INITIAL SCHOOL URINALYSIS SCREENING IN THE REPUBLIC OF PALAU

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The number of persons with diabetes mellitus and end-stage renal disease (ESRD) is increasing in the Pacific island countries. To detect early diabetes and kidney disease in children is important in these countries.

We performed the inaugural school urinalysis screening in the Republic of Palau during 2006 with the assistance of the Japan International Cooperation Agency. All students aged from 6 to 18 years old were targeted and urinalysis was done by test paper employing early morning samples.

A total of 2,258 of the 4,143 students gave consent to urinalysis, among whom 221 (9.8%) were positive for protein, 184 (8.1%) were positive for occult blood, and 52 (2.3%) were positive for glucose. More than 1/3 of the students positive for occult blood were male. Students living at locations with a higher population density and those from higher grades had a higher rate of abnormal findings. The cost of urinalysis per student was 50 US cents.

There was a high rate of abnormal urinalysis findings among students in the Republic of Palau. School urinalysis screening may be an effective and low-cost method of detecting diabetes and kidney disease among children in developing countries.