

- Shanghai Municipal Centre for Disease Control and Prevention (SMCDCP) monitoring database queries and data summaries
- Assessment of exposure to chemicals other than benzene
- Facility reviews and workplace record use
- Exposure classification process
- Data time trends

Study enrollment questionnaires will be used to initiate the work history information for this tier and subsequent tiers of the exposure assessment. Subjects will be entering the study from a broad range of employment, industries and job categories in the Shanghai area. The Shanghai Municipal Centre for Disease Control and Prevention (SMCDCP) database will be queried for information about benzene and other exposures for each subject's work location (if employed in an industry covered) in order to classify study personnel according to factory type and occupation. Factories or jobs not matching on "known benzene exposure" criteria from the database query will be set aside for further review and assignment. Our experience to date reveals that this group is much higher than originally anticipated. Thus, we have supplemented this strategy with a review of the Chinese literature, the Yang-Pu database, real time monitoring in select facilities, and simulations/recreations of past conditions.

For other chemical exposures, the intent at this stage is simply to record the identity of other major chemical exposures for the subject. The SMCDCP database may have a lower information yield for chemicals other than benzene since many other chemicals do not have disease registries and the long standing regulatory requirements such as are established for benzene poisoning.

Work history information collection will start with recruitment of the subject. An interview will be conducted to determine the subject's employment history, and as much as possible of the job positions held. The main objective of the initial work history interview is to establish the type of industry, the work location, and to the extent possible, main jobs held. We do not expect to use interviews to gather worker's self reported exposures, as these are known to be often unreliable (Frischi 1996) and better information sources, such the CDC database and factory records, will be available. The hospital staff who recruits study subjects will conduct this initial interview. A standardized interview data recording form and instruction in its use will be provided. The exposure assessment staff may complete follow-up interviews using a more detailed questionnaire, following their review of the initial interview results. Follow-up will also be completed the initial interviews that were classified as having no significant occupational exposure (e.g., administrative office only jobs). If a subject is incorrectly assigned in a 10% sample, the classification process will be reviewed and modified. Sequential sampling methods will be applied to assure that no more than 1% of the remaining "unexposed" subjects are incorrectly assigned.

For many subjects, workplace records (rather than follow-up interviews) will be the primary and preferred source for details about their work history. As a general rule, most workers in Shanghai tended to stay with the same work location for a career. This work history stability will enhance the role of facility records for work history and exposure history development. However, in cases where records are unavailable or are inadequate (for example, small or closed employment sites), follow-up interviews will be the main information source. The work history