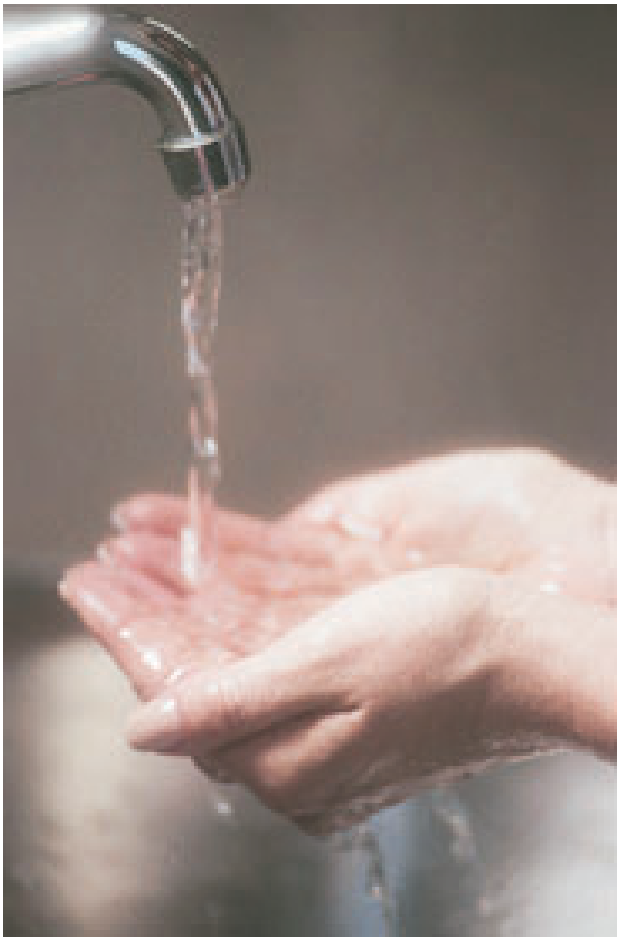


Recommended Infection Control Practices for Hemodialysis Units§

Infection Control Precautions for All Patients

- Wear disposable gloves when caring for the patient or touching the patient's equipment at the dialysis station; remove gloves and wash hands between each patient or station.
- Items taken into the dialysis station should either be disposed of, dedicated for use only on a single patient, or cleaned and disinfected before being taken to a common clean area or used on another patient.
 - Nondisposable items that cannot be cleaned and disinfected (e.g., adhesive tape, cloth-covered blood pressure cuffs) should be dedicated for use only on a single patient.
 - Unused medications (including multiple dose vials containing diluents) or supplies (e.g., syringes, alcohol swabs) taken to the patient's station should be used only for that patient and should not be returned to a common clean area or used on other patients.
- When multiple dose medication vials are used (including vials containing diluents), prepare individual patient doses in a clean (centralized) area away from dialysis stations and deliver separately to each patient. Do not carry multiple dose medication vials from station to station.
- Do not use common medication carts to deliver medications to patients. Do not carry medication vials, syringes, alcohol swabs, or supplies in pockets. If trays are used to deliver medications to individual patients, they must be cleaned between patients.
- Clean areas should be clearly designated for the preparation, handling, and storage of medications and unused supplies and equipment. Clean areas should be clearly separated from contaminated areas where used supplies and equipment are handled. Do not handle and store medications or clean supplies in the same or an adjacent area to where used equipment or blood samples are handled.
- Use external venous and arterial pressure transducer filters/protectors for each patient treatment to prevent blood contamination of the dialysis machines' pressure monitors. Change filters/protectors between each patient treatment, and do not reuse them. Internal transducer filters do not need to be changed routinely between patients.
- Clean and disinfect the dialysis station (e.g., chairs, beds, tables, machines) between patients.
 - Give special attention to cleaning control panels on the dialysis machines and other surfaces that are frequently touched and potentially contaminated with patients' blood.
 - Discard all fluid and clean and disinfect all surfaces and containers associated with the prime waste (including buckets attached to the machines).
- For dialyzers and blood tubing that will be reprocessed, cap dialyzer ports and clamp tubing. Place all used dialyzers and tubing in leakproof containers for transport from station to reprocessing or disposal area.



Hepatitis B Vaccination

- Vaccinate all susceptible patients against hepatitis B.
- Test for anti-HBs 1-2 months after last dose.
 - If anti-HBs is <10 mIU/mL, consider patient susceptible, revaccinate with an additional three doses, and retest for anti-HBs.
 - If anti-HBs is ≥10 mIU/mL, consider patient immune, and retest annually.
 - Give booster dose of vaccine if anti-HBs declines to <10 mIU/mL and continue to retest annually.



Management of HBsAg-Positive Patients

- Follow infection control practices for hemodialysis units for all patients.
- Dialyze HBsAg-positive patients in a separate room using separate machines, equipment, instruments, and supplies.
- Staff members caring for HBsAg-positive patients should not care for HBV-susceptible patients at the same time (e.g., during the same shift or during patient changeover).

Schedule for Routine Testing for Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) Infections				
Patient Status	On Admission	Monthly	Semiannual	Annual
All patients	HBsAg,* Anti-HBc*(total), Anti-HBs,* Anti-HCV, ALT†			
HBV-susceptible, including nonresponders to vaccine		HBsAg		
Anti-HBs positive (≥ 10 mIU/mL), anti-HBc negative				Anti-HBs
Anti-HBs and anti-HBc positive		No additional HBV testing needed		
Anti-HCV negative		ALT	Anti-HCV	
*Results of HBV testing should be known before the patient begins dialysis. †HBsAg=hepatitis B surface antigen; Anti-HBc=antibody to hepatitis B core antigen; Anti-HBs=antibody to hepatitis B surface antigen; Anti-HCV=antibody to hepatitis C virus; ALT=alanine aminotransferase.				

Pharmacia
pGEK-2T
or pGEK-2Tc
Total time: 10 min

in pGEK
C or N terminal segments (consider that urethane)
2-23-73

PCR #	Size of DNA fragments	Primer #	Comments
#1	843-374 = 467 bp	47, 48	HR N-term
#2	644-105 = 539 bp	49, 50	HR2 N-term
#3	2421-1780 = 441 bp	51, 52	HR2, 15' C-term
#4	732-348 = 384 bp	53, 54	OCNC N-term
#5	208-147 = 571 bp	55, 56	CHP-binding
#6	92-1576 = 516 bp	57, 58	HR CN-binding
#7	21-1546 = 887 bp	59, 60	HR C-terminal
#8	51-710 = 1121 bp	61, 62	HIC ID C-term
#9	2-7 = 854 bp	63, 65	OCNC C-terminal

CT = 10 min
#4 = 10 min
#5 = 21 min
#6 = 21 min
#7 = 21 min
#8 = 21 min
#9 = 21 min

post-grad, recovery
does not develop completely
(50)

HR N-term
HR2 N-term
HR2, 15' C-term
OCNC N-term
CHP-binding
HR CN-binding
HR C-terminal
HIC ID C-term
OCNC C-terminal

HR N-term
HR2 N-term
HR2, 15' C-term
OCNC N-term
CHP-binding
HR CN-binding
HR C-terminal
HIC ID C-term
OCNC C-terminal