel & Fraumeni, Ch 9: International patterns of Cancer Incidence and Mortality

Assignment 2 (25 pts): Write a summary of cancer incidence, mortality and survival among US African Americans, Hispanics, and Native Americans compared to rates in non-Hispanic Whites on female breast cancer, male prostate cancer and your 3 cancer sites from Assignment #1 summarized in a Table (Table 1).

Review the Arizona Department of public services Arizona cancer registry information available online. What were you able to find out about rates for these 5 cancer sites, listed in Table 1 for the US, in Arizona (make a Table 2 with these data)? Briefly discuss implications of your findings.

At the end of the write-up, rank your cancer site choices for the student presentation or state a more specific topic. No more than 3 lines within the maximum 3-page limit (text and tables). Based on this write-up, the instructor will examine overlap - assign you 2 of these 3 cancers to examine in future assignments.

Final Student Presentation Topic (more detailed) Due: Friday 9/13/19 (to be discussed if issues on 9/17)
Week 4 Intervention Trials for Cancer Prevention  David O. Garcia PhD, FACSM 9/17/19
Dr. Garcia is an Assistant Professor in Health Promotion Sciences.

Hodgkins Lymphoma: Disease overview  Gianna Mattio (MPH Student)
Ms. Mattio is an MPH student who took the course 2 years ago.

Week 5 Cancer among Firefighters  Jeff Burgess MD, MS, MPH 9-10am 9/24/19
Readings:

Assignment 3 (10 pts): Reading Write-up: Submit to D2l & Bring to class, 1 page: based on these readings what environmental exposures of firefighters exposed to that may lead to cancer? What are the most likely cancers?

Overview of Cancer Types  Leslie Dennis 9/24/19
Readings:

Week 6 Increasing Adherence to Health Lifestyle Behaviors  Tracy Crane MS, PhD 9-10:30 10/1/19
Dr. Crane is an Assistant Professor in Nursing. She will be presenting on her research.

Increasing Access to Supportive Care  Heidi Hamann, MS, PhD 11-12pm 10/1/19
Dr. Hamann is an Associate Professor in Psychology. She will be presenting on her research.

Week 7 Screening for Cancer & Colon Cancer  Peter Lance, MD 10/8/19
Assignment 4 (20 pts): pick A or B: Position paper:
A: Review the controversy on mammography screening for asymptomatic women age 40-49.
Suggestion: Write 100-150 words summarizing why women should or should not get screening (use references), and complete the remaining text of the 3 pages by defending your opinion.

B: Review the controversy on prostate specific antigen (PSA) screening for asymptomatic men.
Suggestion: Write 100-150 words summarizing why men should or should not get screening (use references), and complete the remaining text of the 3 pages by defending your opinion.

Week 8 Skin Cancer  Leslie Dennis 10/15/19
Assignment 5 (10 pts): Consider non-melanoma skin cancer
Part A (1/2 page): See what you can find for non-melanoma skin cancer rates, specifically for squamous cell carcinoma (SCC) and basal cell carcinoma (BCC) of the skin.
Part B (1-2 pages): If there are few or no registries on non-melanoma skin cancer, what type(s) of study designs could you design to look at risk factors for SCC and BCC (reference Epidemiology textbooks as needed). Propose an analytic study you could conduct in Arizona. Make sure to define how subjects would be identified, recruited and interviewed. Also describe the potential concerns and biases you would want to attempt to avoid.
**Week 9 Infectious Causes of Cancer**  
Heidi Brown PhD, MPH & Leslie Dennis 10/22/19  

Assignment 6 (20 pts) pick A or B: Write a position paper on  
A: whether the availability of the prophylactic HPV vaccine will increase or decrease disparities?  
B: whether the literature justifies HPV vaccination should be used as preventative measure for either 1) prostate cancer or 2) head and neck cancers.

**Week 10-13 Student presentations 10-29, 11-5, 11-12, 11-19-19**  
For student presentations, other students are expected to attend, ask questions and complete an evaluation form for each presentation for 3 points per student presentation. You will also write a couple sentences/bullet points and what you might add to your presentation after seeing other presentations. Thus you will turn in one presentation form for each student.

Each student presentations is scheduled tentatively to start on the hour and last for an average of 30 minutes (28-32 min) with 10 minutes for questions. We will take a break after 2 presentations of about 20 minutes unless presentations run over. If they run under 30+10=40 minutes, then the next person may start earlier than scheduled.

For class participation during student presentations, I expect everyone to be on time for each of the 4 presentations. Therefore, meaning be there before 9 AM and make it back from each break on time. These breaks are meant to let you get up and stretch, use the restroom, get a drink or eat something; therefore, during student presentations I expect other students will not be getting up and leaving the classroom in the middle of the presentations. For people who have not presented very often it can be disturbing to have someone leave in the middle of their presentation and it is somewhat rude. However, I realize there are some instances this cannot be avoided, especially if you are feeling ill. But please plan ahead and bring what you need to the presentations. Additionally, I will ask that you all put away your cell phones and close your computers during other students’ presentations. Your participation grade will include asking at least two question during 4 presentations and filling out a very brief form on each student’s presentation.

**Week 14 Thanksgiving - Student presentation if needed 11/26/19**  
Otherwise we will have spent time reviewing presentations in VoiceThread and may need to substitute a Cancer Seminar in order to cancel class this week.

**Review Seminars on your own & submit each to D2L by 1:00 pm on Monday 12-2-15**

**Week 15 Nicotine Products and Cancer**  
Judith Gordon (9-10:20) 12/3/19  

Assignment 7 (20 pts): Based on the readings, describe whether or not e-cigarettes should be recommended as public health strategy for reducing cigarette smoking and/or reducing the harm associated with smoking. Make your statement for or against – one sentence. Then spend the rest of your assignment providing evidence to support your statement. BE PREPARED TO DISCUSS THIS IN CLASS.


TBA (10:30-11:50) 12/3/19
Possibilities:
- Prostate Cancer, Leslie Dennis
- Using meta-analyses to summarize risk factors, Leslie Dennis
- Environmental causes of cancer, Leslie Dennis
- Dr. Harris or others

Week 16 Breast cancer metastases Janet Funk MD (9-10:15) 12/10/19
Dr. Funk is a Professor of Medicine & Nutritional Science.

TBA & MSC wrap up & discussion of assignment Leslie Dennis (10:30-11:50) 12/10/19