

# CHSI

### **Center for Health Services, Inc.**

#### APE RESULTS SUMMARY DEMOGRAPHICS and PROFILING



#### **HSBC**

May 25 to June 5, 2009



| Total number of Examinees per Masterlist | 2053 |
|--|------|
| Total number of Examined during APE      | 884  |
| Compliance Percentage                    | 43%  |



COMPLIANCE During the CHSI On-site Mobile ANNUAL PHYSICAL EXAMINATION (May 25-June 5, 2009)



| Gender Breakdown | NUMBER | %       |
|------------------|--------|---------|
| Male             | 326    | 36.88%  |
| Female           | 558    | 63.12%  |
| TOTAL            | 884    | 100.00% |



| EXAMINEES    |        |      |       |         |
|--------------|--------|------|-------|---------|
| AGE GROUP    | Female | Male | TOTAL | %       |
| BELOW 25     | 145    | 75   | 220   | 24.89%  |
| BET 25- 35   | 323    | 198  | 521   | 58.94%  |
| BET 35-46    | 64     | 38   | 102   | 11.54%  |
| 46 AND ABOVE | 26     | 15   | 41    | 4.64%   |
| NO AGE DATA  |        |      |       |         |
| TOTAL        | 558    | 326  | 884   | 100.00% |





#### **COMPLETE BLOOD COUNT (CBC)**

| Total number of APE Examinees | 884 |
|-------------------------------|-----|
| Total number of CBC Performed | 872 |
| No Blood Specimen             | 12  |

|                     | Female | %   | Male | %   | TOTAL | %    |
|---------------------|--------|-----|------|-----|-------|------|
| Total CBC Performed | 550    | 63% | 322  | 37% | 872   | 100% |
| Result Breakdown    |        |     |      |     |       |      |
| Normal              | 470    | 54% | 289  | 33% | 759   | 87%  |
| With Findings       | 80     | 9%  | 33   | 4%  | 113   | 13%  |

Some of the Findigns

| LOW HEMOGLOBIN | 32 |
|----------------|----|
| LOW HEMATOCRIT | 5  |
| LEUKOCTOSIS    | 83 |

\* combination of findings also exist

![](_page_3_Picture_6.jpeg)

![](_page_3_Figure_7.jpeg)

# Complete Blood Count (CBC)

- Complete blood count or CBC is the best and most convenient mechanism to detect abnormalities in a person's blood.
- It begins with the quantitative evaluation of erythrocytes, leukocytes, and platelets. It ends with the microscopic examination of the blood film to detect abnormalities
- Specific parameter being considered is the hemoglobin level to assess anemia and possible infection.
- Levels of below 120 g/L for females and below 130 g/L for males are considered to be anemics

### Complete Blood Count (CBC)

| FINDINGS   | MOST COMMON DIAGNOSIS   | RECOMMENDATIONS   |
|--|---|---|
| LOW HEMATOCRIT and/or LOW<br>HEMOGLOBIN                        | Anemia  | Clinical Correlation, Iron rich food<br>and/ or supplement          |
| LEUKOCYTOSIS – Elevated<br>White Blood Cell (WBC) Count        | Bacterial Infection   | Clinical correlation and treatment<br>with antibiotics if indicated |
| LEUKOPENIA – Decreased<br>White Blood Cell (WBC) Count         | Viral Infection, Leukemia, Auto-<br>Immune Diseases                         | Clinical correlation, further evaluation                            |
| THROMBOCYTOSIS – Elevated<br>Platelet Count                    | Chronic Leukemia, Polycythemia,<br>Infection, Trauma, Strenuous<br>Exercise | Clinical correlation, further evaluation                            |
| THROMBOCYTOPENIA –<br>Decreased Platelet Count                 | Viral Infection (Dengue H-Fever),<br>Blood Dyscrasias, Carcinomas           | Further work-up   |
| NEUTROPENIA- low neutrophils/<br>segmenters in the diff. count | Viral infection, Typhoid, Hepatitis,<br>Tuberculosis, Blood Disorders       | Clinical correlation, further evaluation                            |
| NEUTROPHILIA – high<br>neutrophils/ segmenters                 | Bacterial Infection, Inflammation   | Clinical correlation, antibiotic treatment if indicated             |
| EOSINOPHILIA – high level of                                   | Allergy, Asthma, Parasitism   | Treatment if indicated  |
| eosinophiis  |   | Correlate with Fecalysis  |
| LYMPHOCYTOSIS – high level<br>of Lymphocytes                   | Chronic Infection, Typhoid,<br>Lymphocytic Leukemia,                        | Clinical correlation and treatment                                  |
| LYMPHOCYTOPENIA – low level<br>of lymphocytes                  | Stress, Trauma, elderly   | Correlation   |

#### URINALYSIS (U/A)

| Total number of APE Examinees | 884 |
|-------------------------------|-----|
| Total number of U/A Performed | 764 |
| No Urine Specimen             | 120 |

|                     | Female | %            | Male | %   | TOTAL | %    |
|---------------------|--------|--------------|------|-----|-------|------|
| Total U/A Performed | 453    | 5 <b>9</b> % | 311  | 41% | 764   | 100% |
| Result Breakdown    |        |              |      |     |       |      |
| Normal              | 374    | 49%          | 277  | 36% | 651   | 85%  |
| With Findings       | 79     | 10%          | 34   | 5%  | 113   | 15%  |

![](_page_6_Picture_3.jpeg)

#### Some of the Findigns

| PYURIA      | - evaluate for possible infection          | 77 |
|-------------|--|----|
| HEMATURIA   | - evaluate further for presence of blood   | 10 |
| GLUCOSURI   | - evaluate further for presence of sugar   | 12 |
| PROTEINURI/ | - evaluate further for presence of protein | 36 |
|             |  |    |

\*combination of findings also exist

![](_page_6_Figure_7.jpeg)

## URINALYSIS (U/A)

- Urinalysis is a diagnostic physical, chemical and microscopic examination of a urine sample. It is performed by collecting a urine sample from the patient in a sterile specimen cup/container
- It is important for general evaluation of health, diagnosis of metabolic, endocrine or systemic diseases that may affect kidney function (eg. Diabetes, Hypertension, Heart Disease), Urinary Tract Infection (UTI), Kidney Stones, pregnancy, monitoring of diabetes and use to screen for drug abuse.
- Suspected patients with UTI findings are advised to increase oral fluid intake and to consult a physician. Those with blood seen, are advised to be worked up for kidney stones. For those with proteins, referred to cardiologist for possible heart or circulation problems. For those with sugar, for fasting blood sugar determination to rule out diabetes mellitus.

### URINALYSIS (U/A)

| FINDINGS   | POSSIBLE DIAGNOSIS                               | RECOMMNENDATIONS  |
|--|--|---|
| PYURIA – indicates presence of pus cells         | Urinary Tract Infection                          | Increase oral fluid intake;<br>Suggest repeat urinalysis  |
| CRYSTALLURIA – presence of<br>Uric Acid Crystals | Gout/ Gouty Arthritis, Urinary<br>Tract Stones   | Increase oral fluid intake, Blood<br>Uric Acid determination  |
| GLUCOSURIA – presence of<br>Sugar                | Diabetes Mellitus                                | For FBS determination; Check up with physician for further evaluation   |
| HEMATURIA – presence of red blood cells          | Urinary Tract Stones, Urinary<br>Tract Infection | Increase Oral fluid intake; check<br>up with physician for clinical<br>correlation and treatment; suggest<br>repeat urinalysis after 1 week |
| OXALURIA – presence of<br>Calcium Oxalate        | Recurrent Kidney Stones                          | For diagnostic ultrasound if indicated after clinical correlation   |

#### **CHEST X-RAY (CXR)**

| Total number of APE Examinees | 884 |
|-------------------------------|-----|
| Total number of CXR Performed | 736 |
| No CXR                        | 148 |
| For RECALL                    | 0   |

|                     | Female | %   | Male | %   | TOTAL | %    |
|---------------------|--------|-----|------|-----|-------|------|
| Total CXR Performed | 446    | 61% | 290  | 39% | 736   | 100% |
| Result Breakdown    |        |     |      |     |       |      |
| Normal              | 429    | 58% | 280  | 38% | 709   | 96%  |
| With Findings       | 17     | 3%  | 10   | 1%  | 27    | 4%   |

![](_page_9_Picture_3.jpeg)

#### Some of the Findigns

DENSITY RELATED, OPACITY RELATED, CARDIOMEGALLY SUGGESTION OF GRANULOMA, RIGHT UPPER LOBE

ELEVATED LEFT HEMIDIA PHRAGM

ELEVATED COSTOPHRENIC RIGHT ANGLE

HY PERAERATED LUNG FIELDS; ILL- DEFINED IN THE LOWER LOBE

\* combination of findings also exist

![](_page_9_Figure_11.jpeg)

### CHEST XRAY (CXR)

- Chest X-ray shows the heart, lungs, airway, blood vessels and lymph nodes. It also shows the bones of the spine and chest, including the breastbone, ribs and collarbone.
- This diagnostic modality can help detect some problems with the organs and structures inside the chest.
- Usually, the picture taken is from the back of the chest. If the results from a chest x-ray are not normal or do not give enough information about the chest problem, more specific X-rays are requested like apico-lordotic view, lateral view and spot film or other tests may be done such as CT Scan (Computed Tomography), ultrasound, ECG or MRI.
- The chest X-ray is done to find lung conditions like pneumonia, tuberculosis and other related lung problems.
- The chest X-ray will also show if the heart is enlarged (cardiomegaly) or if there is atheromatous aorta especially in the elderly; or if there is a nodule, mass or newgrowth; lymph nodes, and other findings that may refer to pre-cancerous or cancerous conditions.

# CHEST XRAY (CXR)

| FINDINGS      | POSSIBLE DIAGNOSIS              | RECOMMNENDATIONS  |
|---------------|---------------------------------|---|
| INFILTRATES   | Pneumonia                       | For pulmonologist evaluation and treatment                              |
| DENSITIES     | Pulmonary Tuberculosis          | For pulmonologist evaluation and treatment.                             |
| CARDIOMEGALLY | Hypertension,<br>Cardiomyopathy | For Cardiologist evaluation,<br>further work up and<br>treatment.       |
| NODES         | Lung Cancer                     | For evaluation and further work-up by pulmonary specialist.             |
| OPACITIES     | Pulmonary Tuberculosis          | For Apicolordotic View<br>For pulmonologist evaluation<br>and treatment |

#### **BLOOD PRESSURE (BP)**

| Total number of APE Examinees | 884 |
|-------------------------------|-----|
| Total number of BP Performed  | 814 |
| No BP Data                    | 70  |

![](_page_12_Picture_2.jpeg)

|                        | Female | %   | Male | %   | TOTAL | %                 |
|------------------------|--------|-----|------|-----|-------|-------------------|
| Total BP Performed     | 509    | 63% | 305  | 37% | 814   | 100%              |
| Result Breakdown       |        |     |      |     |       |                   |
| Normal                 | 445    | 55% | 202  | 24% | 647   | <mark>79</mark> % |
| With Fin (Elev BP/HPN) | 64     | 8%  | 103  | 13% | 167   | 21%               |

![](_page_12_Figure_4.jpeg)

#### ECG (Electrocardiogram)

Total number of ECG Examinees

| Result Breakdown |     |      |  |  |
|------------------|-----|------|--|--|
| Normal           | 83  | 57%  |  |  |
| With Abnormal I  | 62  | 43%  |  |  |
|                  |     |      |  |  |
| TOTAL            | 145 | 100% |  |  |

![](_page_13_Picture_3.jpeg)

#### Some Findings

SB, NSTWC LVH BY VOLTAGE; NSSTWC SINUS BRADYCARDIA NSR IRBBB LVH BY VOLTAGE SR WITH IRBBB NSR WITH FREQUENT PVC'S, NSTWC NSR, LVH BY VOLTAGE SINUS BRADYCARDIA WITH EARLY REPOLARIZATION PATTERN SR, LAD, NSSTTWC SR PRWP V1-V3 ICRBBB

![](_page_13_Figure_6.jpeg)

### ELECTROCARDIOGRAM (ECG)

- The electrocardiogram or ECG (sometimes called EKG) is today used worldwide as a relatively simple way of diagnosing heart conditions.
- An electrocardiogram is a recording of the small electric waves being generated during heart activity.
- By detecting irregularities in rate and rhythm and abnormalities in the ECG tracing, the clinician will have a strong basis for confirming his diagnosis of a specific heart ailment or combination of heart problems thereby leading to early and accurate treatment and timely prevention of complications including sudden heart attack.
- Common heart problems easily detected by ECG include enlargement in heart size (hypertrophy), irregularities in rate and rhythm (arrythmias), insufficiency in coronary blood flow due to blocks or obstruction in the vessels (coronary artery disease), myocardial ischemia (insufficient oxygenation of heart muscles predisposing to heart attack) and myocardial infarction (acute heart attack).
- Correlating the ECG with the clinical manifestations of the patient leads to a more precise diagnosis of heart diseases.

### ELECTROCARDIOGRAM (ECG)

| NON SIGNIFICANT FINDINGS                  | SIGNIFICANT FINDING                    |
|---|--|
| Tachycardia and Bradycardia               | Premature Atrial Contraction           |
| Poor R-wave Progression                   | Premature Ventricular Contraction      |
| Early Repolarization Pattern              | Right or Left Atrial Hyperthrophy      |
| Left or Right Axis Deviation (LAD or RAD) | Right or Left Ventricular Hyperthrophy |
| non-specific ST-T wave changes            | Left of Right Atrila Hemiblock         |
| non-specific T wave changes               | Left of Right Ventricular Hemiblock    |
| non-specific ST wave changes              | Atrial Fibrillation                    |
| Intraventricular Conduction Delay         | Myocardial Ischema                     |
| Complete or Incomplete Bundle Bunch Block | Myocardia Infarction                   |

| For Clinical Correlation | For Clinical Correlation, For Cardio Referral |  |  |  |
|--------------------------|---|--|--|--|
|                          | Requires further evaluation and examination   |  |  |  |

#### **Body Mass Index Result Summary**

Number of Employees w/ BMI data

% Recommendations **Results:** Total below 18.5 kg/m<sup>2</sup> Underweight 52 6% Increase Caloric Diet 18.5-24.9.0 kg/m<sup>2</sup> Normal 418 50% **Overweight** 25.0-29.9 kg/m<sup>2</sup> 212 Low Fat and Caloric Diet, Exercise 25% Mild Obese 30.0-34.9 kg/m<sup>2</sup> Low Fat and Caloric Diet, Exercise 101 12% 35.0-39.9 kg/m<sup>2</sup> Moderate Obese 31 4% Low Fat and Caloric Diet, Regular Exercise Morbidly Obese above 40.0 kg/m<sup>2</sup> 21 3% Low Fat and Caloric Diet, Reg. Exercise, Weight Management 100% Total 835 BMI Result Moderate Obese 4%

835

![](_page_16_Figure_3.jpeg)

| Summary of FINDINGS          |     |      | Summary of Recommnedation             |
|------------------------------|-----|------|---------------------------------------|
| PAP SMEAR FINDINGS           | 13  | 87%  | OB-GYNE REFERRAL                      |
| WEIGHT ABNORMALITIES         | 365 | 44%  | DIET MODIFICATION, REGULAR EXERCISE   |
|                              |     |      | ECG FOR CLINICAL CORRELATION (        |
| ECG FINDINGS                 | 62  | 43%  | CARDIO REFERRAL FOR SIGNIFICANT       |
|                              |     |      | FINDINGS                              |
| DENTAL FINDINGS              | 290 | 35%  | DENTAL REFERRAL                       |
|                              |     |      |                                       |
| ELEVATED BP/HPN              | 165 | 20%  | (CARDIO REFERRAL FOR HYPERTENSIVE)    |
|                              |     |      |                                       |
| PRESENCE OF PUS IN URINE     | 77  | 10%  | INCREASE ORAL FLUID INTAKE, REPEAT    |
| (PYURIA)                     |     | 1070 | URINALYSIS                            |
| PRESENCE OF PROTEIN IN URINE | 36  | 5%   | INCREASE ORAL FLUID INTAKE, REPEAT    |
| (PROTEINURIA)                | 50  | 570  | URINALYSIS                            |
| LOW HEMOGLOBIN / LOW         | 20  | 10/  | IRON RICH FOOD DIET, DAILY IRON       |
| HEMATOCRIT                   | 52  | 4 /0 | SUPPLEMENT                            |
|                              | 27  | 10/  | FOR APL VIEW, SPOT VIEW, FOR CLINICAL |
|                              | 21  | 470  | CORRELATION                           |
| PRESENCE OF SUGAR IN URINE   | 12  | 2%   | INCREASE ORAL FLUID INTAKE, REPEAT    |
| (GLUCOSURIA)                 | 12  | 270  | URINALYSIS                            |
| PRESENCE OF BLOOD IN URINE   | 10  | 1%   | INCREASE ORAL FLUID INTAKE, REPEAT    |
| (HEMATURIA)                  | 10  | 1 /0 | URINALYSIS                            |
|                              | 5   | 1%   | CBC FOR CLINICAL CORRELATION,         |
|                              | 5   | 1 /0 | REPEAT CBC                            |
|                              |     |      |                                       |

### **GENERAL RECOMMENDATIONS**

- RECOMMENDED ACTIONS:
  - Disseminate APE Results per employee and those with FINDINGS be asked to report to clinic or consult physician for fup checkup, corrective actions, health counselling

![](_page_18_Picture_3.jpeg)

![](_page_18_Picture_4.jpeg)

### **GENERAL RECOMMENDATIONS**

- RECOMMENDED WELLNESS PROGRAMS
  - Implement WEIGHT MANAGEMENT awareness programs focused on behavioural modification towards regular exercise, healthy diet and lifestyle
  - Implement HYPERTENSION PREVENTION
    Programs through regular Blood Pressure check ups and monitoring
  - Conduct STRESS MANAGEMENT, EXERCISE and FITNESS Programs and workshops

![](_page_19_Picture_5.jpeg)

![](_page_19_Picture_6.jpeg)

# Chank You!

![](_page_20_Picture_1.jpeg)