Table 11.1. The 2008 Surveillance Case Definition for HIV Infection among Adults and Adolescents (Aged ≥13 Years), United States, 2008[1]

Stage	Laboratory Evidence	Clinical Evidence
Stage 1	Laboratory confirmation of HIV infection *and* CD4+ T-lymphocyte count of ≥500 cells/μL or CD4+ T-lymphocyte percentage of ≥29	None required (but no AIDS-defining conditions)
Stage 2	Laboratory confirmation of HIV infection *and* CD4+ T-lymphocyte count of 200–499 cells/μL or CD4+ T-lymphocyte percentage of 14–28	None required (but no AIDS-defining conditions)
Stage 3 (AIDS)	Laboratory confirmation of HIV infection *and* CD4+ T-lymphocyte count of <200 cells/μL or CD4+ T-lymphocyte percentage of <14	*or* documentation of an AIDS-defining condition (with laboratory confirmation of HIV infection)[b]
Stage unknown[a]	Laboratory confirmation of HIV infection *and* no information on CD4+ T-lymphocyte count or percentage	*and* no information on the presence of AIDS-defining conditions

Laboratory confirmation of HIV infection from either (1) positive result from an HIV antibody screening test (e.g., reactive enzyme immunoassay [EIA]) confirmed by a positive result from a supplemental HIV antibody test (e.g., Western blot or indirect immunofluorescence assay test) or (2) positive result or report of a detectable quantity (i.e., within the established limits of the laboratory test) from any of the following HIV virological (i.e., non-antibody) tests: HIV nucleic acid (DNA or RNA) detection test (e.g., polymerase chain reaction [PCR]); HIV p24 antigen test, including neutralization assay; HIV isolation (viral culture).

[a] Every effort should be made to report CD4+ T-lymphocyte counts or percentages and the presence of AIDS-defining conditions at the time of diagnosis.

[b] Documentation of an AIDS-defining condition supersedes a CD4+ T-lymphocyte count of ≥200 cells/μL and a CD4+ T-lymphocyte percentage of total lymphocytes of ≥14. Definitive diagnostic methods for these conditions are available in Appendix C of the 1993 revised HIV classification system and the expanded AIDS case definition and from the National Notifiable Diseases Surveillance System.

Table 11.2. Treatment of Oral Manifestations of HIV

Oral Manifestation	Medication: Unit Dose/ Formulation	Prescribing Information
Oral candidiasis	Nystatin (Mycostatin®)	
	100,000 u/mL oral suspension	2–5 mL QID, rinse × 2 minutes and swallow for 10–14 days
	200,000 u pastille	1–2 pastilles dissolved slowly 4–5 × day for 10–14 days
	Clotrimazole (Mycelex®)	
	10 mg troche	Dissolve 1 troche in the mouth 5 × day for 10–14 days
	Ketoconazole (Nizoral®)	
	200 mg tablets	2 tablets stat, then 1 tablet QD with meal for 10–14 days
	Fluconazole (Diflucan®)	
	100 mg tablets	2 tablets stat, then 1 tablet QD for 10–14 days
	Itraconazole (Sporanox®)	
	100 mg capsules	2 capsules after meals QD for 10–14 days
	Miconazole (Oravig™)	
	50 mg buccal tablet	1 tablet applied to canine fossa QD for 14 days
Angular chelitis	Nystatin-triamcinolone acetonide (Mycolog II®) ointment	
	2% ketoconazole cream	Apply to affected areas after meals and QHS as needed
	1% clotrimazole ointment	
	2% miconazole ointment	

(*Continued*)

Table 11.2. (*Continued*)

Oral Manifestation	Medication: Unit Dose/ Formulation	Prescribing Information
Recurrent herpes simplex virus infection	Acyclovir (Zovirax®) 200 mg tablet	1–3 tablets 5 × day for 10 days
	Valacyclovir (Valtrex®) 500 mg caplet	2 caplets TID for 10 days
Herpes zoster (shingles)	Acyclovir (Zovirax®) 800 mg tablet	1 tablet 5 × day for 10 days
	Valacyclovir (Valtrex®) 500 mg caplet	2 caplets TID for 10 days
	Famciclovir (Famvir®) 125 mg tablet	4 tablets TID for 10 days
Linear gingival erythema	Chlorhexidine (Peridex®, Periogard®) 0.12% oral rinse	½ ounce BID rinse × 30 seconds and spit for 14 days
Necrotizing ulcerative periodontitis	Chlorhexidine (Peridex®, Periogard®) 0.12% oral rinse	½ ounce BID rinse × 30 seconds and spit for 14 days
	Metronidazole (Flagyl®) 250–500 mg tablet	1 tablet QID for 7 days
	Clindamycin (Cleocin®) 150 mg capsule	1 capsule QID for 7 days
	Amoxicillin/clavulanate (Augmentin®) 250–500 mg capsule	1 capsule TID for 7 days
Major aphthous ulcers	Fluocinonide (Lidex®) 0.05% ointment mixed 50–50 with Orabase®	Apply coat to ulcer QID for 7–14 days
	Clobetasol proprionate (Temovate®) 0.05% ointment mixed 50–50 with Orabase®	Apply coat to ulcer QID for 7–14 days
	Triamcinalone acetonide (Kenalog®) 3 mg/mL intralesional injection	1.3-mL injection every third day for 12 days
	Dexamethasone (Decadron®) Elixir 0.5 mg/5 mL	5-mL oral rinse and spit 3–4 × day OR 15-mL oral rinse and swallow QID for 7 days
	Prednisone (Deltasone®) 20 mg tablet	1 tablet TID for 7 days
	Thalidomide (Thalomid®) 100 mg tablet	2 tablet BID for 5 days, then 2 tablet QD for 9 days

u, unit; mg, milligram; mL, milliliter; QD, once daily; QHS, at bedtime; BID, twice daily; TID, three times daily; QID, four times daily.

Table 11.3. Antiretriviral Drugs and Interactions/Precautions for Drug Prescribing in Dentistry[a] and Drug Toxicities of Concern for Dental Practice (Resource: Lexi-Comp Online, Accessed December 26, 2011)

Antiretroviral Drugs Brand Name (Generic)[a]	Interactions and Precautions for Drug Prescribing in Dental Practice	Drug Toxicities of Concern for Dental Practice
Nucleoside/nucleotide reverse transcriptase inhibitors (NRTIs)		
Combivir® zidovudine + lamivudine	See Retrovir®	See Retrovir® and Epivir®
Emtriva® emtricitabine	n/a	Hyperpigmentation
Epivir® lamivudine (3TC)	n/a	Neutropenia, thrombocytopenia
Epzicom® abacavir + lamivudine	n/a	See Epivir® and Ziagen®
Retrovir® zidovudine (AZT)	Coadministration with clarithromycin enhances myelosuppressive effect and decreases zidovudine concentration; fluconazole may decrease the metabolism of zidovudine	Anemia, neutropenia, oral mucosal pigmentation, taste perversion, dysphagia, oral ulcers
Trizavir® abacavir + zidovudine + lamivudine	See Retrovir®	See Retrovir®, Epivir®, and Ziagen®
Truvada® tenofovir DF + emtricitabine	See Viread®	See Emtriva® and Viread®
Videx® didanosine (ddI)	Nonenteric coated didanosine may decrease the absorption of azole antifungals	Xerostomia, peripheral neuropathy
Viread® tenofovir (TNF)	Avoid acyclovir and valacyclovir that decrease excretion of tenofovir	n/a
Zerit® stavudine (d4T)	n/a	Peripheral neuropathy, exacerbates bone marrow suppression
Ziagen® abacavir (ABC)	n/a	Oral ulceration, erythema multiforme, paresthesias
Protease inhibitors		
Agenerase® amprenavir (APV)	*Benzodiazepine precaution, azole antifungal precaution, macrolide antibiotic precaution*, avoid dexamethasone that decreases amprenavir effect, avoid metronidazole with amprenavir oral solution at risk of propylene glycol toxicity	n/a

(*Continued*)

Table 11.3. (*Continued*)

Antiretroviral Drugs Brand Name (Generic)[a]	Interactions and Precautions for Drug Prescribing in Dental Practice	Drug Toxicities of Concern for Dental Practice
Aptivus® tipranavir (TPV)	*Benzodiazepine precaution, azole antifungal precaution, macrolide antibiotic precaution*	Increased bleeding in hemophiliacs, may impair platelet aggregation and increase bleeding risk
Crixivan® indinavir (IDV)	*Benzodiazepine precaution, azole antifungal precaution, macrolide antibiotic precaution*, may increase concentration of fentanyl	Increased bleedng in hemophiliacs, anemia
Invirase® saquinavir (SQV)	*Benzodiazepine precaution, azole antifungal precaution, macrolide antibiotic precaution*	Increased bleedng in hemophiliacs, taste alteration, oral ulceration, dysphagia, neutropenia, thrombocytopenia, anemia
Kaletra® lopinavir + ritonavir (LPV/RTV)	See Norvir® and *benzodiazepine precaution*; increases levels of clarithromycin, ketoconazole, and itraconazole; decreases level of voriconazole; diminishes therapeutic effect of tramadol; metronidazole may interact with alcohol in Kaletra® oral solution	See Norvir® and increased bleeding in hemophiliacs, neutropenia, ulcerative stomatitis, xerostomia, facial edema
Lexiva® fosamprenavir (FPV)	*Benzodiazepine precaution, azole antifungal precaution, macrolide antibiotic precaution*, may enhance the toxic effect of meperidine	Increased bleeding in hemophiliacs, cushingoid appearance, erythema multiforme, neutropenia, hemolytic anemia
Norvir® ritonavir (RTV)	*Benzodiazepine precaution*; avoid meperidine, propoxyphene, piroxicam; ketoconazole increases ritonavir levels; clarithromycin and erythromycin reduce ritonavir levels; ritonavir may increase levels of prednisone; metronidazole may enhance adverse effects of ritonavir	Increased bleeding in hemophiliacs, may cause cushingoid appearance, paresthesias, taste perversion, parotid lipomatosis
Reyataz® atazanavir (ATV)	*Benzodiazepine precaution, azole antifungal precaution, macrolide antibiotic precaution*, increases serum concentration of fentanyl, may enhance the toxic effect of meperidine	Increased bleeding in hemophiliacs, may cause cushingoid appearance, erythema multiforme, neutropenia, anemia, thrombocytopenia

Table 11.3. (*Continued*)

Antiretroviral Drugs Brand Name (Generic)[a]	Interactions and Precautions for Drug Prescribing in Dental Practice	Drug Toxicities of Concern for Dental Practice
Prezista® darunavir (DRV)	*Benzodiazepine precaution, azole antifungal precaution, macrolide antibiotic precaution*, darunavir may increase the serum concentration of topical lidocaine, may enhance the toxic effect of meperidine	Increased bleeding in hemophiliacs, may cause cushingoid appearance, erythema multiforme, oral lesions, facial edema, osteonecrosis, pancytopenia, paresthesias, xerostomia
Viracept® nelfinavir (NFV)	*Benzodiazepine precaution, azole antifungal precaution, macrolide antibiotic precaution*, increases the serum concentration of fentanyl, may enhance the toxic effect of meperidine	Increased bleeding in hemophiliacs, may cause cushingoid appearance, neutropenia, thrombocytopenia, anemia, paresthesias, mouth ulcers
Non-nucleoside reverse transcriptase inhibitors (NNRTIs)		
Complera™ rilpivirine + tenofovir DF + emtricitabine	See Truvada® and Edurant™	See Truvada® and Edurant™
Edurant™ rilpivirine	Avoid dexamethasone that decreases rilipivirine effect and decrease dexamethasone effect; concomitant use with ketoconazole, fluconazole, or itraconazole reduces azole concentration and elevates rilpivirine concentration; avoid erythromycin and clarithromycin	n/a
Intelence® etravirine	May decrease serum concentration of itraconazole and ketoconazole, may increase serum concentration of voriconazole, decreases serum concentration of clarithromycin	May cause cushingoid appearance, erythema multiforme, anemia, paresthesias, stomatitis, xerostomia
Rescriptor® delavirdine	May increase serum concentration of fentanyl, may diminish therapeutic effect of tramadol	May cause cushingoid appearance, erythema multiforme, anemia, thrombocytopenia, pancytopenia, mouth ulcers, gum hemorrhage

(*Continued*)

Table 11.3. (*Continued*)

Antiretroviral Drugs Brand Name (Generic)[a]	Interactions and Precautions for Drug Prescribing in Dental Practice	Drug Toxicities of Concern for Dental Practice
Sustiva® efavirenz	*Benzodiazepine precaution*, may increase serum concentration of fentanyl, decreased concentration of itraconazole and voriconazole, voriconazole may increase efavirenz concentration	May cause cushingoid appearance, abnormal taste, erythema multiforme, paresthesias, neutropenia
Viramune® nevirapine	Decreased concentration of voriconazole, voriconazole may increase nevirapine concentration	Oral ulceration, erythema multiforme
	Entry inhibitors	
Fuzeon® enfuviritide (ENF, T-20)	n/a	Neutropenia, thrombocytopenia, xerostomia, taste disturbance
Selzentry® maraviroc	Avoid ketoconazole, itraconazole, clarithromycin	Neutropenia, anemia, herpes exacerbation, stomatitis, osteonecrosis
	Integrase inhibitor	
Isentress® raltegravir	n/a	Neutropenia, thrombocytopenia, facial wasting

[a] This list is constantly changing with new medications and new drug interactions and toxicities reported. The dentist should consult with a contemporary electronic drug interaction program, pharmacist, or the treating physician before prescribing drugs. *Benzodiazepine precaution*, avoid midazolam, triazolam, diazepam, and/or alprazolam: at risk for increased and prolonged sedation and respiratory depression; *azole antifungal precaution*, concomitant administration with azole antifungals increases levels of both drugs; *macrolide antibiotic precaution*, concomitant administration with macrolide antibiotics (erythromycin, azithromycin, and/or clarithromycin) increases serum concentration of both drugs and decreases antibiotic effectiveness; n/a, not applicable.

Table 11.4. Management of Occupational Blood Exposures[11]

Provide immediate care to the exposure site	Wash wounds and skin with soap and water Flush mucous membranes with water
Reporting of exposure	Access to medical provider for testing Access to postexposure protocol Documentation for workers' compensation or disability claims
Determine risk associated with exposure by:	Type of fluid (e.g., blood, visibly bloody fluid, other potentially infectious fluid or tissue, and concentrated virus) Type of exposure (i.e., percutaneous injury, mucous membrane or nonintact skin exposure, and bites resulting in blood exposure)
Evaluate exposure source	Assess the risk of infection using available information Test known sources for HBsAg, anti-HCV, and HIV antibody (consider using rapid testing) For unknown sources, assess risk of exposure to HBV, HCV, or HIV infection Do not test discarded needles or syringes for virus contamination
Evaluate exposed person	Assess immune status for HBV infection (i.e., by history of HBV vaccination and vaccine response)
Give PEP for exposures posing risk of infection transmission.	HBV—If source patient HBsAg+ or unknown, check HBsAb status of exposed. If exposed is unvaccinated or nonresponder (<10 mLU/mL): HBIGx1 and initiate hepatitis B (HB) vaccination. HCV—PEP not recommended HIV—PEP recommendations depend on HIV disease severity of source patient and severity of occupational injury. Initiate PEP as soon as possible, preferably within hours of exposure. Offer pregnancy testing to all women of childbearing age not known to be pregnant. Seek expert consultation if viral resistance is suspected. Administer PEP for 4 weeks if tolerated.
Perform follow-up testing and provide counseling.	Advise exposed persons to seek medical evaluation for any acute illness occurring during follow-up.
HBV exposures	Perform follow-up HBsAb testing in persons who receive HBV vaccine. Test for anti-HBs 1–2 months after last dose of vaccine. HBsAb response to vaccine cannot be ascertained if HBIG was received in the previous 3–4 months.
HCV exposures	Perform baseline and follow-up testing for anti-HCV and ALT 4–6 months after exposure. Perform HCV RNA at 4–6 weeks if earlier diagnosis of HCV infection is desired. Confirm repeatedly reactive anti-HCV EIAs with supplemental tests.
HIV exposures	Perform HIV antibody testing for at least 6 months postexposure (e.g., at baseline, 6 weeks, 3 months, and 6 months). Perform HIV antibody testing if illness compatible with an acute retroviral syndrome occurs. Advise exposed person to use precautions to prevent secondary transmission during the follow-up period. Evaluate exposed person taking PEP within 72 hours after exposure to monitor for drug toxicity for at least 2 weeks.

ALT, alanine amino-transferase; EIAs, enzyme immunoassays; HBIG, hepatitis B immunoglobulin; HBsAg, hepatitis B surface antigen; HBsAb, hepatitis B surface antibody; HBV, hepatitis B virus; HIV, human immunodeficiency virus; anti-HCV, hepatitis C antibody; HCV RNA, hepatitis C virus ribonucleic acid (HCV viral load); PEP, postexposure prophylaxis.