Course EPIB-660                               2011

PRACTICAL ASPECTS OF PROTOCOL DEVELOPMENT

Session 2                                 Wednesday, May 11, 12h30–14h30
Dr M.R. Becklake
Dr Beth. Foster

(Preparation for Session 3)

SETTING RESEARCH IN CONTEXT
Assignment 1 (to be completed for, and presented in session 3, on Friday, May 13)

This assignment illustrates different approaches to the following research question:

Does exposure to grain dust at work adversely affect respiratory health?

1. Students may familiarize themselves with background to the issue in the Canadian context through reading #1.

2. Then prepare a short (up to 2 pages) written assessment of the paper assigned to you, using the framework outlined in Session 1. Be sure that your review identifies the main elements of a research report addressing the questions: Why? How? Who? What? When? and So what? Also comment on methodologic strengths and weaknesses, potential sources of bias and threats to study inferences. Give an overall opinion as to its scientific quality from an epidemiologic perspective. This assessment constitutes Assignment 1 and is due on Friday, May 13, and you will recall, this counts for 10% of your final mark.

3. Also prepare a one page summary (to use as a power point or overhead) if you are called upon to present to the class your evaluation of the paper assigned to you.

The purpose of this Session is to use these papers, published over an almost 20 year period, to illustrate the sequential, coherent investigation of a health issue by researchers around the world using a variety of study approaches. Each study adds some new feature and / or approach in addressing the research question.

The papers for review are listed on the next page.
Session 2 continued                                                   Wednesday, May 11: 12h30 - 14h30
(Preparation for session 3)
Assignment 1 continued                                                                               Dr Beth Foster

Readings 1-16  (all enclosed)
Papers for review will be handed out to you in class today. Only one paper will be assigned to each student

General Background

Research studies 1974-1993

Review papers: These papers resulted from the above body of work.
The Canadian Thoracic Society recommended that for regulatory purposes, grain dust should no longer be classified as a “nuisance” dust, but that exposure levels should be regulated. This is in line with recommendations of the American Congress of Government and Industrial Hygienists (ACGIH) that the designation “nuisance” dust (the category in which grain dust was previously placed) be replaced with the term “Particles Not Otherwise Classified” (PNOC’s) to recognise that the absence of evidence of specific toxic effects does not mean that these dusts are biologically inert (ACGIH: 2010).

ACGIH believes that even biologically inert or poorly soluble particles may have adverse effects ... and recommends that airborne concentrations should be kept below 3mgm/m3 respirable particles, and 10 mg/m3 inhalable particles, until such time as a TLV is set for a particular substance.

Threshold Limit Values (TLV’s) for Chemical Substances and Physical Agents and Biological Exposure Indices (BEI’s). ISBN 1-882417-11-9, ACGIH Technical Affairs Office, Cincinnati OH 45240-4148)