

McKesson
Readmissions Resource™



SEPSIS RESOURCE GUIDE

Prevent • Diagnose • Treat

MCKESSON

Guide Reference

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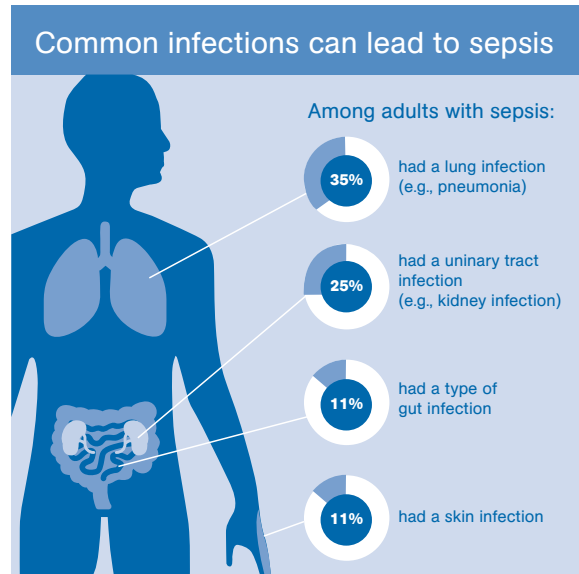


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Overview of Sepsis

Research has shown that chronic illnesses — along with cancer and hypertension — are common among people with sepsis. It affects people of all ages but is most concerning for those who are **65 years or older** with health issues. These individuals:

- Are **more susceptible** to the disease, which can be deadly if not quickly recognized and treated.
- Often show symptoms of infection, such as **fever, chills and general malaise**, which may not initially alert clinicians to those suffering from sepsis.
- Account for **65 percent** of all sepsis hospital cases — a staggering statistic considering elderly patients often have ailments associated with other diagnoses.
- Can often acquire sepsis that is **triggered by infections**, which occur in many forms (e.g., pressure sores, respiratory issues or urinary tract infections).



CDC Vital Signs: <https://www.cdc.gov/vitalsigns/pdf/2016-08-vitalsigns.pdf>



Sepsis and Readmission



Sepsis is the most expensive condition to treat in U.S. hospitals, estimated at

>\$20B
a year

Each year, at least
1,700,000
Americans get sepsis

Nearly
270,000
Americans die
as a result

Readmissions due to sepsis are

2-3X
more likely

and

2-3X
costlier

than readmissions due to other conditions

National Institute of General Medical Sciences: https://www.nigms.nih.gov/Education/pages/factsheet_sepsis.aspx



Sepsis and Readmissions

Older sepsis survivors are three times more likely to notice a decline in their cognitive abilities, making it difficult to return to their previous lifestyles and resulting in an increased likelihood of hospital readmissions. In fact, **sepsis is one of the leading causes of readmissions**.

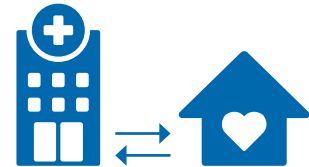
The Federal government is:

- Promoting public health efforts, including sepsis prevention and early recognition
- Investigating sepsis to identify at-risk populations
- Supporting development of new sepsis tests and treatments
- Developing more accurate tracking methods to evaluate progress in preventing and treating sepsis

Post-acute care providers should **proactively treat chronic conditions** and **focus on infection prevention** to reduce readmission rates associated with sepsis. By doing so, they can improve patient outcomes.

For every 100 Medicare patients admitted to a hospital within a 30-day period,

21.3%
*were admitted
because of sepsis*



Agency for Healthcare Research and Quality (AHRQ): <https://www.ahrq.gov>



Symptoms of Sepsis

Pay careful attention to the signs of sepsis. They can indicate when the condition shifts from manageable to severe. If the following symptoms occur in a patient, seek help immediately.



Rapid Heart Rate
(above 100 beats/minute)



Rapid Breathing
(above 20 breaths/minute)



**Extreme Pain
or Discomfort**



Fever
(less than 96.8 or greater than 100)



**Shivering
or Clammy**



Confusion
(more common among older people)



Prevention

Vaccination



Get vaccinated against the flu, pneumonia and other infections that could lead to sepsis. Advise your residents and patients to do the same.

Time is of the Essence



Symptoms may be subtle:

- Shivering, fever, cold (elderly may lack fever)
- Extreme pain or discomfort
- Clammy or sweaty skin
- Lethargy, confusion or disorientation
- Short of breath, rapid breathing, high heart rate

Education



Educate patients and families on general signs of infection related to:

- Skin/Wound Infections
- Respiratory Infections
- Urinary Tract Infections

Infection Prevention



Prevent infections that can lead to sepsis:

- Proper treatment of wounds reduces risk
- Practicing good hand hygiene by patients, caregivers and clinicians



Antimicrobial Stewardship



- Early antibiotic treatment decreases mortality in septic patients
- Identify actions, indications and dosing of antibiotic
- Broad-spectrum antibiotics need to be patient specific, directed against potential pathogen(s)



Prevention

HAND HYGIENE			
	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
	McKesson	53-29033-8.5	Hand Sanitizer Foaming, w/Aloe 8.5 oz Bottle w/Pump
	McKesson	16-1069	Hand Sanitizer Gel w/Aloe, Flip Top, 8 oz
	Central Solutions	SANI14116-1000	DermaCen Alcohol-Free Hand Sanitizer Bck Foaming 1000 ml
	McKesson	53-28087-18	Antimicrobial Lotion Soap Aloe Pump 18 oz
	McKesson	53-28063-8	Antibacterial Soap 8 oz Bottle, Clean scent
	GOJO	3659-12	Purell Hand Sanitizer Gel 12 oz Pump Bottle
PPE GLOVES			
	McKesson	14-6N34	Confiderm™ Nitrile Exam Glove 3 mil Powder-Free Blue MED
	McKesson	14-6N36	Confiderm™ Nitrile Exam Glove 3 mil Powder-Free Blue LG
	McKesson	14-6N38	Confiderm™ Nitrile Exam Glove 3 mil Powder-Free Blue XLG





Prevention

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
PPE GLOVES			
	McKesson	14-6978C	Nitrile Glove, Exam PF Tactile Touch Blue, LG (200/BX) Multiple Sizes Available
	McKesson	14-680C	Nitrile Glove, Exam PF Tactile Touch Blue, XLG (100/BX) Multiple Sizes Available
	McKesson	14-6N34	3.0 Nitrile Exam Gloves, Medium, Powder-Free
	McKesson	14-316	Latex Glove, Exam, PF Smooth, MED (100/BX)
	McKesson	14-318	Latex Glove, Exam, PF Smooth, LG (100/BX)
	McKesson	14-320	Latex Glove, Exam, PF Smooth, XLG (100/BX)
PPE GOWNS			
	McKesson	31521100	Isolation Fluid Resistant Gown, Full Back, Universal Yellow (50/CS)
	McKesson	30201100	Isolation Fluid Resistant Gown, Full Back, Universal (50/CS)
	McKesson	44451100	Fluid Resistant Gown, Full Back, Elastic Cuff Universal Blue (50/CS)





Prevention

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
PPE MASKS			
	McKesson	91-2600	Facemask, w/Visor, Earloops Blue (25/BX)
	McKesson	91-2002	Procedure Mask, w/Earloops Blue (50/BX)
	McKesson	91-2001	Procedure Facemask, w/Earloops Yellow
	McKesson	91-2003	Procedure Facemask, w/Earloops White
	McKesson	91-1600	Surgical Mask, w/Visor, Anti-fog w/Ties Blue (25/BX)
	McKesson	91-1000	Surgical Mask, Classic Style w/Ties Blue (50/BX)
PPE KIT			
	IP Prevention Products	IPD-POUCH2.0	<p>Manufacturer recommended IP Pouch usage/protocol (designed to store supplies for immediate use)</p> <ol style="list-style-type: none"> 1. Before use, enter date (mm/dd/yy) on label (recommend replace monthly or when visibly soiled) 2. Place near patient or attach to patient equipment (wheelchairs, bedside table, IV pole) 3. To prevent cross-contamination, store nasal cannulas and handheld nebulizers in pouch when not in use



Prevention

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
SKIN PROTECTION			
	McKesson	53-CZ4	Skin Protectant THERA™ Calazinc Body Shield 4 oz Tube Cream Scented
	McKesson	53-AFP3	Antifungal THERA™ Powder 3 oz Shaker Bottle
	McKesson	53-DS4	Skin Protectant THERA™ Dimethicone Body Shield 4 oz Tube Cream Scented
	McKesson	53-SSG4	Skin Protectant THERA™ Silicone Skin Guard 4 oz. Tube Unscented Cream
	3M	5050	Skin Protectant 3M™ Cavilon™ Advanced 2.7 ml Ampule Liquid Unscented
HYGIENE SOLUTION			
	Therawor®	HXC-08Z	Therawor 8 oz Foaming No-Rinse Body Wash, Lavender Scent Multiple Sizes Available
	Therawor®	SWA-200	Therawor SwabStick (200 pack)
	Therawor®	HX-0050	Therawor Personal Wipe, Lavender Scent (50 ct)



Prevention

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
SURFACE DISINFECTANT			
	McKesson	50-66160	McKesson Germicidal Disinfectant Wipe
	Professional Disposables Inc.	P54072	Bleach Disinfectant Wipe
	Professional Disposables Inc.	P13872	Sani-Cloth® AF3 Alcohol-Free Wipe Surface Disinfectant Cleaner
	Professional Disposables Inc.	P03672	Easy Screen™ Pre-saturated Task Wipe with Alcohol, Non-sterile 6x9
	Professional Disposables Inc.	P25372	Sani-Cloth® Prime Germicidal Wipe Surface Disinfectant Cleaner
	Healthlink	30824	Clorox Healthcare® Hydrogen Peroxide Wipe w/Cherry Almond Scent



Log in to **McKesson SupplyManagerSM** to order products.



Diagnosis

Diagnosing sepsis remains a key challenge. **Early diagnosis can be difficult** because the signs and symptoms of sepsis may be attributed to other causes.

- A variety of tests can be ordered to identify the underlying infection, including those for blood, urine and wound secretion.
- A quick sepsis diagnosis can support effective treatment and help improve survival rates.

Having lab protocols in place can help clinicians be proactive and **improve quality of care**. Receiving faster lab results allows for **prompt evaluation** of patient condition, helping reduce readmissions, decrease length of stay and better manage patients at high risk for readmission.

McKesson Medical-Surgical offers several lab testing products to help provide quicker diagnostic results.

Ready to move beyond CLIA waived testing?

*If you are ready to expand
your testing capabilities from
CLIA waived to CLIA moderately
complex, our team of experts
at MedSol can provide the
support you need.*



Learn more at:
mms.mckesson.com/medsol



Diagnosis

Sepsis Clinical Diagnosis Guidelines

Pre-Sepsis Infection	Suspected Infection & 2> SIRS* Criteria	Sepsis
<ul style="list-style-type: none"> • New onset of fever/chills (temp > 101.5, WBC > 12K), Patient currently on antibiotic, Cough/SOB, Cellulitis/Wound Drainage, Weakness • If 1 SIRS criteria met begin Screen: Urine Culture, CBC w diff, Chest X-ray, Basic Metabolic Profile • Educate Resident/family about status, Review Advance Directives 	<ul style="list-style-type: none"> • New onset of fever/chills (temp > 101.5, WBC > 12K), Pulse > 100, BP Systolic < 100 or mmHg or systolic blood pressure fall > 40 mmHg, Respiratory Rate > 20–25 / SpO2 < 90%, Altered mental state • If 2 SIRS criteria are met begin Treatment: Temp or WBC change must be one of two criteria: CBC w diff, lactate level, blood cultures 	<ul style="list-style-type: none"> • Monitor for progression into Multisystem Organ Dysfunction Syndrome, Progression of symptoms despite treatment, Tissue hypoperfusion – Lactate > 2.0 mmol/L, Urine output < 400ml in 24 hrs, Systolic BP < 90 despite IV fluids or systolic blood pressure fall > 40 mmHg from baseline, Altered mental state • If 3 SIRS or more criteria Transfer: Consider transferring to another level of care – acute, palliative, or hospice

Systemic Inflammatory Response Syndrome (SIRS) was developed based on clinical and laboratory abnormalities to define a set of clinical parameters for early identification of sepsis. Earlier recognition, more timely management, and aggressive treatment protocol is necessary to prevent progression to severe sepsis.



Diagnosis

Home Care Adult Sepsis Screening Flow Chart

Follow these steps to better diagnose sepsis in home care patients.

Step 1: Home Visit

Nurse completes an Adult Sepsis Screening Assessment for each home visit by asking the following questions:

1. *Does the patient have a suspicion for infection?*
2. *Does the patient have 2 or more systemic criteria present for sepsis?*
3. *Is there at least one new Sepsis related organ dysfunction criteria present?*

Based on the answers from Step 1, see the appropriate follow-up response in Step 2.



Diagnosis

Step 2: Follow-Up

Answers to 1, 2, & 3 are "No"

STOP
Complete a new
Adult Sepsis
Screen
Assessment
at next
home visit

Answers to 1 is "Yes" but
2 and 3 are "No"

**PATIENT MEETS
CRITERIA FOR
INFECTION**
Educate patient on
signs and symptoms
of sepsis

Answers to 2 and/or
3 are "Yes"

**PATIENT MEETS
CRITERIA FOR MD
NOTIFICATION**
Document findings,
educate patient on
signs and symptoms
of sepsis
and notify MD

Answers to 1 & 2 are "Yes"
but 3 is "No"

**PATIENT MEETS
CRITERIA FOR
SEPSIS**
Document findings,
educate patient on
signs and symptoms of
sepsis and treatment,
notify MD and obtain
order to draw CBC

Answers to 1, 2 & 3 are "Yes"




**PATIENT MEETS
CRITERIA FOR
SEVERE SEPSIS**
Document findings,
educate patient on signs
and symptoms of sepsis
and treatment, notify
provider, patient to be
transported to the
emergency department

Step 3: Interventions

If needed, refer to Sepsis Screening – SBAR Form for determination of interventions.







Diagnosis

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
LAB TESTS			
	Abbott Point Of Care	04J48-50	Distribution Kit, i-STAT Moderate w/Downloader D/S
	Abbott Point of Care	09P3125	Cartridge, i-STAT Chem 8+ crd (25/BX)
	Abbott Point of Care	03P8550	Cartridge, i-STAT CG4 Lactate CRD (25/BX)
	McKesson	900MCKSP	Starter Package, Hemoglobin Analyzer Kit w/1 BG Microcuvette
	McKesson	900-100MCK	Microcuvette for Hemoglobin Analyzer
	Roche	4837975001	Blood Coagulation Meter Kit CoaguChek® XS 8 µL Sample
	Roche	04625315160	Test Strip, PT CoaguChek® XS PT Prof 2x24 (48/EA)



Diagnosis

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
LAB TESTS			
	Arkray	500001	Assure® Blood Glucose Meter
	Arkray	500050	Assure® Platinum Blood Glucose Test Strip 50/BX
	McKesson	121-10SGPROMO5	Analyzer/Test Strip Kit, Urine Promo (5VL/CS)
	McKesson	121-10SG	Urine Test Strip, 10SG F/121-120ANALYZ (100/VL 12V)
	McKesson	121-071	Control, Urine Dipper LEV1&2 12 ml (4/BX)
INDICATORS			
	Welch Allyn	71WT-B	Welch Allyn Connex® Spot Monitor
	Welch Allyn	H-BP100SBP	B/P Monitor for Home Use 1Tube Child/Adult






Diagnosis

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
INDICATORS			
	McKesson	01-768-641-11ABKGM	Adult Sphyg/Sprague B/P Kit, LF Black
	McKesson	01-670BKGM	Lumeon® Classic Stethoscope Dbl Sided Chestpiece 28" Black
	3M	2201	Littmann® Classic Stethoscope II S.E. Dbl Sided Chestpiece 28" Black
	Mabis	10-448-130	Disposable Stethoscope Dispos-A-Scope® Yellow 1-Tube 30"
	McKesson	16-93651	Handheld Finger Pulse Oximeter



Diagnosis

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
	Health O Meter	895KLT	Floor Scale, Digital Audio Display 550 lbs. Battery Operated
	Health O Meter	1100KL	Scale, 3 Sided Hand Rail Bariatric
	Health O Meter	500KL	Scale, Physician Dig w/Ht Rod 500 lb
	Health O Meter	895KLT	Scale, Digital Floor Talking Bilingual 550 lb CAP
	McKesson	16-415GMHT	Oral Digital Thermometer
	ADC	427	Adtemp™ Digital Temporal Thermometer Infrared Probe Handheld



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Treatment

Sepsis can be identified based on specific screening and diagnostic criteria.

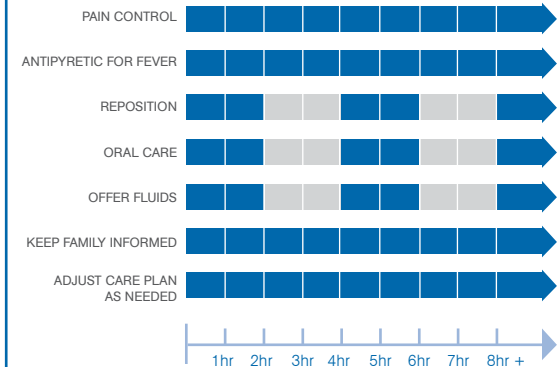
Stay in Facility

Establish IV access for the following:




- IV normal saline 0.9% normal saline/sodium chloride @ 30ml/kg if BP <100
- Administer IV, IM or PO antibiotics
- Comfort Care Measures

We offer an array of products and solutions to help prevent and treat sepsis. Speak to your McKesson Account Manager about the resources we have to support quality care. You may also refer to the information found in this resource guide.

Comfort Care Measures





Treatment

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
IV HYDRATION			
	McKesson	25-8821	IV Start Kit, w/Tegaderm STR LF
	EMED Technologies	SUB-109-G24	SUBQ Infusion Set SUB-Q 24 g 9 mm 36" Tubing w/o Port
	EMED Technologies	SUB-400	SUBQ Infusion Set SUB-Q 27 g 6 mm 36" Tubing Bifur w/o Port
	EMED Technologies	SUB-250	SUBQ Infusion Set SUB-Q 27 g 6 mm 36" Tubing w/o Port
	Norfolk Medical Products	HDC2500	Aqua-C Hydration System Hypodermoclysis



Treatment

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
IV HYDRATION			
	B. Braun	L8000	IV Solution Normal Saline 0.9% 1000 cc
	B. Braun	L8001	IV Solution Normal Saline 0.9% 500 cc
	B. Braun	S8004-5384	IV Solution Normal Saline 0.9% 50 cc
	Hospira	798309	IV Solutions Sodium Chloride 0.9% 1000 ml Bag Preservative Free
	Hospira	798302	IV Solutions Sodium Chloride 0.9% 250 ml Bag Preservative Free
	Baxter	2B1324X	IV Solutions Sodium Chloride 0.9% 1000 ml Bag Preservative Free
	Baxter	2B1323Q	IV Solutions Sodium Chloride 0.9% 500 ml Bag Preservative Free
	Baxter	2B1322Q	IV Solutions Sodium Chloride 0.9% 250 ml Bag Preservative Free
	B. Braun	352894	IV Admin Set, Safeday 15DPM 2 Port CKVLV 106"
	B. Braun	473438	Extension Set 8" Tubing – 1 Port 0.61 Priming Volume DEHP-Free
	Hospira	1468728	Primary Plumset™ 15 Drops/ml Drip Rate 103" Tubing 2 Port
	Baxter	2C8519	Clearlink™ Administration Set 10 Drops/ml Drip Rate 113" 2 Port



Treatment

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
IV HYDRATION			
	B. Braun	4251652-02	Introcan Safety® Peripheral IV CATH 22 g 1" Sliding Safety Needle
	B. Braun	4251628-02	Introcan Safety® Peripheral IV CATH 20 g 1" Sliding Safety Needle
	B. Braun	4252500-02	Introcan Safety® Peripheral IV CATH 24 g 3/4" Sliding Safety Needle
	Bard	IV0520	Statlock® Ultra IV Catheter Stabilization Device



Treatment

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
ORAL HYDRATION			
	Kent Precision Foods	J585-C6800	Thickened Water Thick-It® AquaCareH2O® 8 oz. Bottle Unflavored Ready to Use Nectar
	Kent Precision Foods	L9044	Thickened Water Thick-It® AquaCareH2O® 8 oz Bottle Unflavored Ready to Use Nectar
	Kent Precision Foods	X380-MC600	Electrolyte Replenishment Drink Mix Sqwincher Powder Pack™ Fruit Punch Flavor 9.53 oz
	Kent Precision Foods	X397-MD600	Electrolyte Replenishment Drink Mix Sqwincher Zero Grape Flavor 1.76 oz
IV ANTIBIOTICS			
	APP Pharmaceuticals	63323040220	Aztreonam, SDV 2 gm/30 ml (10/CT) APPNOV
	Pharma/Amneal Bio	70121145307	Meropenem, VL 1 g/30 ml (10/CT)
	Pharma/Amneal Bio	70121145407	Meropenem, VL 500 mg/20 ml (10/CT)
	APP Pharmaceuticals	63323032225	Imipenem Cilastatin SOD, SDV 500 mg/20 ml (25/B)
	Fresenius USA	63323096010	Tigecycline, SDV 50 mg/10 ml (10/CT)




Treatment

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
	IV ANTIBIOTICS		
	Hospira	409781124	Metronidazole, SDV 500 mg/100 ml (24/CS)
	Akorn	17478010720	Levofloxacin, VL 25 mg/20 ml
	APP Pharmaceuticals	63323040120	Aztreonam, SDV 1 gm/20 ml (10/CT) APPNOV
	Sagent Pharmaceuticals	25021012250	Cefepime HCL, VL 2 gm/20 ml (10/CT) 9SAGPH
	Sagent Pharmaceuticals	25021012120	Cefepime HCL, VL 1 gm/20 ml (10/CT) 9SAGPH
	West Ward Pharmaceuticals	143985925	Ceftriaxone, VL PDR 250 mg/10 ml (25/CT) 9 West
	Sandoz	781320785	Ceftriaxone, VL 500 mg/15 ml
Sandoz	781320895	Ceftriaxone Sod, VL 1 gm (10/CT)	



Treatment

	MANUFACTURER	MANUFACTURER #	ITEM DESCRIPTION
PAIN RELIEF			
	McKesson	60-941-01	Ibuprofen, Tab 200 mg
	McKesson	60-921-01	Aspirin, 325 mg EC Tab
	McKesson	60-201-01	Acetaminophen, 500 mg Tab



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For more information on the McKesson Readmissions Resource™, visit mms.mckesson.com/readmissions-care.

Have additional questions?

Contact our Clinical Resource Team at readmissionsresourceinfo@mckesson.com.

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2019-1010