

# The Fifth Wave of Indonesia Family Life Survey (IFLS-5): Update on Biomarkers

John Strauss, Bondan Sikoki, Firman Witoelar,  
Elizabeth Herningtyas and Perry Hu  
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# IFLS-5

- **Fielded from September 2014 to August 2015**
  - Main dataset will be public during PAA at [www.Rand.org/labor/FLS/IFLS](http://www.Rand.org/labor/FLS/IFLS)
- **Wave 4 (2007) DBS sample size: 10088**
- **Wave 5 DBS Sample size: 7392**
- **Response rate for blood collection out of wave 4 DBS sample (after subtracting deaths): 79.5%**
- **Measured hemoglobin levels, using Hemocue**
- **Collected dried blood spot (DBS) specimens**

# Assessment of DBS Quality

- **Scale for rating spot quality**
  - **Excellent:** allows 5 to 6 1/8" punches from a spot
  - **Good:** allows 3 to 4 punches from a spot
  - **Poor:** allows 1 to 2 punches from a spot
  - **Usable:** spot is too small or unsaturated
- **Not just an assessment tool but also a constant reminder for the interviewers to obtain quality DBS specimens**

# Number of Blood Spots Collected

Number of spots collected	Frequency	Percentage
5	1571	21
4	1203	16
3	3616	49
2	882	12
1	45	1
Total	7317	100

# Quality of Blood Spots Collected

Quality scale	First spot	Second spot	Third spot
Excellent	48%	55%	55%
Good	42%	37%	36%
Poor	10%	8%	9%
Unusable	0.3%	0.4%	0.4%

# Planned DBS-based Assays

- **Glycosylated hemoglobin (HbA1c)**
  - A new assay for IFLS
- **C-reactive protein (CRP)**
  - Measured during IFLS-4, but will be using a new protocol
- **Collaborating institution: University of Gadjah Mada**

# Training and Pre-test

- **Currently planned for May of 2016**
- **Assistance from Department of Laboratory Medicine, University of Washington**
- **Goal: standardization of assay protocols and training before bioassay data harmonization**