• 系統編號	RG9809-0013		
• 計畫中文名稱	兒童暴露參數先驅計畫		
• 計畫英文名稱			
• 主管機關	行政院衛生署國民健康局	• 計畫編號	採購案號:9804003A
• 執行機構	台北醫學大學公共衛生學系		
• 本期期間	9806 ~ 9812		
• 報告頁數	160 頁	• 使用語言	中文
• 研究人員	陳重信;簡伶朱;潘文涵;陳建仁;范純華; Dang,Winston;Chien,Ling-Chu;Pan,Wen-Harn;Chen,Chien-Jen;Fan,Chun-Hua;		
• 中文關鍵字	暴露因子;嬰兒;飲食;非飲食;兒童;食物;攝取;		
• 英文關鍵字	Exposure factor; infant; dietary; non-dietary; children; food; intake;		
• 中文摘要	國健局自97年起建立「台灣一般民眾暴露參數彙編」,以青少年及成年人的暴露參數爲主,但兒童與成年人所暴露之環境生理、行爲有差異台灣目前與暴露有關之調查研究,仍以成年人或青少年以上者爲主,與嬰幼兒有關之暴露參數資料仍極度缺乏。本計畫內容包括國內、外相關研究及參考文獻之彙整,蒐集、整理、評估與分析國內、外(例如:美國、日本)現有文獻或資料庫資料,並根據兒童常見的健康危害、暴露危害途徑、與生活特質,建立台灣本土化的12歲以下兒童健康風險評估所需之暴露參數資料,並對欠缺或應建立本土資料的部份、相關單位分工之工作內容、經費預估等項目及優先順序提出建議。 蒐集的資料爲兒童(12歲以下)內容包括:1.水份及其他液體的攝入,2.非飲食性的攝入(如:吸吮手指、啃食物品等行爲),3.土壤與灰塵的攝入,4.吸入率,5.皮膚接觸的暴露,6.體重,7.蔬果的攝取,8.魚類貝類的攝取,9.肉類奶製品與脂肪的攝取,10.穀類的攝取,11.家中自製品的攝取(如:自種蔬果、養殖魚、蝦、貝類等),12.總食物攝取,13.母乳的攝取等項目。飲食與水分攝取需由 2004-2008 年國民營養健康狀況調查原始資料整理,其餘項目資料則參考台灣一般民眾暴露參數彙編,根據本計劃所蒐集國內外兒童暴露參數資料文獻彙整的結果發現,非飲食性的攝入(如:吸吮手指、啃食物品等行爲)、土壤與灰塵的攝入、吸入率及皮膚接觸的暴露這些項目是目前所欠缺的。 藉由舉辦專家會議,根據兒童常見的健康危害、暴露危害途徑與生活特質作討論,針對未來建立本土化暴露參數執行工作的優先順序提出建議,所得之優先順序爲:1.水份及食物的攝入、2.飲食攝入(含食物與母乳)、3.吸入率、4.非飲食性的攝入、5.土壤與灰塵的攝入、6.皮膚接觸的暴露。未來能夠透過跨領域及國際性跨國研究,建置台灣本土化嬰幼兒基本資料,做爲台灣未來推動決策科學研究、風險管理論述及環境衛生醫療實用基礎之參考。		
• 英文摘要	In 2008, BHP of DOH published "Compilation of Exposure Factors, DOH95-HP-1801" from teens and adults as major exposure target population. Due to		

differences in physical, activities practices between young Taiwanese children and teens/adults, this planning and analysis for the Taiwan Child-Specific Exposure Factors Handbook will be used in comparison to other international studies, including US and Japan, on scale, scope, and depth of child-specific policies. For the end, that also will help to analyze and assess the quality of studies for children-specific exposure factors databank. Based on the daily exposure patterns, routes, and specific activities, to build local exposure factors database for children under age 12 is crucial. The handbook will also provide essential information that will guide policy makers to identify and prioritize investigation and research on important child-specific exposure factors. For those factors lack of specific exposure origin, this study will coordinate different ministries of government, in order to share the expenses and workloads. Children-specific exposure factors (under age 12) will include: 1. Ingestion of water and other liquids consumption, 2. Non-dietary ingestion (mouthing activities), 3. Soil and dust ingestion, 4. Inhalation rates, 5. Dermal exposure factors, 6. Body weight studies, 7. Intake of fruits and vegetables, 8. Intake of fish and shellfish, 9. Intake of meats, dairy products and fats, 10. Intake of grain products, 11. Intake of home-produced foods, 12. Total dietary intake, 13. Human milk intake. Intake of foods and water consumption are needed from the original studies of Nutrition and Health Survey in Taiwan, NAHSIT,2004-2008. Other data can be obtained from the 2008 "Compilation of Exposure Factors". From our preliminary study, non-dietary ingestion (mouthing activities), soil and dust ingestion, inhalation rates, and dermal exposure factors are most critical. After consultations with many experts in this area, the priority of studies as follow: 1. Water and food intake 2. Total dietary intake (include food and human milk) 3. Inhalation rates 4. Non-dietary ingestion 5. Soil and dust ingestion 6