ENVIRONMENTAL COMPLIANCE
FIELD EVALUATION
INDOOR RESIDUAL SPRAYING ACTIVITIES
2015-2016

PRESIDENT’S MALARIA INITIATIVE

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United States of America
President’s Malaria Initiative (PMI)

2008, Indoor Residual Spraying (IRS) for malaria control in Ghana began

Focus: local capacity building, strict environmental compliance and entomological monitoring
United States of America President’s Malaria Initiative (PMI) – Coverage (2015-2016)

- Spray approximately 231,345 structures

- Protect 596,706 people using the long-lasting IRS product containing Actellic 300 CS™ - pirimiphos-methyl

- Spraying operations ran concurrently before the rains and the consequent peak malaria transmission period
TARGETED DISTRICTS
Key Areas

• Management and supervision;
• Resident health and safety/Information, Education and Communication (IEC);
• Worker health and safety;
• Storage and stock control: central, district and parish stores;
• Transportation of pesticides and equipment;
• Spraying operations;
• Clean-up facilities, post-spraying activities and liquid waste disposal; and
• Solid waste disposal.
TOOLS USED

IRS is a highly technical process that demands thorough supervision and monitoring in order to achieve the intended impact.
Supervisory Tools-checklists

Spray Operator Morning Mobilization and Vehicles Inspections

• Purpose: To ensure spray teams leave for the day with the correctly accounted for
• Person responsible for completing this checklist: Site Manager, Field Supervisor, ECO, Spray Operations Coordinator (SOC)

End-of-Day Cleanup

Purpose: To ensure spray teams correctly follow environmental compliance

• procedures for cleaning equipment, account for insecticide stocks, and store equipment for the next day
• Person responsible for completing this checklist: Site Manager, ECO, visiting HQ staff and SOCs (when visiting an operational site)

Home Owner Preparations and Spray Operator Performance

• Purpose: To ensure that SOPs spray houses (structures) that have been correctly
• Prepared for spraying (inside and out) and use correct spray and insecticide handling techniques
• Person responsible for completing this checklist: Spray Field Supervisors, IEC/
• Coordinator, ECO, Operations Manager, and SOCs (when visiting the field for supervision)
Supervisory Tool Purpose and Person Responsible

Storekeeper Performance

Purpose: To ensure that Site Storekeepers are following best warehousing practices and accounting for stocks and equipment.

Team leader, Spray Operations Coordinator (SOC)

Directly Observed Spraying

Purpose: To ensure proper application of insecticides by correctly applying the spray techniques.

- Person responsible for completing this checklist: Team Leader
FINDINGS

ENVIRONMENTAL COMPLIANCE

• The spray operators demonstrated their understanding of established best environmental management practices
• Pumps are checked and tested prior to being issued out to spray operators
• Stores visited had a first aid box, recommended medicines and trained storekeepers
• Inventory of insecticide bottles in order to maintain an up-to-date record of stocks
FINDINGS

• All walls, thatch roof, and wooden or straw doors were sprayed
• Floors, metal roofs, doors, glass, inside of cupboards, food storage structures, curtains, latrines, and animal pens were not to be sprayed
• Belongings, except immovable ones, moved outside before spraying
Ghana
PMI country since 2007

Population at risk of malaria (2016): 100%
Malaria incidence/1,000 population at risk (2015): 266.4
Total PMI investment in country (FY11-FY17): $275.5 million
Dollars spent per individual at risk (FY17): $9.77
Deaths averted 2013-2015 (Winskill et. al. 2017): 19,400

National malaria control strategy (2014-2020) goal:
Reduce malaria mortality and morbidity by 75% from 2014 levels.

Likelihood of achieving the goal (as per the Country PMI team): Medium

Percent children (6-59 months) positive for malaria, 2011 – 2016, Ghana
Solid Waste Disposal

Solid wastes generated include:

• Empty insecticide bottles,
• Damaged pumps (Hudson X-pert and IK Goizper)
• Old, non-reusable personal protective equipment
• Cardboxes

Most solid wastes are presently being recycled
SUCCESS STORIES RECYCLING

• Since 2012 PMI recycled 340,626 bottles into 29,113.3 kilograms of plastic

• In 2018, 711 damaged steel pumps weighing 2.8 tons were crushed, melted and molded into 2.2 tons of iron rods.

• RECYCLED 5,078 empty cardboard boxes weighing 8.6 tons.

• 6.5 tons of toilet paper, cardboard boxes and other paper products.
RECYCLING
CARBON SAVINGS

35,084kg carbon dioxide
Any questions?

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