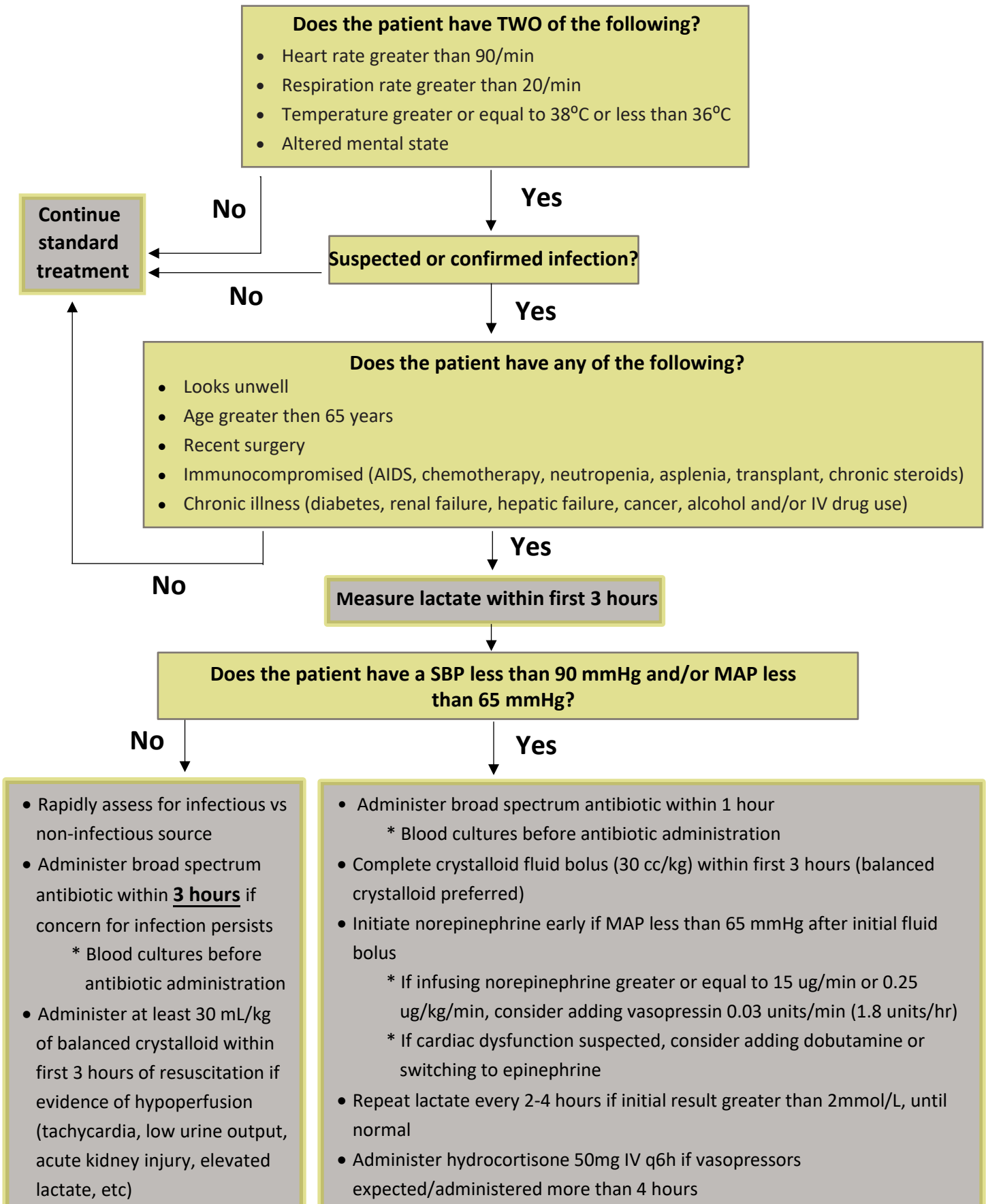




Adult ED Sepsis Guidelines Algorithm (2022)



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ED Nurse Protocol - ADULT Suspected Sepsis

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Key: Req – Requisition MAR – Medication Administration Record K – Kardex Dis – Discontinued

Key

Phase

Instructions for completing this order set:

- Indicates a pre-selected order. To delete a pre-selected order, draw a line through it
- Must tick the box for order to be implemented. Orders not checked will not be implemented
- Fill in blank spaces as needed/appropriate
- Indicates an item for consideration by Provider; is NOT an order

ED Nurse Protocol - ADULT Suspected Sepsis

Systemic Inflammatory Response Syndrome (SIRS) Criteria:

- Temperature less than 36 C° OR greater than 38 C°
- Heart rate greater than 90 BPM
- Respiratory rate greater than 20/min
- Altered mental status (e.g. somnolence, confusion, agitation, Glasgow Coma Scale less than 15)

Inclusion Criteria

- TWO or more SIRS criteria **AND** any established risk factor(s) as per Sepsis Screening tool **AND**

- Patients goals of care are **curative**

Initiate this order set if positive SIRS criteria AND at least ONE risk factor:

- Looks unwell
- Age greater than 65
- Recent surgery
- Immunocompromised (Including AIDS, chemotherapy, neutropenia, asplenia, transplant, chronic steroids)
- Chronic illness (Including diabetes, renal failure, hepatic failure, cancer, alcoholism, IV drug use)
- Cardiovascular: abnormal peripheral pulses, prolonged cap refill, mottled skin, cold extremities, skin or joint pain, swelling, or redness
- Respiratory: cough, sputum, chest pain, shortness of breath
- GI/GU: abdominal pain, distension, vomiting, diarrhea, dysuria/frequency
- Tubes and Lines: IV, central line, indwelling catheter, invasive medical devices

Diet/Nutrition

NPO

Activity

Elevate Head of Bed, Head of bed at 30 degrees or higher

Communication Orders

Notify Provider, For antibiotic orders as soon as possible to allow for antibiotic administration within 1 hour

ED Nurse Protocol - ADULT Suspected Sepsis

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Signature, Designation

Date

Time

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ED Nurse Protocol - ADULT Suspected Sepsis

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Key: Req – Requisition MAR – Medication Administration Record K – Kardex Dis – Discontinued

Key

Phase

Laboratory

Hematology

Complete Blood Count and Differential, Blood, STAT

Chemistry

Electrolytes and Creatinine Panel, Blood, STAT

Glucose Level Random, Blood, STAT

ALT, Blood, STAT

GGT, Blood, STAT

Lactate, Blood, STAT

Lipase Level, Blood, STAT

Bilirubin Total, Blood, STAT

Venous Blood Gas (VBG), Venous Blood, STAT (Check off acute blood gases)

- Select hCG for applicable patients of child-bearing age WITH a uterus

hCG Qualitative, Blood, Routine OR STAT

Microbiology

Blood Culture x 2, STAT

Macroscopic Urinalysis with Culture if Positive, Urine, STAT, Source: Midstream In & Out Catheter Indwelling

Diagnostic Imaging

Review Previous ECG Results

HH ECG Electrocardiogram, ASAP, Suspected Sepsis

Continuous Infusions

- If systolic BP less than 100 mmHg OR MAP less than 65 mmHg, then select IV bolus order

Lactated Ringers IV Bolus, 500 mL, IV, ONCE, infuse over 20 min, Give as bolus, if SBP less than 100 mmHg OR MAP less than 65 mmHg; **Assess full vital signs post-IV bolus** and contact Provider if MAP less than 65 mmHg

Medications

Analgesics and Antipyretics (non-opiate)

Max acetaminophen from all sources 4,000 mg per 24 hours

acetaminophen - RANGE DOSE 500 mg to 1,000 mg, Tab, oral, ONCE, PRN for fever, Temp greater than 38 C °

acetaminophen - RANGE DOSE 650 mg to 975 mg, Supp-Rectal, ONCE, PRN for fever, Temp greater than 38 C °

ED Nurse Protocol - ADULT Suspected Sepsis

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Signature, Designation

Date

Time

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LABORATORY REQUEST BLOOD

This form when completed constitutes a referral to VIHA laboratory physicians
All Red areas MUST be completed by the requestor

ORDERING PHYSICIAN: _____
Print first and last name clearly; include middle initial

MSP PRACTITIONER #: _____

COPY OF RESULTS TO: _____

DATE REQUIRED: _____

- ROUTINE
- STAT, collection and testing
- SYSTEM UTILIZATION
- TIMED, time required: _____
- STAT collection only
- NON-LAB COLLECTION

Collected by: _____ Time: _____ Date: _____

Pt LOCATION in ER: _____

PATIENT NAME

LOCATION

MRN #

PHN#

BIRTHDATE

PATIENT ADDRESS

Apply patient label

Use Transfusion Medicine Requisition for Blood Product Requests

Accession # (Lab Use only)

DIAGNOSIS AND RELATED TEST INFORMATION: **Suspected Sepsis**

Bolded test names available STAT (* indicates limited to specific diagnosis, see back page) Requisitions must be submitted prior to facility cut-off time for early morning collection

HEMATOLOGY	COAGULATION	IMMUNOLOGY	TRANSFUSION MEDICINE
<input checked="" type="checkbox"/> Hematology profile <input type="checkbox"/> RBC morphology <input type="checkbox"/> Reticulocyte count <input type="checkbox"/> (Hemato) Pathologist review <input type="checkbox"/> Mononucleosis screen <input type="checkbox"/> Malarial parasites <input type="checkbox"/> G6PD <input type="checkbox"/> Hemoglobin F Kleihauer	<input checked="" type="checkbox"/> Check (✓) applicable box <input type="checkbox"/> No anticoagulant <input type="checkbox"/> Coumadin/Warfarin <input type="checkbox"/> Heparin <input type="checkbox"/> LMWH <input type="checkbox"/> Fibrinolytic (Streptokinase, TPA) <input type="checkbox"/> Other anticoagulant _____ <input type="checkbox"/> INR <input type="checkbox"/> PTT <input type="checkbox"/> Fibrinogen <input type="checkbox"/> D-Dimer* <input type="checkbox"/> Lupus inhibitor panel	<input type="checkbox"/> ANA <input type="checkbox"/> ANCA <input type="checkbox"/> DNA double stranded Ab <input type="checkbox"/> ENA Ab <input type="checkbox"/> Rheumatoid factor <input type="checkbox"/> Mitochondrial Ab <input type="checkbox"/> Smooth muscle Ab <input type="checkbox"/> Thyroid specific peroxidase Ab <input type="checkbox"/> Cardiolipin Ab Special procedures available by (Hemato) Pathologist consultation	<input type="checkbox"/> Bone donation <input type="checkbox"/> Direct antiglobulin test (DAT) <input type="checkbox"/> Cold agglutinin screen <input type="checkbox"/> Hemolytic disease of newborn investigation (HDN) <input type="checkbox"/> Newborn Rh type Mother's name: _____ Mother's MRN: _____

CHEMISTRY	Endocrine Tests	Menstrual History	Cardiac Tests
<input checked="" type="checkbox"/> Glucose <input type="checkbox"/> Glucose fasting <input type="checkbox"/> Hemoglobin A1c <input checked="" type="checkbox"/> Creatinine <input checked="" type="checkbox"/> Electrolyte <input checked="" type="checkbox"/> Sodium <input checked="" type="checkbox"/> Potassium <input checked="" type="checkbox"/> Chloride <input checked="" type="checkbox"/> Carbon dioxide total <input type="checkbox"/> Albumin level <input type="checkbox"/> Alkaline phosphatase <input type="checkbox"/> Amylase <input checked="" type="checkbox"/> ALT <input checked="" type="checkbox"/> Bilirubin total <input type="checkbox"/> Bilirubin conjugated <input type="checkbox"/> Calcium <input type="checkbox"/> Calcium ionized	<input checked="" type="checkbox"/> GGTP <input type="checkbox"/> IgA <input type="checkbox"/> IgG <input type="checkbox"/> IgM <input checked="" type="checkbox"/> Lactate <input checked="" type="checkbox"/> Lipase <input type="checkbox"/> Magnesium* <input type="checkbox"/> Osmolality calculated <input type="checkbox"/> Osmolality measured <input type="checkbox"/> Protein total <input type="checkbox"/> Protein electrophoresis <input type="checkbox"/> Phosphorus <input type="checkbox"/> Uric Acid	<input type="checkbox"/> Cortisol AM <input type="checkbox"/> Cortisol PM <input type="checkbox"/> Parathyroid hormone <input type="checkbox"/> TSH <input checked="" type="checkbox"/> Check (✓) applicable box <input type="checkbox"/> LMP date dd-MM-yy <input type="checkbox"/> Post <input type="checkbox"/> Pre-menopausal <input checked="" type="checkbox"/> hCG (serum preg test)* <input type="checkbox"/> hCG quantitative <input type="checkbox"/> Estradiol <input type="checkbox"/> FSH <input type="checkbox"/> LH <input type="checkbox"/> Progesterone <input type="checkbox"/> Prolactin	<input type="checkbox"/> Troponin <input type="checkbox"/> Baseline <input type="checkbox"/> Timed (indicate time required above) <input type="checkbox"/> BNP/NT-proBNP <input type="checkbox"/> CK* <input type="checkbox"/> Lipid profile (if checked LDL reported) <input type="checkbox"/> Cholesterol <input type="checkbox"/> Triglycerides <input type="checkbox"/> HDL <input type="checkbox"/> C Reactive Protein*

DRUG MONITORING - THERAPEUTIC*	WHOLE BLOOD TESTS
Dose: _____ Time of last dose: _____ Time of next dose: _____ Time Required: _____ <input type="checkbox"/> Aminoglycoside concentration (select one) <input type="checkbox"/> Gentamicin <input type="checkbox"/> Tobramycin <input type="checkbox"/> Amikacin <input checked="" type="checkbox"/> Requested measurement (must select one) <input type="checkbox"/> Low dose - trough <input type="checkbox"/> Low dose - peak <input type="checkbox"/> High dose - (q24h) trough <input type="checkbox"/> Hartford dose - (6 - 12h post-dose) <input type="checkbox"/> Random See back page for dosage regimen	<input type="checkbox"/> Arterial <input checked="" type="checkbox"/> Venous <input type="checkbox"/> Capillary <input type="checkbox"/> Cord <input type="checkbox"/> Blood gases (pH, pCO ₂ , pO ₂) <input checked="" type="checkbox"/> Acute blood gases FIO ₂ _____ SPO ₂ _____ Resp rate _____ Other _____ <input type="checkbox"/> Glucose blood <input type="checkbox"/> Sodium blood <input type="checkbox"/> Potassium blood <input type="checkbox"/> Chloride blood <input type="checkbox"/> Lactate blood <input type="checkbox"/> Calcium ionized blood <input type="checkbox"/> Hemoglobin POC

HEPATITIS AND HIV TESTING*
<input type="checkbox"/> Hepatitis screen ACUTE (HBsAg, Anti-HBs, Anti-HBc Total, Anti-HCV, Anti-HAV IgM) <input type="checkbox"/> Hepatitis screen CHRONIC/previous (HBsAg, Anti-HBs, Anti-HBc Total, Anti-HCV) <input type="checkbox"/> Hepatitis B surface antigen CARRIER (HBsAg) <input type="checkbox"/> Hepatitis B surface antibody IMMUNITY (anti-HBs) <input type="checkbox"/> Hepatitis A antibody IgG IMMUNITY (anti-HAV IgG) <input type="checkbox"/> EXPOSED person (blood or body fluid exposure) <input type="checkbox"/> SOURCE person (blood or body fluid exposure) <input type="checkbox"/> HIV (Ag/Ab Combo)

BLOOD CULTURE*
Antibiotics _____ Indicate if unusual pathogen suspected _____ <input checked="" type="checkbox"/> Adult <input type="checkbox"/> Pediatric <input type="checkbox"/> Fungal <input type="checkbox"/> TB or AFB
OTHER TESTS

This Inpatient "BLOOD" requisition is to be used for all blood specimen requests (other than for Transfusion Medicine Blood Products)

ORDERING PRIORITIES

ROUTINE

Orders designated routine are processed during the normal h of Laboratory operation ("normal" h are facility-specific).

Routine orders received after facility-specific "cutoff" times are processed on the following day.

Routine pre-operative orders fall under this category and are not to be ordered as STAT, except after consultation with a laboratory physician.

Results for most ROUTINE tests are available the same day; however some tests are batched and/or referred to other laboratories for testing.

SYSTEM UTILIZATION

Used when there is a critical need to improve patient flow. These tests are given priority over routine work.

STAT (Collection and testing)

Used when a critical care situation exists.

Tests available as STAT priority are identified in bold on the face of the requisition.

The following tests are only available STAT for specific diagnoses.

- CK for rhabdomyolysis
- CRP for temporal arteritis and polymyalgia rheumatica
- Digoxin if indicated by ECG changes or clinical history
- hCG (quantitative) if ectopic presentation
- Magnesium if indicated by ECG changes
- D-Dimer if pulmonary embolism presentation

STAT (Collection only)

To be used when the specimen is required to be collected urgently but the analysis can be deferred.

TIMED

Used when the sample needs to be collected at a specific time or at specific timed intervals. Eg. drug levels, cardiac markers. Check TIMED tick box and fill in Time Required information.

BLOOD CULTURES

A routine adult blood culture order consists of 2 sets of bottles (1 aerobic + 1 anaerobic bottle per set).

NUMBER AND TIMING OF BLOOD CULTURES		
Adult	2 sets collected per day. A blood culture order will initiate the collection of 2 sets.	Two blood culture sets are preferably obtained from two different collection sites during one visit to the bedside to minimize inconvenience and to maximize sensitivity.
Pediatric	A single venipuncture per day.	

Blood cultures are limited to 2 sets/day. Only if these sets are insufficiently filled (<30 mL between 4 vials), will a third set be permitted around a febrile episode. Medical Microbiologist or site pathologist approval is required for the third set.

Blood cultures can be ordered on two consecutive days. After that, Medical Microbiologist or site pathologist approval required.

Inclusion of relevant clinical information on the requisition is necessary so that extended incubation times can be implemented e.g. Special vials are collected for patients with suspected/confirmed candidemia or fungemia, systemic infections with mycobacteria, endocarditis, presence of vascular grafts, prosthetic valves, enteric fevers, etc.

HEPATITIS AND HIV TESTING

Exposed and source person (blood or body fluid exposure) requests:

Test menu: HbsAg, anti HBs, anti HB core total, anti HCV, anti HIV 1 & 2 stat

Blood and body fluid exposure form must also be completed

DRUG MONITORING Collections between 2000h and 0700h (or outside facility specific) require prior approval

Drug	Measurement	Collection Time
Gentamicin	Low dose ¹ - trough	0 - 30 minutes before dose optimal
Tobramycin	Low dose ¹ - peak	30 -60 minutes after end of IV infusion
Amikacin	High dose ² - (q24) trough	0 - 30 minutes before dose optimal
	Hartford dose ³	Interval level 6-12 h post dose
	Random	Collect any time
Vancomycin	Trough	0 - 30 minutes before dose optimal
	Peak	Not required, consult Medical microbiologist
	Random	Collect at any time
Theophylline	Peak	Within 30 minutes after dose if IV
All others	Trough	0 - 30 minutes before dose optimal

¹ - Low dose: Gentamicin / Tobramycin (1 - 2 mg / kg / dose), Amikacin (5 - 7.5 mg /kg /dose)

² - High dose: Gentamicin / Tobramycin (5 - 7 mg / kg q24hr), Amikacin (15 - 20 mg /kg q24hr)

³ - Hartford dose: Gentamicin / Tobramycin (7 mg / kg q24hr), Amikacin (15 mg /kg q24hr)

FASTING RECOMMENDATIONS

For the following tests:	Fasting glucose	Gastrin	GTT Gestational diabetes Confirmation
	Insulin	Triglycerides	GTT Non-pregnant 75 g load
Do not eat or drink (except water as required for thirst) for at least 8 h (6 h if pregnant) before test.			
Do not exceed 12 h fast (8 h if pregnant)			



island health

North Island Hospital (CVH)

HEART AND LUNG DIAGNOSTICS

101 Lerwick Rd. Courtenay, BC V9N 0B9

PHONE: 250-331-5900 ext 65390

FAX: 250-331-5904

ELECTRODIAGNOSTIC REQUISITION

Patient Information

Label Here

ORDERING PHYSICIAN _____

Ward / Room #: _____

FAMILY PHYSICIAN _____

ED (Emerg) Room #: _____

COPIES TO _____

Do as outpatient

PRECAUTION YES NO

TYPE: CONTACT DROPLET AIRBORNE

PATIENT STATUS: ROUTINE ASAP STAT PREOP SURGERY DATE _____ TIME _____

PROCEDURE REQUESTED: ECG STRESS TEST 24HR HOLTER MONITOR 7 DAY HOLTER MONITOR

PACEMAKER YES NO

15 lead ecg (V4R, V8, V9)

stress tests and 7 day holters: (orderable by Internist only)

24HR ABP: (self-pay \$40)

CLINICAL DIAGNOSIS and/or CURRENT SYMPTOMS: (mandatory)

Gi gdYWYX'GYdg]g

CHEST PAIN/PRESSURE.

PACEMAKER

SOB

DIABETIC

ELEVATED CHOLESTEROL

FAMILY HISTORY

ANGINA

ROUTINE CHECK UP

CAD

OTHER

HYPERTENSION

MEDICATIONS:

Holter or Stress test requests only

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