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**Dental Assisting Program**

**Clinical Manual**

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# INTRODUCTION

This manual is designed as a clinical resource and reference guide for dental assisting students in the ***San Joaquin Valley College*** Dental Assisting Program. The student is responsible for all information contained in this manual and will use it as a reference for all clinic procedures. It is, therefore, mandatory that the manual be kept in the Dental Laboratory for use during clinical sessions.

The content of this manual includes a comprehensive description of clinical policies and requirements, evaluation criteria, and specific objectives for the performances of all dental assisting procedures. ***San Joaquin Valley College*** reserves the right to make appropriate changes at any time, should changes in these policies/requirements be deemed necessary. If new policies and/or procedures are created or current policies and/or procedures are changed, faculty will distribute the changes or additions in writing. It is the student’s responsibility to place the new policies and/or procedures in the manual, and/or to replace the old policies or procedures with the new one.

## Overview

The purpose of this manual is to:

* Orient all students, faculty, and staff to:
  + Departmental and clinical objectives, responsibilities, philosophies, policies and procedures.
  + Overall program and specific term expectations of the faculty.
  + The administrative and operational aspects of the clinical facility.
* Guide:
  + Students through the clinical experiences of their dental assisting education.
  + Clinical faculty in facilitating the students’ clinical experiences.

## Clinical Philosophy

The ***San Joaquin Valley College*** Dental Assisting clinic is operated primarily to provide an opportunity for students to integrate and utilize knowledge and skills for the development of professional and clinical competency, and secondarily to provide dental assisting services to the community surrounding the college. The practice of dental assisting requires performance characterized by:

* Acceptance of responsibility
* Integration of knowledge and skills into clinical settings
* Development of clinical competency
* Development of a professional attitude
* Demonstration of ethical and professional practice
* Belief in the importance of the patient as an individual
* Ability to perform responsibilities as an integral part of the dental team

The primary intent of the program is to educate students in dental assisting duties.

# DENTAL ASSISTING PROGRAM CONTACT INFORMATION

## Program Director, Faculty & Staff – [San Diego]

**Dental Assisting Program Director** (619) 426-7582

[San Diego Faculty name]

[Email address]

**Dental Assisting Faculty** (619)426-7582

[San Diego Faculty name]

[Email address]

[San Diego Faculty name]

[Email address]

[San Diego Faculty name]

[Email address]

[San Diego Faculty name]

[Email address]

[San Diego Faculty name]

[Email address]

*Supervising Dentist*

[Email address]

## Student Communication

### E-mail

Students are required to use their free ***SJVC*** email address to communicate with Dental faculty, administrators and other students. Students can access email via Outlook by going to https://infozone.sjvc.edu.

### Bulletin Board

Dental assisting students have a designated area on a bulletin board inside the dental assisting lab where various announcements may be posted.

### Telephone

Students may contact the program director, faculty and staff at the telephone number(s) listed in this manual (see previous page for phone numbers) or on course syllabi.

# PROFESSIONALISM

## Personal Appearance/Dress Code

### *SJVC* Dental Assisting Dress Code

**Uniform**

Students must adhere to the dress code at all times, including off-campus college functions. Wearing hats, caps or any other form of head wear on campus is considered unprofessional, and is, therefore, prohibited, unless included on the listing of approved uniform requirements. Students may make no major alterations to the uniform and must keep it clean and in good repair. Any exceptions to dress code needed to comply with religious requirements must be discussed with the Dean of Student Services.

Students must wear closed-toe nurse type shoes that can be wiped clean. Shoes must be kept clean, in good repair and polished. No cloth shoes are permitted. Students may wear hose or socks which completely cover the ankle so that no bare skin is visible.

Students are required to purchase and wear a lab coat during laboratory classes. The designated full-length clinical gowns are provided for clinical procedures only and are to be worn over scrubs. The gowns are not to be worn outside the Clinic. For extra warmth, long sleeved, white turtlenecks or t-shirts may be worn under scrubs.

Students must exhibit good personal hygiene and limit or avoid the use of perfumes and heavy cosmetics.

**Hair**

DA students must wear hair pulled back *away* from the face and not extending below the lower edge of the collar. Hair must be clean and neatly styled. Dangling side bangs or ponytails that obstruct a student’s or instructor’s view will not be allowed. Ponytails must be secured so they do not fall forward during patient treatment. Facial hair must be clean and neatly groomed.

**Jewelry**

Other than the ears, any visible piercing (to include a tongue ring) is prohibited. No visible neck jewelry is allowed. Religious and medical alert necklaces may be worn on a chain long enough so as not to be visible. Students may wear a *wedding band* and a wristwatch; no bracelets except a medical alert. Hoops or dangling earrings are not acceptable. *One studded post per ear* lobe is allowed. Any other facial or oral jewelry may not be worn on campus, at clinical sites, or at functions representing SJVC.

**Extern and Clinical Sites**

At extern and clinical sites, students are expected to dress in appropriate uniforms. Students must not enter clinical areas smelling of cigarette smoke.

**A student is not permitted to wear his/her uniform at a non-authorized *SJVC* function.**

The designated full-length clinical gowns are provided for clinical sessions only and are to be worn over scrubs. The gowns are not to be worn outside the Clinic. If clinical sites are chilly, long sleeved, white turtlenecks or t-shirts may be worn under scrubs for extra warmth.

**Fingernails**

Fingernails should not extend beyond the fingertips. Fingernail polish and/or artificial nails may not be worn on campus.

## Professional and Ethical Behavior Expectations of the Dental Assisting Student

The ***SJVC*** faculty expects students to be professional and respectful to their patients, classmates, staff, and faculty. Patient confidentiality and compassion are at the cornerstone of care. Students are to discuss private information regarding their patients only with the supervising faculty and/or attending dentist. All patients are to be treated with the utmost professional respect. Any inappropriate behavior demonstrated by patients should be immediately brought to the supervising faculty’s attention.

Students must be professional in their choice of language around patients. Personal conversations with classmates must be kept to a minimum. Students should avoid such comments as, “This is the first time I’ve done this on a patient!”. If a student is unsure about a procedure, the student should not discuss his/her insecurity in front of the patient. The student should speak to his/her supervising instructor discreetly away from the patient.

Students of the ***San Joaquin Valley College*** Dental Assisting Program are expected to abide by moral and ethical standards. *Representative examples are given in the following areas, but evaluation will not necessarily be limited to these examples.*

Examples of professional conduct and judgment include, but are not limited to.

* Placing the patient’s welfare first when implementing patient care.
* Demonstrating concern for the patient’s welfare and comfort.
* Willingness to accept suggestions for improvement and evaluation gracefully.
* Maintaining physical, mental, and emotional composure in all situations.
* Following prescribed treatment plans.
* Abiding by lab rules and regulations (including professional appearance).
* Demonstrating eagerness to learn.
* Demonstrating attitudes of respect, concern and cooperation toward fellow classmates.
* Asking for clarification when uncertain of instructions or task.
* Practicing good personal grooming and hygiene in order to meet clinical aseptic standards.
* Working independently while recognizing his/her limitations.
* Demonstrating sound clinical judgment commensurate with level of experience.
* Demonstrating ability for self-evaluation according to criteria presented in manuals & lectures.
* Maintaining neat and clean working area and sterile instruments.
* Demonstrating honesty with faculty members, patients, and colleagues.
* Showing concern, primarily with quality treatment for patients rather than a quest for grades.
* Providing pertinent, individualized, appropriate information to the patient regarding treatment and prevention of dental disease.

Examples of **unprofessional conduct** and judgment include, but are not limited to:

* Failing to follow good personal grooming and hygiene guidelines.
* Accruing excessive and/or inexcusable absences.
* Behaving in a manner not conducive to the professional clinical atmosphere.
* Failing to use clinic time effectively and efficiently as determined by the program director.

Examples of **critical errors** in professional conduct and judgment include, but are not limited to:

* Showing disrespect to patients, fellow classmates, and faculty or staff (e.g. verbal confrontations, altering patient assignments without permission, distasteful non-verbal or physical gestures).
* Failing to place the patient’s welfare as first priority above clinical requirements that may or may not be needed.
* Failing to maintain physical, mental and emotional composure that may lead to injury to the student, patient or faculty.
* Failing to be honest with patients, faculty, and colleagues.
* Falsifying patient records.

Unprofessional behavior resulting in a critical error will be documented in writing by the faculty member observing the behavior and then given to the Program Director. On the first occurrence, the student will meet with the Program Director who will determine appropriate action to be taken. On the second occurrence, the student will meet with the Program Director and/or Dean of Students. Appropriate action will be determined at that time. On the third occurrence, the student may fail the course.

## 

## *SJVC* Student Rights and Responsibilities

All students enrolled in the dental assisting program must be familiar with and abide by the ***SJVC*** Student Rights and Responsibilities stated in the College Catalog and Student Handbook.

## Attendance

* It is the responsibility of the student to attend all scheduled sessions.
* In the event of an absence due to illness or emergency, the student must notify his/her scheduled patient and instructor in advance.
* Tardiness in excess (lateness of 10 minutes or more) will be documented as unprofessional conduct. Unusual circumstances must be fully documented and will be discussed on an individual basis between the student, instructor, and program director.

# STANDARD OPERATING PROCEDURES FOR THE CLINIC

## Responsibilities of Supervising Dentist

* Be responsible for and in control of the quality, radiation safety, and technical aspects of all x-ray examinations and procedures
* Review Health History/consent forms
* Write prescriptions for full mouth series on patients
* Provide examination, diagnostic, and consultant services
* *May* evaluate student performance

## Responsibilities of Dental Assisting Faculty

* Teach and facilitate the dental assisting process of care
* Ensure maintenance of standard of care
* Evaluate student’s treatment and provide appropriate feedback
* Attend calibration sessions to maintain currency of clinical protocol, instrumentation, and current clinical patient management.
* Provide feedback to Director regarding any concerns related to education or patient treatment

## Responsibilities of Infection Control Officer

The Program Director or designated faculty/staff member may act as the Infection Control Officer.

The infection control officer has many duties that can be roughly divided into 7 areas:  
  
**Written Materials/Information**

* Prepare, review, and update compliance policies, plans, procedures, and practices, including manuals and standard operating procedure lists.
* Ensure that current copies of regulatory and recommending documents are readily available.

**Education and Training**

* Provide initial, annual, and “as per need” health and safety training to practice workers
* Assure that educational materials that support the infection control program are present.
* Provide training to contract employees, such as janitorial services and repair personnel
* Ensure employee attendance at continuing education courses
* Evaluate the quality and effectiveness of training exercises
* Review work restrictions for exposure or infection
* Establish an understanding of engineering and work practices controls and proper use of personal protective equipment

**Record Keeping**

* Prepare work-related injury/illness reporting forms (eg, exposure incident and accident reports)
* Determine appropriate DHCP immunizations (eg, hepatitis B vaccination and refusal forms)
* Maintain OSHA required medical records
* Maintain equipment performance records (eg, sterilization monitoring and emitted water quality)
* Post emergency phone numbers
* Record employee attendance at training sessions and trainer qualifications
* Ensure employee attendance at continuing education courses
* Evaluate the quality and effectiveness of training exercises
* Maintain records concerning the handling of regulated medical waste

**Product Evaluation**

* Develop contact within companies that provide health and safety products and information
* Discuss new products with other DHCP
* Evaluate and implement safer medical devices (self-sheathing needles)
* Provide training for new health and safety materials

**Fire and Emergency**

* Ensure that necessary fire prevention and control equipment are present, identified, and in working order
* Develop and practice fire and emergency plans
* Post escape routes and meeting points outside of the office

**Hazardous Materials Management**

* Ensure awareness of SJVC’s hazard communication plan, the hazards present, the possible risks, and the processes designed to prevent exposure to hazardous chemicals
* Ensure that all hazardous materials are properly labeled and placed on a list
* Assure that employees are familiar with the labeling system
* Obtain materials safety data sheets (MSDS) to ensure that employees can easily find information
* Display warning signs and posters
* Prepare and post step-by-step procedures

**Compliance Monitoring**

* Ensure that employees understand all health and safety policies, plans, and procedures
* Observe employee compliance
* Develop compliance checklists that can be used in lieu of direct observations
* Make certain that an MSDS is present for each hazardous material present within the practice
* Prepare regular health and safety reports and use them to improve compliance performance

References

[**http://www.dentistrytoday.com/infection-control/1315**](http://www.dentistrytoday.com/infection-control/1315)

Palenik CJ. Selecting a safety coordinator. *Dent Econ*. Oct 2002;92:122.

Palenik CJ, Miller CH. Creating the position of office safety coordinator. *Dent Assist*. Mar-Apr 2002;71:10-14.

## Patient Sources

Patients are obtained for the Dental Assisting Program through the following mechanism:

Student Recruitment - Patients recruited personally by a student or referred to a specific student. ***SJVC*** will assist as much as possible to supply patients, but it is ultimately the student’s responsibility.

## Scheduling Appointments

Students are responsible for:

* Scheduling their patients using the practice management software provided by SJVC.
* Checking and scheduling appointments in the computer to avoid double-booking.
* Viewing and updating their appointments regularly and in a timely manner.
* Confirming each patient’s appointment the day before the scheduled appointment.

It is considered unprofessional and poor practice management to move or cancel patient appointments without prior approval and notification.

## Patient Cancellations and Broken Appointments

If patients are late, within the first 5 minutes of the lab session students must inform their instructor their patient is late and whether or not the patient is likely to keep the appointment.

If patients are more than 10 minutes late, students are to call the patient to find out if s/he still plans to keep the appointment. Students must document late arrivals of greater than 10 minutes and broken appointments in the patient’s treatment record under services rendered.Patientsbreaking, canceling, or arriving late for appointments may be dismissed after the third occurrence.

Patients arriving 30 minutes late are subject to rescheduling. It is the student’s responsibility to impress upon the patient the importance of punctuality in order to complete treatment in a timely manner.

If patients are unreachable, scheduled forlate arrival, or are not coming, students are expected to make the most of the clinical experience by spending a significant amount of the clinic time working on their typodont with instructor supervision. At the discretion of the instructor, students may be allowed to:

* Practice instrumentation as assigned on typodont.
* Practice procedures on a student partner (who is also without a patient) splitting the clinic time equally so both students have an opportunity to practice their skills.
* Assist another student(s).
* Act as a student evaluator.
* Practice infection control procedures.
* Support the dental team.

When patients are not available to be seen, faculty and students should plan together an alternative strategy for that day’s session so students have a meaningful learning experience.

## Clinic Maintenance

### Infection Control and Housekeeping

Each student is responsible for proper set-up and clean-up of the dental operatory following guidelines outlined in APPENDIX IX. In addition, students are responsible for performing any light housekeeping duties in their assigned operatory (wiping up spills, dusting off counters, wiping dental light, etc.)

### Reporting Equipment Failure

Equipment failure is to be immediately reported to the instructor assigned to the section in which the failure has occurred. Equipment failure not rectified during the lab session must be relayed to the Program Director in writing stating the unit number and equipment problem. It is the Program Director’s responsibility to coordinate the repair order and completion of necessary repairs.

# 

# *SJVC* POLICIES FOR INFECTION CONTROL

## Minimum Standards for Infection Control at *SJVC* Dental Assisting Laboratory

The following standards are mandated by the Dental Board of California.

Definitions of terms used in this section:

|  |  |  |
| --- | --- | --- |
| 1. | Standard Precautions | A group of infection prevention practices that apply to all patients, regardless of suspected or confirmed infection status, in any setting in which healthcare is delivered. These include: hand hygiene, use of gloves, gown, mask, eye protection, or face shield, depending on the anticipated exposure, and safe handling of sharps. Standard precautions shall be used for care of all patients regardless of their diagnoses or personal infectious status |
| 2. | Critical Items | Confer a high risk for infection if they are contaminated with any microorganism. These include all instruments, devices, and other items used to penetrate soft tissue or bone. |
| 3. | Semi-Critical Items | Instruments, devices and other items that are not used to penetrate soft tissue or bone, but contact oral mucous membranes, non-intact skin or other potentially infectious materials (OPIM). |
| 4. | Non-Critical Items | Instruments, devices, equipment, and surfaces that come in contact with soil, debris, saliva, blood, OPIM and intact skin, but not oral mucous membranes. |
| 5. | Low-Level Disinfection | The least effective disinfection process. It kills some bacteria, some viruses and fungi, but does not kill bacterial spores or mycobacterium tuberculosis var bovis, a laboratory test organism used to classify the strength of disinfectant chemicals. |
| 6. | Intermediate-Level Disinfection | Kills mycobacterium tuberculosis var bovis indicating that many human pathogens are also killed. This process does not necessarily kill spores. |
| 7. | High-Level Disinfection | Kills some, but not necessarily all bacterial spores. This process kills mycobacterium tuberculosis var bovis, bacteria, fungi and viruses. |
| 8. | Germicide | A chemical agent that can be used to disinfect items and surfaces based on the level of contamination. |
| 9. | Sterilization | A validated process used to render a product free of all forms of viable microorganisms. |
| 10. | Pre-cleaning | The removal of bioburden prior to disinfection |
| 11. | Cleaning | The removal of visible soil (e.g., organic and inorganic material) debris and OPIM from objects and surfaces and shall be accomplished manually or mechanically using water with detergents or enzymatic products. |
| 12. | Clinical Contact Surface | Surfaces that are touched by contaminated hands, instruments, devices, or other items while providing dental or medical care or while performing activities that support dental or medical care. (OSAP) |
| 13. | Housekeeping Surface | Environmental surface that is not involved in the direct delivery of dental care (for example, floors, walls). (OSAP) |
| 14. | Personal Protective Equipment (PPE) | (PPE) is specialized clothing or equipment worn or used for protection against a hazard. PPE items may include, but are not limited to, gloves, masks, respiratory devices, protective eyewear and protective attire which are intended to prevent exposure to blood, body fluids, OPIM, and chemicals used for infection control. General work attire such as uniforms, scrubs, pants and shirts, are not considered to be PPE. |
| 15. | Other Potentially Infectious Materials (OPIM) | (OPIM) means any one of the following:  (A) Human body fluids such as saliva in dental procedures and any body fluid that is visibly contaminated with blood and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.  (B) Any unfixed tissue or organ (other than intact skin) from a human, (living or dead).  (C) Any of the following, if known or reasonably likely to contain or be infected with human immunodeficiency virus (HIV), hepatitis B virus (HBV), or hepatitis C virus (HCV):  1. Cell, tissue, or organ cultures from humans or experimental animals;  2. Blood, organs, or other tissues from experimental animals; or  3. Culture medium or other solutions. |
| 16. | Dental Healthcare Personnel (DHCP) | (DHCP), are all paid and non-paid personnel in the dental healthcare setting who might be occupationally exposed to infectious materials, including body substances and contaminated supplies, equipment, environmental surfaces, water, or air. DHCP includes dentists, dental hygienists, dental assistants, dental laboratory technicians (in-office and commercial), students and trainees, contractual personnel, and other persons not directly involved in patient care but potentially exposed to infectious agents (e.g., administrative, clerical, housekeeping, maintenance, or volunteer personnel). |

***SJVC*** will comply with infection control precautions and enforce the following minimum precautions to protect patients and DHCP and to minimize the transmission of pathogens in health care settings as mandated by the California Division of Occupational Safety and Health (Cal/OSHA).

California Code of Regulations Title 16 Section 1005

(1) Standard precautions shall be practiced in the care of all patients.

(2) A written protocol shall be developed, maintained, and periodically updated for proper instrument processing, operatory cleanliness, and management of injuries. The protocol shall be made available to all DHCP at the dental office.

(3) A copy of this regulation shall be conspicuously posted in each dental office.

Personal Protective Equipment:

(4) All DHCP shall wear surgical facemasks in combination with either chin length plastic face shields or protective eyewear whenever there is potential for aerosol spray, splashing or spattering of the following: droplet nuclei, blood, chemical or germicidal agents or OPIM. Chemical-resistant utility gloves and appropriate, task specific PPE shall be worn when handling hazardous chemicals. After each patient treatment, masks shall be changed and disposed. After each patient treatment, face shields and protective eyewear shall be cleaned, disinfected, or disposed.

(5) Protective attire shall be worn for disinfection, sterilization, and housekeeping procedures involving the use of germicides or handling contaminated items. All DHCP shall wear reusable or disposable protective attire whenever there is a potential for aerosol spray, splashing or spattering of blood, OPIM, or chemicals and germicidal agents. Protective attire must be changed daily or between patients if they should become moist or visibly soiled. All PPE used during patient care shall be removed when leaving laboratories or areas of patient care activities. Reusable gowns shall be laundered in accordance with Cal/OSHA Bloodborne Pathogens Standards (Title 8, Cal. Code Regs., section 5193).

Hand Hygiene:

(6) All DHCP shall thoroughly wash their hands with soap and water at the start and end of each workday. DHCP shall wash contaminated or visibly soiled hands with soap and water and put on new gloves before treating each patient. If hands are not visibly soiled or contaminated an alcohol based hand rub may be used as an alternative to soap and water. Hands shall be thoroughly dried before donning gloves in order to prevent promotion of bacterial growth and washed again immediately after glove removal. A DHCP shall refrain from providing direct patient care if hand conditions are present that may render DHCP or patients more susceptible to opportunistic infection or exposure.

(7) All DHCP who have exudative lesions or weeping dermatitis of the hand shall refrain from all direct patient care and from handling patient care equipment until the condition resolves.

Gloves:

(8) Medical exam gloves shall be worn whenever there is contact with mucous membranes, blood, OPIM, and during all pre-clinical, clinical, post-clinical, and laboratory procedures. When processing contaminated sharp instruments, needles, and devices, DHCP shall wear heavy-duty utility gloves to prevent puncture wounds. Gloves must be discarded when torn or punctured, upon completion of treatment, and before leaving laboratories or areas of patient care activities. All DHCP shall perform hand hygiene procedures before donning gloves and after removing and discarding gloves. Gloves shall not be washed before or after use.

Needle and Sharps Safety:

(9) Needles shall be recapped only by using the scoop technique or a protective device. Needles shall not be bent or broken for the purpose of disposal. Disposable needles, syringes, scalpel blades, or other sharp items and instruments shall be placed into sharps containers for disposal as close as possible to the point of use according to all applicable local, state, and federal regulations.

Sterilization and Disinfection:

(10) All germicides must be used in accordance with intended use and label instructions.

(11) Cleaning must precede any disinfection or sterilization process. Products used to clean items or surfaces prior to disinfection procedures shall be used according to all label instructions.

(12) Critical instruments, items and devices shall be discarded or pre-cleaned, packaged or wrapped and sterilized after each use. Methods of sterilization shall include steam under pressure (autoclaving), chemical vapor, and dry heat. If a critical item is heat-sensitive, it shall, at minimum, be processed with high-level disinfection and packaged or wrapped upon completion of the disinfection process. These instruments, items, and devices, shall remain sealed and stored in a manner so as to prevent contamination, and shall be labeled with the date of sterilization and the specific sterilizer used if more than one sterilizer is utilized in the facility.

(13) Semi-critical instruments, items, and devices shall be pre-cleaned, packaged or wrapped and sterilized after each use. Methods of sterilization include steam under pressure (autoclaving), chemical vapor and dry heat. If a semi-critical item is heat sensitive, it shall, at minimum, be processed with high level disinfection and packaged or wrapped upon completion of the disinfection process. These packages or containers shall remain sealed and shall be stored in a manner so as to prevent contamination, and shall be labeled with the date of sterilization and the specific sterilizer used if more than one sterilizer is utilized in the facility.

(14) Non-critical surfaces and patient care items shall be cleaned and disinfected with a California Environmental Protection Agency (Cal/EPA)-registered hospital disinfectant (low-level disinfectant) labeled effective against HBV and HIV. When the item is visibly contaminated with blood or OPIM, a Cal/EPA-registered hospital intermediate-level disinfectant with a tuberculocidal claim shall be used.

(15) All high-speed dental hand pieces, low-speed hand pieces, rotary components and dental unit attachments such as reusable air/water syringe tips and ultrasonic scaler tips, shall be packaged, labeled and heat-sterilized in a manner consistent with the same sterilization practices as a semi-critical item.

(16) Single use disposable items such as prophylaxis angles, prophylaxis cups and brushes, tips for high-speed evacuators, saliva ejectors, air/water syringe tips, and gloves shall be used for one patient only and discarded.

(17) Proper functioning of the sterilization cycle of all sterilization devices shall be verified at least weekly through the use of a biological indicator (such as a spore test). Test results shall be documented and maintained for 12 months.

Irrigation:

(18) Sterile coolants/irrigants shall be used for surgical procedures involving soft tissue or bone. Sterile coolants/irrigants must be delivered using a sterile delivery system.

Facilities:

(19) If non-critical items or surfaces likely to be contaminated are manufactured in a manner preventing cleaning and disinfection, they shall be protected with disposable impervious barriers. Disposable barriers shall be changed when visibly soiled or damaged and between patients.

(20) Clean and disinfect all clinical contact surfaces that are not protected by impervious barriers using a California Environmental Protection Agency (Cal/EPA) registered, hospital grade low- to intermediate-level germicide after each patient. The low-level disinfectants used shall be labeled effective against HBV and HIV. Use disinfectants in accordance with the manufacturer's instructions. Clean all housekeeping surfaces (e.g. floors, walls, sinks) with a detergent and water or a Cal/EPA registered, hospital grade disinfectant. Products used to clean items or surfaces prior to disinfection procedures shall be clearly labeled and DHCP shall follow all material safety data sheet (MSDS) handling and storage instructions.

(21) Dental unit water lines shall be anti-retractive. At the beginning of each workday, dental unit lines and devices shall be purged with air or flushed with water for at least two (2) minutes prior to attaching hand pieces, scalers, air water syringe tips, or other devices. The dental unit lines and devices shall be flushed between each patient for a minimum of twenty (20) seconds.

(22) Contaminated solid waste shall be disposed of according to applicable local, state, and federal environmental standards.

Lab Areas:

(23) Splash shields and equipment guards shall be used on dental laboratory lathes. Fresh pumice and a sterilized or new rag-wheel shall be used for each patient. Devices used to polish, trim, or adjust contaminated intraoral devices shall be disinfected or sterilized, properly packaged or wrapped and labeled with the date and the specific sterilizer used if more than one sterilizer is utilized in the facility. If packaging is compromised, the instruments shall be re-cleaned, packaged in new wrap, and sterilized again. Sterilized items will be stored in a manner so as to prevent contamination.

(24) All intraoral items such as impressions, bite registrations, prosthetic and orthodontic appliances shall be cleaned and disinfected with an intermediate-level disinfectant before manipulation in the laboratory and before placement in the patient's mouth. Such items shall be thoroughly rinsed prior to placement in the patient's mouth.

1. Anyone transporting extracted teeth from an outside office or facility to the ***San Joaquin Valley College*** Dental Assisting Facility must adhere to the following policy:
   1. If you are transporting teeth from an outside office or facility, autoclave the teeth prior to taking them from the office or facility.
   2. After autoclaving the teeth, transport them in either a 10% bleach solution, or a solution of an acceptable disinfectant such as biocide.
   3. After following steps #1 and #2, extracted teeth may be stored in a glycerol and alcohol solution to prevent dehydration.
   4. If the outside office or facility will not autoclave the teeth for you, it is permissible to transport them to our Dental Assisting facility as described in #2. They can then be autoclaved in our clinic.
   5. A written protocol shall be developed for proper instrument processing, operatory cleanliness, and management of injuries.
2. The Dental Assisting Program Director shall ensure that biohazard labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious materials. However, it is not anticipated that labels and signs will be necessary as those conditions requiring labels and signs are unlikely to exist. The label shall be fluorescent orange or orange-red.
3. Dental assisting students will receive training in classes. The following elements will be covered:
   1. A discussion of the epidemiology and symptoms of bloodborne diseases.
   2. An explanation of the modes of transmission of bloodborne pathogens.
   3. ***San Joaquin Valley College*** Bloodborne Pathogen Exposure Control Plan.
   4. The recognition of tasks that may involve exposure.
   5. An explanation of the use and limitations of methods to reduce exposure, for example engineering controls, work practices and personal protective equipment (PPE).
   6. Information on the types, use, location, removal, handling, decontamination, and disposal of personal protective equipment (PPE).
   7. An explanation of the basis of selection of PPEs.
   8. Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious material.
   9. An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting and medical follow-up.
4. Records
5. Medical Records - The Campus Administrative Assistant is responsible for maintaining medical records related to student or staff exposure as indicated below. These records will be kept in the college’s Business Office.
6. Medical records shall be maintained in accordance with T8 California Code of Regulation Section 3204. These records shall be kept confidential and not disclosed without student or staff’s written consent and must be maintained for at least the duration of enrollment or employment plus 30 years. The records shall include the following:
7. The name and social security number of the student or staff member.
8. A copy of the student’s HBV vaccination status, including the dates of vaccination and ability to receive vaccination.
9. A copy of all results of examination, medical testing, and follow-up procedures.
10. A copy of the information provided to the health care professional, including a description of the student’s or dental assisting faculty member duties as they relate to the exposure incident, and documentation of the routes of exposure and circumstances of the exposure.
11. A confidential copy of the healthcare professional opinion.
12. Training Records - The Dental Assisting Program Director is responsible for maintaining the following training records. These records will be kept in the Dental Assisting Program Director’s Office.
13. Training records shall be maintained for five years from the date of training. The following information shall be documented:
14. The dates of the training sessions;
15. An outline describing the material presented;
16. The names and qualifications of persons conducting the training;
17. The names and job titles of all persons attending the training sessions.
18. The student records shall be made available to the student or to his designated representative for examination and copying upon request in accordance with T8 CCR-GISO Section #3204.
19. The Campus Director is responsible for annually reviewing this program, and its effectiveness, and for updating this program as needed.

(A copy of this regulation shall be conspicuously posted in the ***SJVC*** Dental Assisting Laboratory)

## Standard Precautions

1. Gloves are worn when:
   1. Touching blood, body fluids, body substances and mucous membranes.
   2. There are cuts, breaks, or openings in the skin.
   3. There is possible contact with urine, feces, dressings, vomitus, wound drainage, soiled linen, or soiled clothing.
2. Hands are washed
   1. Immediately after removing gloves.
   2. After contact with the patient.
3. Hands and other body parts must be washed immediately if contaminated with blood or body fluids.
4. Masks, goggles, face shields, gowns, and/or aprons are worn when splattering, splashing, smearing, or soiling of or from blood or body fluids is possible.
5. Handle needles, sharp instruments, and other sharp objects carefully to avoid injuring the patient or yourself.
6. Use resuscitation devices when mouth-to-mouth resuscitation is indicated.
7. Avoid patient contact when you have open skin wounds or lesions. Discuss the situation with the supervisor.

## Student Immunizations

Standards: Students will participate in receiving Hepatitis B vaccinations and TB testing

Policy:

1. What: Hepatitis B vaccine and TB skin test

2. Where: On ground

3. By Whom: Administrative Assistant to the Dean’s

4. When:

a. DA105:

i. Week 1, Day 2 packets received

ii. Week 2, Day 1 Hep B 1st injection and TB test

iii. Week 2, Day 3 TB test reading

b. DA110: Hep B 2nd injection (five weeks from 1st injection)

c. DA235: Hep B 3rd injection (five months from 2nd injection)

Procedure- How

1. Faculty

a. Identify immunization schedule on syllabi; ensure no quizzes, field trips, guest speakers, etc. is scheduled for Week 2, Day 1 and 3 of course

b. In DA105:

a. When received, have students complete immunization packet in class; return packet to A.A. to the Dean’s communication box

b. Return Week 1 Day 4

c. In DA110 & DA235:

a. For Week 2, Day 1 and 3 of course, schedule activities which will accommodate immunization schedule

Students Who Missed Immunization Schedule

a. Contact student; document in Academic Info

b. By email, notify Administrative Assistant student was absent from class

c. Administrative Assistant will reschedule the following month

a. A referral will be given for the student to obtain immunizations at Concentra

## Management of Occupational Exposure to Blood and Body Fluids

POLICY**:**

All faculty and students will report puncture wounds and percutaneous or permucosal exposure to blood or body fluids by completing an Accident/Injury Report Form and will be evaluated for treatment by the instructor and the Program Director.

DEFINITIONS:

1. Occupational exposure is a percutaneous, permucosal or dermal exposure that occurs during performance of job duties; e.g., a needlestick, cut with sharp object, splash, etc.
2. Needle/sharp puncture or laceration containing body fluid known to transmit blood borne infections.
3. Splash of body fluid known to transmit blood borne infections to exposed mucous membranes, i.e., eyes, ears, nares, mouth.
4. Prolonged exposure with blood to exposed skin that is chapped, abraded, or afflicted with dermatitis.
5. Valid sources for possible exposure to HBV or HIV and other blood borne pathogens include:
   1. Blood, amniotic fluid, pericardial fluid, peritoneal fluid, pleural fluid, synovial fluid, cerebrospinal fluid, semen, vaginal secretions, or anybody substance visibly contaminated with blood.
   2. Feces, nasal secretion, sputum, sweat, tears, urine, saliva and vomitus, unless heavily contaminated with blood do *NOT* qualify as valid exposures.
   3. Saliva is not a valid source, except in the dental setting, where saliva is likely to be contaminated with blood.

GENERAL INFORMATION:

Accidental needle punctures and other critical exposures (as defined above) to blood and body fluids are possible dental office problems and may be a threat to the health of dental personnel. They can result in serious disease and considerable costs. Hepatitis C (HCV) poses the greatest risk.

Other infections, which can be potentially transmitted by such exposures, include: Hepatitis non A-E, tetanus, syphilis, malaria, Rocky Mountain Spotted Fever. Post-exposure prophylaxis is indicated for preventing hepatitis and possibly HIV infection. The risk of acquiring hepatitis B following a needle puncture from a hepatitis B surface antigen positive source is higher than the risk of acquiring HIV infection following a needle puncture from an HIV positive source.

1. EXPOSED HEALTH CARE WORKER PROCEDURE/RESPONSIBILITIES:
2. Report all punctures, lacerations, splashes to instructor immediately.
3. Follow appropriate first aid procedures as advised by instructor.

*General Guidelines*

* Immediately wash the affected area with soap and water and cover the area with a dressing if possible.
* For an ocular exposure, flush thoroughly with water.

1. Follow procedure for work injury by completing necessary forms. The following information is to be included on the Incident Report:
2. Date and time of exposure
3. Job duty being performed by worker at time of exposure
4. Details of exposure, including amount of fluid or material, and severity of exposure (e.g., for a percutaneous exposure, depth of injury and mucous membrane exposure, the extent and duration of contact and the condition of the skin such as chapped, abraded, intact).
5. If source known: name, DOB, and contact information.
6. Report to the instructor for evaluation and, as necessary, treatment. If unable to go to a personal physician within 24 hours of exposure you may report to:

***US. Healthworks Walk-In Clinic***

***[Address and telephone number]***

Appropriate paperwork must be completed at the college prior to appointment.

1. INSTRUCTOR OR PROGRAM DIRECTOR PROCEDURE:
2. Sterile or clean needle/sharp puncture, laceration:
3. Examine, cleanse and treat as necessary
4. Review and update, as necessary, tetanus immunization
5. Review Hepatitis B immunity:
6. Offer entrance into Hepatitis B Vaccination (HBV) program if staff/student has not been immunized. Give first 1 cc dose of HBV. Schedule faculty/student for one month and 6 month doses. This is done at no cost to faculty/student. Document all refusals for HBV.
7. Student contaminated with body fluids at risk for transmission of blood borne disease needle/sharp puncture/laceration, mucous membrane splash, prolonged exposure to non-intact skin from known source.
8. Document known source information in staff/student record
9. Examine, cleanse with antimicrobial soap, and treat as necessary
10. Review and update, as necessary, tetanus immunization
11. Review Hepatitis B immunity if not already immunized at no cost to faculty/student. Give first dose of HBV. Schedule for one month and six months doses to complete series.
12. Obtain antibody titer of HbsAB if already vaccinated. If HBsABs (+) no further treatment needed even if source is HBsAG (+). Physician may recommend follow up consultations. If HBsAB is (-) and the source is HBsAG (+) then give HBIG and HBV booster. If staff/student is HBsAB (-) and source patient is HBsAG (-) give HBV booster only.
13. Provide faculty/student with informed consent for HIV testing, do counseling, and obtain HIV test at no cost to staff/student if desired by them.
14. In regard to ‘Source Patient’:
15. Inform source patient of incident and need to see physician.
16. Ask physician to obtain an HBsAG on patient.
17. Instruct patient that there is no charge to them for these tests. Cost to be paid by ***San Joaquin Valley College***.
18. Actions based on the source patient serology results or previously known serologic status may include:
19. Source patient HBsAG and HIV results negative no further faculty/student testing necessary, unless physician determines source patient is at high risk for HBV (i.e., drug user, gay male, Asian immigrant, dialysis patient, clinical hepatitis, etc.) or HIV (i.e., IV drug user, gay/bisexual male, multiple sex partners, hemophiliac, etc.).
20. Individual physician and staff/student discretion is necessary, depending on circumstances.
21. Source patient HBsAG positive, and faculty/student has not received Hepatitis B vaccine, as soon as possible and if possible within 24 hours, give:
22. HBIG 0.06 ml/kg body weight, give IM.
23. Beginning the Hepatitis B Vaccine program within 7 days of exposure is HIGHLY recommended.
24. If HBV NOT BEGUN, then give second dose of HBIG 0.06 ml/kg. 1 month after first dose.
25. Source patient HIV positive OR refuses to consent to HIV test and considered high risk: do the following:
26. Offer faculty/student AZT prophylaxis per post exposure AZT protocol. (Refer to physician if prophylaxis desired.) No cost for this.
27. Instruct faculty/student to report and seek medical attention for any acute febrile illness within 12 weeks after exposure, particularly if characterized by fever, rash, or lymphadenopathy.
28. Instruct faculty/student to return for follow-up testing 3 and 6 months and 1 year.
29. Instruct faculty/student on prevention of HIV transmission. Indicate that counseling is available.
30. Unknown source, contaminated needle/sharp puncture/laceration, mucous membrane splash, prolonged bloody exposure to non-intact skin.
31. Assess the source of the exposure for risk of transmission of blood borne infections.
32. If source is assessed to be at risk for blood borne transmission; implement, based on assessment in section B above, actions based on source patient test results or known serologic status.

## 

## Student/Staff/Faculty BBP Exposure Treatment

**IMMEDIATELY WASH THE AFFECTED AREA** WITH SOAP AND WATER. FOR OCCULAR EXPOSURE, FLUSH THOROUGHLY WITH WATER.

**REPORT EXPOSURE**

TO INSTRUCTOR/PROGRAM DIRECTOR

INSTRUCTOR/PROGRAM DIRECTOR

**INSPECT WOUND AND PROVIDE FIRST AID TREATMENT.**

**OBTAIN AND COMPLETE INCIDENT REPORT AND AUTHORIZATION**

TO BE SEEN AT US HEALTHWORKS WALK-IN CLINIC

WITH INSTRUCTOR AND/OR PROGRAM DIRECTOR

**APPROACH SOURCE PATIENT TO INFORM OF SITUATION AND ADVISE OF NEED FOR IMMEDIATE BLOOD TEST**

AT US. HEALTHWORKS  **WALK-IN CLINIC**

INJURED STUDENT

**REPORT TO US HEALTHWORKS** WALK-IN CLINIC

WITHIN 24 HOURS; TAKING COMPLETED PAPERWORK FROM CLINIC.

**FOLLOW ALL DIRECTIONS**

OF DR. A TUS HEALTHWORKS WALK-IN CLINIC AND

**RETURN FOR ALL FOLLOW UP VISITS AS INDICATED.**

## Common Communicable or Infectious Diseases Found in the Health Care Setting

|  |  |  |
| --- | --- | --- |
| Disease | Incubation Period | Transmission |
| HEPATITIS (type A) | 15 to 16 days | virus; fecal-oral |
| HEPATITIS (type B/D) | 45 to 180 days | Virus; parenteral injection, sexual |
| HEPATITIS (type C) | 14 to 180 days | Virus; blood, parenteral injection, sexual |
| HEPATITIS (type E) | 15 to 64 days | Virus; fecal/oral |
| PNEUMOCOCCAL PNEUMONIA | variable | Bacteria; respiratory droplet |
| A.I.D.S. (H.I.V.) | 2 to 6 years | Virus; sexual, blood, needle stick |
| TUBERCULOSIS | Variable | Bacteria; sputum, respiratory droplet |

***Taken from: Dental Management of the Medically Compromised Patient 6th Edition, Little, Falace, Miller and Rhodus, Mosby, 2002.***

## 

## Symbols for OSHA Bloodborne Pathogen Exposure Controls Applicable to Clinical Procedures

OSHA exposure categories applied to specific tasks as follows:

|  |  |
| --- | --- |
|  | Tasks that involve exposure to blood, body fluids, or tissues, or that carry a potential for spills or splashes. Appropriate protective measures should be used *every* time. |
|  | Tasks that involve no exposure to blood, body fluids, or tissues in the normal work routine, but exposure or potential exposure may occur in certain situations. Appropriate protective measures should be used in these situations. |
|  | Tasks that involve no exposure to blood body fluids, or tissues. Appropriate protective measures are not necessary. |
|  | Washing hands after a procedure |
|  | Washing hands before and after a procedure. |
|  | Disposable sharp equipment that must not be bent, recapped, removed, sheared, or purposely broken. Equipment should be disposed of in a rigid, leak proof, puncture-resistant container that is color-coded orange or orange-red or labeled with the orange-red biohazard sign. |
|  | Reusable sharp equipment that must be placed immediately, or as soon as possible, after use into appropriate sharps containers. The containers used to receive contaminated equipment must be puncture-resistant, leak proof, and color-coded orange or orange-red or labeled with the orange-red biohazard sign. |
|  | Masks, goggles, or face shielding is required as protection whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can reasonably be anticipated. |
|  | Protective clothing such as laboratory coats, gowns, or aprons, is required as protection whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and clothing contamination can reasonably be anticipated. |
|  | Biohazard bags must be used to discard materials containing blood or other potentially infectious materials. The bags must be leak proof and color-coded orange or orange-red or labeled with the orange-red biohazard sign. |
|  | Decontamination requires using a bleach solution or Environmental Protection Agency-registered germicide. All contaminated work surfaces must be decontaminated after completion of procedures and immediately, or as soon as feasible, after any spill of blood or other potentially infectious materials (as well as at the end of the work shift) if the surface may have become contaminated since the last cleaning. |
|  | Gloves must be worn when it is reasonably anticipated that there will be hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membranes. Gloves are not to be washed or decontaminated for reuse and are to be replaced as soon as practical when they become contaminated, or if they are torn or punctured or their ability to function as a barrier is compromised. Utility gloves may be decontaminated for reuse provided that the glove is intact and able to function as a barrier. Examination gloves are used for non-sterile procedures. Sterile gloves are used for minor surgery and other sterile procedures. |

## OSHA Training Requirements for all Dental Office Employees

Information and Training

SJVC shall train each student and faculty member with occupational exposure in accordance with the requirements of this section. Training for faculty members will be provided at no cost and during working hours.

Training shall be provided as follows:

1. At the time of initial assignment to tasks where occupational exposure may take place; At least annually thereafter.
2. Annual training for all employees shall be provided within one year of their previous training.
3. SJVC will provide additional training when changes such as modification of tasks or procedures or institution of new tasks or procedures affect the employee's occupational exposure. The additional training may be limited to addressing the new exposures created.
4. Material appropriate in content and vocabulary to educational level, literacy, and language of employees shall be used.

The training program shall contain at a minimum the following elements:

1. An accessible copy of the regulatory text of this standard and an explanation of its contents;
2. A general explanation of the epidemiology and symptoms of bloodborne diseases;
3. An explanation of the modes of transmission of bloodborne pathogens;
4. An explanation of the SJVC's exposure control plan and the means by which the employee can obtain a copy of the written plan;
5. An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials;
6. An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment;
7. Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment;
8. An explanation of the basis for selection of personal protective equipment;
9. Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge;
10. Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;
11. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available;
12. Information on the post-exposure evaluation and follow-up that SJVC is required to provide for the employee following an exposure incident;
13. An explanation of the signs and labels and/or color coding;
14. An opportunity for interactive questions and answers with the person conducting the training session.
15. The person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the workplace that the training will address.
16. Additional Initial Training for Employees in HIV and HBV Laboratories and Production Facilities. Employees in HIV or HBV research laboratories and HIV or HBV production facilities shall receive the following initial training in addition to the above training requirements.
17. SJVC shall assure that employees demonstrate proficiency in standard microbiological practices and techniques and in the practices and operations specific to the facility before being allowed to work with HIV or HBV.
18. SJVC shall assure that employees have prior experience in the handling of human pathogens or tissue cultures before working with HIV or HBV.
19. SJVC shall provide a training program to employees who have no prior experience in handling human pathogens. Initial work activities shall not include the handling of infectious agents. A progression of work activities shall be assigned as techniques are learned and proficiency is developed. SJVC shall assure that employees participate in work activities involving infectious agents only after proficiency has been demonstrated.

**Management of Training Records**

The Program Director shall be responsible for managing training records. Training records shall be maintained for 3 years from the date on which the training occurred.

Training records shall include the following information:

1. The dates of the training sessions;
2. The contents or a summary of the training sessions;
3. The names and qualifications of persons conducting the training; and
4. The names and job titles of all persons attending the training sessions.

# *SJVC* POLICIES FOR TREATING PATIENTS

## Patient Treatment Provided by Dental Assisting Students

The following dental assisting services are taught to clinic competence and are provided in the ***SJVC*** Dental Assisting Clinic

1. Clinic infection control and exposure precautions

All dental assisting students are expected to utilize infection control procedures to establish and maintain the chain of asepsis in accordance with current policies and protocol in the dental assisting clinic, radiology and other laboratory classes. SEE APPENDIX IX for complete guidelines.

1. Dental assisting process of care for child, adolescent, adult, geriatric and special care patients
   1. Dental assisting assessment
      1. Medical and dental history
      2. Vital signs
      3. Intraoral and Extraoral examination
   2. Planning
      1. Dental assisting treatment plan/patient consent
      2. Case presentation to patient and faculty
   3. Implementation
      1. Infection control
      2. Treatment
         1. Radiographs
         2. Coronal Polish
            1. Stain removal

Rubber cup polishing

Air polishing

* + - * 1. Oral Hygiene Instruction
        2. Fluoride therapy
        3. Nutritional counseling
      1. Application of pit and fissure sealants
  1. Evaluation
     1. Patient satisfaction
     2. Post-operative instructions
  2. Medical emergency care
     1. Healthcare provider CPR with AED training is required to treat patients.

## Conditions Requiring a Physician’s Consultation

Patients seeking care in the ***SJVC*** Dental Assisting Clinic may present with a variety of pre-existing medical conditions. Some of these medical conditions will require a consultation with the patient’s physician prior to the start of any dental assisting procedures. To obtain medical information from a patient’s physician a **Medical Information Release Form** is required.

The following list includes, but is not limited to, conditions that normally require a physician’s consultation prior to the patient receiving dental treatment:

1. **Acquired Immune Deficiency Syndrome (AIDS)**
2. **Heart Disease and/ or abnormalities**
   1. Prosthetic cardiac valve
   2. Previous infective endocarditis
   3. Congenital heart disease (CHD)
      1. Unrepaired cyanotic CHD, including palliative shunts and conduits
      2. Completely repaired congenital heart defect with prosthetic material or device, whether placed by surgery or by catheter intervention, during the first six months after the procedure\*\*
      3. Repaired CHD with residual defects at the site or adjacent to the site of a prosthetic patch or prosthetic device (which inhibit endothelialization)
   4. Cardiac transplantation recipients who develop cardiac valvulopathy
3. **Tuberculosis**
   1. Patients currently being treated for tuberculosis
   2. Patients with recent conversion to positive tuberculin skin test (purified protein derivative – PPD) but do not have active disease.
4. **Hypertension – Stage 2**

**Classification and Follow-up of Blood Pressure Measurement for Adults Aged 18 Years or Older\***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category \*\*** | | **Systolic Blood Pressure\*\*\*** **(mm Hg)** |  | **Diastolic Blood Pressure\*\*\*** **(mm Hg)** | **Patient Management for**  **Dental Treatment** |
| **Normal** | | <120 | and | <80 | No contraindications |
| **Prehypertension** | | 120-139 | or | 80-89 | No contraindications |
| **Stage 1 Hypertension** | | 140 - 159 | or | 90 - 99 | Retake and confirm blood pressure.  Proceed with elective dental treatment.  Monitor blood pressure during appointment. |
| **Stage 2 Hypertension** | | >160 | or | >100 | Retake and confirm blood pressure.  Emergency or non-invasive dental treatment only.  Monitor blood pressure during appointment.  Refer patient to physician for medical evaluation.  **Medical consult required prior to elective treatment.** |
|  | | >210 | or | > 120 | Retake and confirm blood pressure with alternate device such as mercury-manometer type sphygmomanometer.  If blood pressure is unchanged, consider immediate referral of the patient to physician or emergency room for evaluation.  No treatment of any kind should be undertaken.  **Medical consult required prior to any treatment.** |
| \* | Not taking antihypertensive drugs and not acutely ill. | | | | |
| \*\* | When systolic and diastolic pressures fall into different categories, the higher category should be selected to classify the individual's blood pressure. | | | | |
| \*\*\* | Based on the average of two or more readings taken at each of two or more visits following an initial screening. | | | | |

Guidelines based on *Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure, 2003* [*http://hyper.ahajournals.org/cgi/content/full/42/6/1206*](http://hyper.ahajournals.org/cgi/content/full/42/6/1206)*), Herman, W. New national guidelines on hypertension, J Am Dent Assoc,135:5, 576-584. © 2004 (*[*http://jada.ada.org/cgi/content/full/135/5/576*](http://jada.ada.org/cgi/content/full/135/5/576)***)***

1. **Prosthetic Joint Replacement within 2 years**
2. **Pregnancy**

|  |
| --- |
| General Guidelines for Pregnant Patients |
| Pregnant patients are not eligible for dental x-rays. |
| Treatment (excluding radiology) may be rendered following consultation with the patient’s physician. |
| The second trimester is considered the safest for general dental treatment. |
| Avoid prolonged appointment time in the dental chair. |

Guidelines based on the following textbooks:

Little, James W., Donald Falace, Craig Miller, and Nelson L. Rhodus. *Dental Management of the Medically Compromised Patient*. St. Louis: Mosby, 2007. Print.

Wilkins, Esther M. *Clinical practice of the dental hygienist*. Baltimore: Wolters Kluwer, 2009. Print

1. **Cancer Patients Receiving Treatment (Radiation or Chemotherapy)**
2. **Diabetes** 
   1. Uncontrolled Type 1 or Type 2
   2. Controlled Type 1 or Type 2 with an acute oral infection

## Grading Components

### Examinations

Students will be evaluated by standardized examinations. These examinations include instrumentation practicum examinations, mock board and comprehensive exit examinations. Specific criteria for these examinations are outlined in each course syllabus.

**Radiographs**

Students will be evaluated on the competency of their skills, radiography technique, identification of pathology and anatomic landmarks, and their ability to self-evaluate their work.

### Skill Requirements

Students are required to complete a minimum number of specific DA and RDA duties to attain the skills necessary. These procedures are commonly referred to as “skills”. Refer to the DA Skill Competency Packet for the specific skill requirements for each course.

### Performance Evaluations

Performance evaluations are observations of student performance for a particular procedure with detailed evaluation and feedback. These are completed during lab, pre-clinical and clinical assignments only. Students must select the appropriate performance evaluation for the particular procedure and confer with their supervising instructor regarding requirements of the evaluation prior to attempting the performance evaluation. Specific criteria for each performance evaluation and number of acceptable errors are listed on the performance evaluation form. Refer to APPENDIX XII for the specific performance requirements for each clinical course.

## Competency Based Clinical Evaluation

All courses utilize a **competency-based clinical evaluation system**. This type of evaluation system measures the student’s performance against pre-established standards or criteria; not other students. Standards (criteria) for patient care have been established for each procedure that a dental assistant or registered dental assistant are allowed to perform. These criteria are established at the *entry level or competent level* of skill performance. Criteria for each procedure are listed in the DA Skill Competency Packet. When a dental assisting student is consistently able to perform a particular treatment procedure in a manner that meets entry-level performance standards, they are said to ‘*be competent* in the procedure’ or ‘to have attained *competence* in that procedure’.

To graduate from the ***SJVC*** Dental Assisting Program a student must be considered a *competent* entry- level dental assistant.

Competency levels are designated by a numerical value between 1-10; 1 being at the ***novice*** level and progressing to 10 at the ***competent*** level. Once a student has been deemed competent in all areas, they have met the “competency” requirement for graduation.

**INTRODUCTORY ◆ DEVELOPMENT ◆ MASTERY**

**0 10**

See Appendix XII for additional information regarding competencies and the stages of Psychomotor Skill Development.

### Student Responsibilities in a Competency Based Evaluation System:

1. Students are responsible for establishing a plan to complete all skill requirements and performance evaluations during the assigned course.
2. Students must prepare for the Performance Evaluation and complete appropriate forms prior to evaluation.
3. Students need to clarify with the instructor any questions regarding a procedure during “teaching” time prior to attempting an evaluation.
4. Students must discuss with the instructor any evaluation grade that is not understood or is disputed.
5. Students are responsible for keeping an accurate up-to-date record of completed evaluations.
6. Students must keep all scheduled meetings with the program director or faculty advisor.
7. Students should make an appointment with their faculty advisor or the Program Director as soon as a problem is noted.
8. Students are responsible for reviewing the Performance Evaluation Forms and bringing any errors to the attention to the Program Director.
9. Students need to self-evaluate their work and ask faculty to observe and help with any problem areas.
10. Students must be familiar with the objectives for performance, criteria, and critical errors which are specified on the specific Performance Evaluations for each clinical course.
11. Students must keep consultation appointments (as needed) with designated advisor.
12. Students are encouraged to seek maximum help from instructors while learning to perform procedures. No instructor help will be permitted during performance evaluations; the instructor will evaluate the performance (both process and product) and designate ‘acceptable’ or ‘unacceptable.’
13. Students must be aware that certain criteria (i.e., asepsis, patient management, professionalism, patient education, etc.) apply to each patient and are considered part of all aspects of patient treatment.

Students are responsible to seek faculty input regarding their performance so that they may:

* 1. correct techniques as necessary
  2. determine problem areas and methods for improving those areas
  3. have confidence that their performance is correct and competent
  4. attain competence in all clinical skill areas

# EMERGENCIES

All students involved with the direct provision of patient care must be continuously recognized / certified in basic life support procedures, including healthcare provider cardiopulmonary resuscitation with an Automated External Defibrillator (AED) through the *American Heart Association or American Red Cross*.

Copies of staff, faculty, and student CPR certification are kept on file in the ***SJVC*** Dental Assisting Program Director Office.

## Protocol for Medical Emergencies in Dental Assisting

1. **Student Clinician:** Discontinue treatment, remain calm, assure patient
2. **Student Clinician:** Send nearest person/bystander to notify any instructor and supervising dentist. If needed, **activate EMS by calling 911.**
3. **Student Bystander # 1**: inform instructor and supervising dentist of the following:
   1. State nature of emergency
   2. State location and unit number
   3. Obtain oxygen cart and emergency kit
   4. Return to emergency and assist with taking and recording vitals
4. **Student Clinician:** remain with patient and continue to assess the situation:
   1. Is patient conscious?
   2. Is patient breathing?
   3. Does the patient have a pulse?
5. **Student Clinician:** Attend to immediate needs of patient
   1. Ensure an open airway
   2. Initiate CPR if indicated
   3. Obtain baseline vital signs and record on **Record of Emergency form** (found in your clinic manual or **Clinic Office**)
6. **Supervising dentist** will determine status of the patient, confirm vital signs, and begin emergency treatment
   1. If not previously activated and need is determined by the supervising dentist **Additional Student/Instructor Bystander # 2:** Activate EMS by calling **911**
7. Continue with Basic Life Support until EMS arrives and takes over
8. **Student Bystander # 1:** Provide a photocopy of the Record of Emergency to the EMS team

**If emergency occurs after clinic hours:**

1. Activate EMS by calling **911**, give emergency location
2. Return to scene and begin basic life support

## Specific Duties for Handling Emergencies

**Program Director – Instructor/DDS**

1. Evaluate patient’s condition
2. Position patient
3. Establish airway
4. Direct emergency proceedings
5. Assist patient with medications when indicated
6. Initiate CPR
7. Complete post emergency paperwork

**Student Clinician (student treating patient at time of emergency)**

1. Inform DDS/instructor of patient history, important relevant conditions, medications, anesthesia administered, blood pressure, pulse/time recorded
2. Loosen tight clothing - continue to reassure patient
3. Administer O2
4. Maintain airway
5. Assist with CPR
6. Complete final entry on emergency record-give to Bystander # 2 for copy to EMS
7. Complete post emergency paperwork

**Student/Bystander # 1**

1. Alert DDS/instructor
2. Obtain O2 and emergency kit
3. Prepare medication from emergency kit as directed by supervising dentist/Program Director
4. Assist student clinician with monitoring vital signs
5. Provide copy to EMS
6. Complete post emergency paperwork

**Student/Instructor/Bystander # 2**

1. Be available for anything requested from those administering the treatment.
2. Call for medical aid as needed 911
3. Suction

## Oxygen Delivery Systems – Dental Assisting Clinic

**TANK CART (with Nitrous Oxide)**

**To Activate System**

1. TURN ON MASTER VALVE with the wrench located on the GREEN TANK
2. Check the GREEN GAUGE to be sure that PRESSURE is being registered (500 PSI).
3. If gauge does NOT register positive pressure, the tank is EMPTY
4. ACTIVATE ALTERNATIVE GREEN TANK!
5. Opening the MASTER VALVE Makes oxygen available to the positive-pressure face mask system *AND* to the nasal hood system

**POSITIVE PRESSURE FACE MASK SYSTEM (Non-breathing patient)**

1. **FOR EMERGENCY USE ONLY**
2. PROCEDURE:
   1. Activate system as directed above and check gauge for pressure (500 PSI)
   2. Place face mask over non-breathing patient’s nose and mouth
   3. Press chrome button on top of the face mask to force oxygen into the non-breathing adult patient’s lungs, EVERY 5 SECONDS, or as needed per CPR protocol (watch for chest rise)
3. After use:
   1. Turn Master Valve to OFF position
   2. Press the face mask button to flush the system and to reduce the pressure held in soft tubing MAKE SURE THAT ALL VALVES ARE CLOSED AND LINES ARE DECOMPRESSED AFTER USE!

**NASAL HOOD SYSTEM (For breathing patient in need of supplemental oxygen)**

1. FOR BREATHING PATIENT IN NEED OF **SUPPLEMENTAL** OXYGEN
2. PROCEDURE:
   1. Activate system as directed above and check gauge for pressure (500 PSI)
   2. Press the LOWEST GREEN BUTTON to ON position
   3. (If audible air escape is evident, the oxygen flush line has been activated instead of ‘on/off’ button)
   4. Adjust the oxygen flow by moving the handle at the base of the GREEN BALL/TUBE GAUGE. Read center of ball. (6 liters per minute is an acceptable starting setting)
   5. Place nasal hood over patient’s nose
   6. After use:
      1. Turn handle controlling the oxygen flow to the OFF position
      2. Turn MASTER VALVE to OFF position
      3. Push the GREEN FACE MASK BUTTON to flush (purge) lines

**SINGLE TANK SYSTEM**

1. Turn WRENCH, located on top of the tank, COUNTERCLOCKWISE to activate the system.
2. Check the small dial for pressure (500 PSI). If pressure is NOT registered, the tank is EMPTY. Seek back-up system of nitrous unit.
3. Regulate oxygen flow by turning the ON knob in the direction of the arrow on the knob.
4. Place mask over the patient’s nose and mouth.
5. After use:
   1. Make sure that all valves are in a closed position.
   2. No flushing (or purging) required on this system.

## Emergency Eye Wash Stations

|  |  |
| --- | --- |
| P5170108.JPG | P5170108.JPG |

**OPERATION**:

1. Hold eyes open over nozzles

2. Flush eyes for a minimum of 20 minutes

3. Contact Physician

## Automated External Defibrillator and First Aid Kits



## Fire Extinguishers





OPERATION: Instructions differ and are on each fire extinguisher.

## Dealing with a Broken Instrument Tip/Swallowed Objects in Dental Assisting Clinic

PROCEDURE:

The main objective in dealing with the broken instrument tip/object is to know positively that the tip/object has been removed. An unrecovered working end could lodge in the oral soft tissues or sulcus, causing pain, a localized infection, and/or abscess formation. An aspirated tip/object could cause serious lung complications, and the swallowed tip/object could cause serious complications within the digestive tract.

**STEP 1:** PREVENTION

Use the appropriate instrument for the task and follow the principles of instrumentation. Examine your instruments regularly. Discard those instruments with thin, weakened working ends and any that have been distorted.

**STEP 2A:** IF THERE IS ANY REASON TO SUSPECT THAT THE INSTRUMENT TIP ENTERED THE OROPHARYNX AREA:

*Cease procedure. Immediately* place two or three fingers of your non dominant hand across the occlusals of the patient’s mandibular teeth to prevent swallowing. The saliva will flow from the back of the throat, floating the object with it. Retrieve the object with cotton pliers.

Positioning the patient in a head down position will permit gravity to return the object to the oral cavity where it may be recovered.

**STEP 2B:** IF THE INSTRUMENT TIP IS IN THE TREATMENT AREA

*Cease procedure.* Retain retraction and maintain patient head position. *Immediately* isolate the area with gauze or cotton rolls. *Do not use any type of suction, compressed air, or allow the patient to rinse or swallow.*

**STEP 3:** ALERT INSTRUCTOR. Remain calm. Do not alarm the patient.

**STEP 4A:** When the object presumably enters the PATIENT’S TRACHEA:

Position the patient into a head-down position (Trendelenburg) with the patient lying on his right side. Encourage coughing.

**STEP 4B:** EXAMINE FIELD OF OPERATION:

Examine the field of operation to include the floor of the mouth and the mucobuccal fold and the area around the tooth. Utilize transillumination.

**STEP 5:** EXAMINE GINGIVAL SULCUS

Gently examine the gingival sulcus using an explorer, or a piece of dental floss, or a curette in a spooning-like stroke. Be careful not to push the instrument tip into the base of the sulcus.

**STEP 6:** EXPOSE RADIOGRAPH TO CONFIRM LOCATION

If the instrument tip cannot be retrieved, maintain isolation of the area, and obtain a periapical radiograph of the area.

**STEP 7:** TIP NEITHER RETRIEVED, NOR VISIBLE ON RADIOGRAPH

If the instrument tip has not been retrieved and is not visible in the periapical radiograph, follow the guidelines regarding the swallowing/aspiration of foreign objects. (An x-ray series will be ordered to examine the respiratory and digestive tracts.) Advise the Program Director and the supervising dentist.

**STEP 8:** DOCUMENTATION

Accurately document the incident in the patient’s dental record (appointment and treatment record only).

## Swallowing (Aspiration) of Foreign Objects in Dental Assisting Clinic

Procedure to follow if object is not recovered by having the patient vomit:

If patient is able to drive, have patient report immediately to:

**USHealthWorks**

If patient does not recover object by the end of the fourth day, then a follow-up x-ray should be taken. Incident should be reported to the President of ***SJVC*** and to the Dental Assisting Program Director the same day that it occurs. Follow-up reports are made to this office until the object is recovered or does not show up in the x-ray series.

## Campus Emergencies

### Fire

1. Call **911** - Report location of fire
2. Pull fire alarm
3. If your clothes should catch on fire, STOP, DROP, and ROLL
4. Evaluate building or buildings
5. Assure that all people are out of building
6. Gather together in North parking lot, beyond hedges and await further instructions

### Earthquake, Explosion, etc.

1. Duck, cover and hold
   1. Duck and cover yourself under a table, desk, door frame, chair, etc.
   2. Avoid book shelves, glass cupboards, file shelves and other items which may fall
   3. Hold until shaking stops. Do not panic
2. Immediately evacuate area. Gather in North parking lot, beyond the hedges and await further instructions.

### Hazardous Materials Incident

1. Evacuate contaminated area and do not re-enter for any reason
2. Call **911**
3. Gather together in North parking lot, beyond hedges and await further instructions

Evacuation Map (goes here)

|  |  |  |
| --- | --- | --- |
| Signs and Symptoms and Emergency Procedures | | |
| **Emergency** | **Signs/Symptoms** | **Procedure** |
| **All Cases** |  | 1. Determine consciousness (shake & shout):  Yell for help  2. Place in supine position (unconscious)  3. Identify major problem  A. Airway  B. Breathing  C. Circulation  4. Act in accord with findings  5. Activate EMS |
| Adrenal Crisis (cortisol deficiency) | Anxious, stressed  Mental confusion  Pain in abdomen, back, legs  Muscle weakness  Extreme fatigue  Nausea, vomiting  Lowered blood pressure  Elevated pulse  Loss of consciousness  Coma | Conscious Patient  Terminate oral procedure  Call for help and emergency kit  Place patient in supine position with legs slightly raised  Request telephone call for medical assistance  Administer oxygen by nonrebreather bag  Monitor blood pressure and pulse  *Unconscious Patient*  Place patient in supine position with legs slightly raised  Basic life support  Try ammonia vaporole when cause is undecided  Administer oxygen  Summon medical assistance  Transport to hospital |
| Airway Obstruction | Good air exchange, coughing, wheezing | Sit patient up  Loosen tight collar, belt  No treatment; let patient cough |
| *Partial* | Poor air exchange, noisy breathing, weak, ineffective cough, difficult respirations, gasping  Patient is panicky | Reassure patient  Treat for complete obstruction |
| *Complete* | Gasping with great effort; no noises  Patient clutches throat  Unable to speak, breathe, cough | *Conscious Patient*  Perform Heimlich maneuver  Patient becomes unconscious: proceed for unconscious |
|  | Cyanosis  Dilated pupils | *Unconscious Patient*  Initiate A-B-C of Basic Life Support  Unsuccessful breathing attempts: proceed with airway obstruction management  Perform Heimlich maneuver: 6 - 10 thrusts  Examine mouth: apply finger sweep  Open airway: give 2 ventilations  Repeat manual thrusts and finger sweep until object is expelled  Try rescue breathing again  *Obtain medical assistance* |
| Angina Pectoris | Sudden crushing, paroxysmal pain in substernal area  Pain may radiate to shoulder, neck, arms  Pallor, faintness  Shallow breathing  Anxiety, fear | Position: upright, as patient requests, for comfortable breathing  Place nitroglycerin sublingually only when the blood pressure is at or above baseline  Administer oxygen by nasal cannula  Reassure patient  Without prompt relief after a second nitroglycerin, treat as a myocardial infarction |
| Allergic Reaction  1. Delayed | Skin  Erythema (rash)  Urticaria (wheals, itching)  Angioedema (localized swelling of mucous membranes, lips, larynx, pharynx)  Respiration  Distress, dyspnea  Wheezing  Extension of angioedema to larynx: may have obstruction from swelling of vocal apparatus | Skin  Administer antihistamine  Respiration  Position: upright  Administer oxygen by nasal cannula  Epinephrine  Airway obstruction  Position: supine  Airway maintenance  Epinephrine  *Summon medical assistance* |
| 2. Immediate Anaphylaxis (anaphylactic shock) | Skin: Urticaria (wheals, itching)  Flushing  Nausea, abdominal cramps, vomiting, diarrhea  Angioedema  Swelling of lips, membranes, eyelids  Laryngeal edema with difficult swallowing  Respiration distress  Cough, wheezing  Dyspnea  Airway obstruction  Cyanosis  Cardiovascular collapse  Profound drop in blood pressure  Rapid, weak pulse  Palpitations  Dilation of pupils  Loss of consciousness (sudden)  Cardiac arrest | Rapid treatment needed (epinephrine)  Position: supine when dyspnea predominates)  Administer oxygen by nonrebreather bag  Basic life support  Monitor vital signs  Cardiopulmonary resuscitation  *Summon medical assistance; transfer to hospital* |
| **Burns 2** |  | First and Second-degree Burns |
| 1. First degree  2. Second degree  (partial thickness) | Skin reddened  Swelling  Pain  Skin reddened, blisters  Swelling  Wet surface  Pain (more than third degree)  Heightened sensitivity to touch | Do not give food or liquids, anticipate nausea  Be alert for signs of shock  Do not apply ointment, grease, or bicarbonate of soda  Immerse in cool water to relieve pain, not ice  Gently clean with a mild antiseptic  Dress lightly with bandage  Elevate burned part  *Obtain medical assistance* |
| 3. Third Degree  (full thickness) | Leathery look  Insensitive to touch | *Request medical assistance and transport system*  Treat for shock  Basic life support; maintain airway  Check for other injuries  Wrap in clean sheet; transport |
| 4. Chemical Burn | Reddened, discolored | Check directions on container from which the chemical came for antidote or other advice  Burn caused by an acid may be rinsed with bicarbonate of soda, burn caused by alkali may be rinsed in weak acid such as acetic (vinegar)  *Medical assistance needed* |
| **Cardiovascular Diseases** | Symptoms vary depending on cause | For all patients:  Be calm and reassure patient  Keep patient warm and quiet; restrict effort  Always administer oxygen when there is chest pain  *Call for medical assistance* |
| Myocardial Infarction (heart attack) | Sudden pain similar to angina pectoris, which also may radiate, but of longer duration  Pallor: cold, clammy skin  Cyanosis  Nausea  Breathing difficulty  Marked weakness  Anxiety, fear  Possible loss of consciousness | Position: with head up for comfortable breathing  Symptoms are not relieved with nitroglycerin  Monitor vital signs: blood pressure, pulse, respirations  Administer oxygen by nonrebreather bag  Alleviate anxiety: reassure  *Call for medical assistance for transfer to hospital* |
| Heart Failure | Difficult or labored breathing  Pulmonary congestion with cough  May cough up blood  Rapid, weak pulse  Dilated pupils  May have chest pain | *Urgent medical assistance needed*  Place patient in upright position  Make patient comfortable: cover with blanket  Administer oxygen by nonrebreather bag  Reassure patient |
| Cardiac Arrest | Skin: ashen gray, cold, clammy  No pulse  No heart sounds  No respirations  Eyes fixed, with dilated pupils: no constriction with light  Unconscious | Position: supine  Basic life support  Check oral cavity for debris or vomitus: leave dentures in place for a seal  Begin cardiopulmonary resuscitation: minutes count |
| Chemical Solution in Eye | Tears  Stinging | Irrigate promptly with copious amounts of water. Turn head so water flows away from inner aspect of the eye. Continue for 15 to 20 minutes. |
| **Diabetic Complications**  Diabetic Coma  (ketoacidosis)  (hyperglycemia) | Slow onset  Skin: flushed and dry  Breath: fruity odor  Dry mouth, thirst  Low blood pressure  Weak, rapid pulse  Exaggerated respirations  Coma | Conscious Patient  Terminate oral procedure  Obtain medical care: hospitalize  Keep patient warm  Administer oxygen by nasal cannula  Unconscious patient  Basic life support  *Urgent medical assistance needed* |
| Insulin Reaction  (hyperinsulinism)  (hypoglycemia) | Sudden onset  Skin: moist, cold, pale  Confused, nervous, anxious  Bounding pulse  Salivation  Normal to shallow respirations  Convulsions (late) | Conscious Patient  Administer oral sugar (cubes, orange juice, candy or frosting)  Observe patient for 1 hour before dismissal  Determine time since previous meal, and arrange next appointment after food intake  Unconscious Patient  Basic life support  Position: supine  Maintain airway  Administer oxygen by nonrebreather bag  Monitor vital signs  Summon medical assistance  Administer intravenous glucose |
| Dislocated Jaw | Mouth is open; patient is unable to close | Stand in front of seated patient  Wrap thumbs in towels and place on occlusal surfaces of mandibular posterior teeth  Curve fingers and place under body of the mandible  Press down and back with thumbs, and at same time pull up and forward with fingers  As joint slips into place, quickly move thumbs outward  Place bandage around head to support jaw |
| Epileptic Seizure  1. Generalized tonic-clonic | Anxiety or depression  Pale, may become cyanotic  Muscular contractions  Loss of consciousness | Position: supine. Do not attempt to remove from dental chair  Make safe by placing movable equipment out of reach  Do not force anything between the teeth; a soft towel or large sponges may be placed while mouth is open  Open airway: monitor vital signs  Administer oxygen by nasal cannula  Allow patient to sleep during postconvulsive stage  Do not dismiss the patient if unaccompanied |
| 2. Generalized absence | Brief loss of consciousness  Fixed posture  Rhythmic twitching of eyelids, eyebrows, or head  May be pale | Take objects from patient’s hands to prevent their being dropped |
| Facial Fracture | Pain, swelling  Ecchymoses  Deformity, limitation of movement  Crepitation on manipulation  Zygoma fracture; depression of cheek  Mandibular fracture; abnormal occlusion | Place patient on side  Basic life support  Support with bandage around face, under chin, and tied on the top of the head (Barton)  *Seek prompt transport to emergency care facility* |
| Foreign Body in Eye | Tears Blinking | Wash hands  Ask patient to look down  Bring upper lid down over lower lid for a moment; move it upward  Turn down lower lid and examine; if particle is visible, remove with moistened cotton applicator  Use eye cup; wash out eye with plain water  When unsuccessful, seek medical attention: prevent patient from rubbing eye by placing gauze pack over eye and stabilizing with adhesive tape |
| Hemorrhage | Prolonged bleeding  a. Spurting blood: artery  b. Oozing blood: vein | Compression over bleeding area  a. Apply gauze pack with pressure  b. Bandage pack into place firmly where possible  Severe bleeding: digital pressure on pressure point for supplying vessel  Watch for shock symptoms |
| Bleeding from tooth socket |  | Pack with folded gauze: Have patient bit down firmly  Do not rinse |
| Bleeding from an extremity |  | Elevate the part: support with pillows or substitute  Apply tourniquet only when limb is amputated, mangled, or crushed |
| Nosebleed |  | Tell patient to breathe through mouth  Apply cold application to nose  Press nostril on bleeding side for a few minutes  Advise patient not to blow nose for an hour or more |
| Hyperventilation Syndrome | Lightheadedness, giddiness  Anxiety, confusion  Dizziness  Overbreathing (25 to 30 respirations per minute)  Feelings of suffocation  Deep respirations  Palpitations (heart pounds)  Tingling or numbness in the extremities | Terminate oral procedure  Remove rubber dam and objects from mouth  Position upright or best for comfortable breathing  Loosen tight collar  Reassure patient. Explain overbreathing: request that each breath be held to a count of 10  Ask patient to breathe deeply (7 - 10 per minute) into a paper bag adapted closely over nose and mouth. Never use a bag for a patient with diabetes.  Carbon dioxide is indicated, NOT oxygen. |
| Internal Poisoning 3 | Signs of corrosive burn around or in oral cavity  Evidence of empty container or information from patient  Nausea, vomiting, cramps | Be calm and supportive  Basic life support; airway maintenance  Artificial ventilation (inhaled poison)  Record vital signs  *Call Poison Control Center*  *Conscious Patient*  Dilute poison in the stomach with 1 or 2 glasses of water or milk  Induce vomiting by giving 1 tablespoon of syrup of ipecac followed by 1 to 2 glasses of water.  Do not induce vomiting if caustic, corrosive, or petroleum products have been ingested  Avoid nonspecific and questionably effective antidotes, stimulants, sedatives, or other agents, which may do more harm  *Obtain medical assistance* |
| Local Anesthesia Reactions  1. Psychogenic | Reaction to injection, not the anesthetic  Syncope  Hyperventilation syndrome | See earlier in this table |
| 2. Allergic (very rare) | Anaphylactic shock  Allergic skin and mucous membrane reactions  Allergic bronchial asthma attack | See earlier in this table |
| 3. Toxic Overdose | Effects of intravascular injection rather than increased quantity of drug are more common  a. Stimulation phase  Anxious, restless, apprehensive, confused  Rapid pulse and respirations  Elevated blood pressure  Tremors  Convulsions  b. Depressive phase  Follows stimulation phase  Drowsiness, lethargy  Shock-like symptoms: pallor, sweating  Rapid, weak pulse and respirations  Drop in blood pressure  Respiratory depression or respiratory arrest  Unconsciousness | Mild reaction  Stop injection  Position: supine  Loosen tight clothing  Reassure patient  Monitor blood pressure, heart rate, respirations  Administer oxygen by nasal cannula  Summon medical assistance  Severe reaction  Basic life support: maintain airway  Administer oxygen by nonrebreather bag  Continue to monitor vital signs  Cardiopulmonary resuscitation  Administration of anticonvulsant |
| Respiratory Failure | Labored or weak respirations or cessation of breathing  Cyanosis or ashen-white with blood loss  Pupils dilated  Loss of consciousness | Position: supine (if not breathing)  upright (if breathing)  Check for and remove foreign material from mouth  Establish airway  Rescue  Adult: 1 breath every 5 seconds  Child (1-8): 1 breath every 4 seconds  Infant (younger than 1 year): 1 breath every 3 seconds  Monitor vital signs: blood pressure, pulse, respirations  Administer oxygen by nonrebreather bag |
| Syncope (fainting) | Pale gray face, anxiety  Dilated pupils  Weakness, giddiness, dizziness, faintness, nausea  Profuse cold perspiration  Rapid pulse at first, followed by slow pulse  Shallow breathing  Drop in blood pressure  Loss of consciousness | Position: Trendelenburg  Loosen tight collar, belt  Place cold, damp towel on forehead  Crush ammonia vaporole under patient’s nose  Keep warm (blanket)  Monitor vital signs: blood pressure, pulse, respirations  Keep airway open  Administer oxygen by nasal cannula  Keep in supine position 10 minutes after recovery to prevent nausea and dizziness  Reassure patient, especially during recovery |
| Shock | Skin: pale, moist, clammy  Rapid, shallow breathing  Low blood pressure  Weakness and/or restlessness  Nausea, vomiting  Thirst, if shock is from bleeding  Eventual unconsciousness if untreated | Position: Trendelenburg  Keep quiet and warm  Monitor vital signs: blood pressure, respirations, pulse  Keep airway open  Administer oxygen by nonrebreather bag  *Summon medical assistance* |
| Stroke (cerebrovascular accident) | *Premonitory*  Dizziness, vertigo  Transient paresthesia or weakness on one side  Transient speech defects  *Serious*  Headache (with cerebral hemorrhage)  Breathing labored, deep, slow  Chills  Paralysis one side of body  Nausea, vomiting  Convulsions  Loss of consciousness (slow or sudden onset) | *Conscious Patient*  Turn patient on paralyzed side; semi-supine  Loosen clothing about the throat  Reassure patient; keep calm, quiet  Monitor vital signs: blood pressure, pulse, respirations  Administer oxygen by nasal cannula  Clear airway; suction vomitus because the throat muscles may be paralyzed  *Seek medical assistance promptly*  *Unconscious Patient*  Position: supine  Basic life support  Cardiopulmonary resuscitation if indicated |
| Tooth Forcibly Displaced (avulsed tooth) | Swelling, bruises, or other signs of trauma, depending on the type of accident | Instruct patient or parent to rinse tooth gently in cool water and place in water or wrap in wet cloth  Bring to the dental office or clinic immediately  The longer the time lapse between avulsion and replantation, the poorer the prognosis |

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# APPENDICES

## Appendix I: Teaching Philosophy for Clinical Instruction

The faculty believes it is important to establish a common philosophy regarding clinical instruction. It is our hope this will be a valuable tool to keep communication open between instructors, and between students and instructors, so we will all be aware of the approaches to be used, the rationale for each of these, and the expectations for performance. The faculty holds the following beliefs with regard to student learning and teaching in clinical courses:

Teaching Methods and the Learning Environment

We believe people learn best by self-discovery and active participation. Students will be provided with opportunities to experience-structured practice, problem solving, and self-correction of errors with instructor guidance.

The learner needs to know what he/she is doing correctly, in order to gain a sense of accomplishment and build confidence. It is expected, however, the learner will make errors during the process of learning a psychomotor skill. Errors, too, must be clearly identified to the learner to aid in the satisfactory progress through the stages of skill development. This evaluation of errors will be given in a constructive manner, which points out the significance of the errors and provides suggestions for improvement. This allows the opportunity to learn from mistakes. Identification of these errors will be provided by instructor evaluation and is intended to help the student progress. In addition, this evaluation will provide individualized learning experiences and guidance for the student. It is important the students recognize errors or problems so that they can prepare a specific plan for working on the correction of these problems.

Learning will be facilitated by a variety of approaches: lecture, discussion, reading assignments, audio-visual aids, instructional units, and practical experiences. Learning will be reinforced by utilizing these various techniques. We recognize that individuals will differ in their ability to learn by these various styles and while one method may work well for one student, another method may be more effective for others. Students must become aware of the methods that help them learn and initiate a self-learning environment to reinforce what was taught. We expect the student to be responsible for his/her own learning. Reading materials and assignments will be provided prior to lectures, seminars, or labs. The student is expected to prepare ahead of time so that he/she has sufficient background knowledge to gain maximum benefit from class time and clinical experiences.

Instructors and students must be aware that individuals learn psychomotor skills in different ways and at different rates. Therefore, flexible time frames will be provided within each term to facilitate individual learning rates. This will allow students to get ahead on some requirements when possible, but will not jeopardize the student who needs more time to accomplish a given skill.

For a positive learning atmosphere to exist, it is important students not compare their rate of learning with that of fellow classmates. Much student frustration will be alleviated if they recognize individual differences and not compare, but instead work progressively toward the accomplishment of goals, recognizing they did the best they could at any given time. We expect all students will be at a successful career entry level at the time of graduation.

We believe learner confidence and patient safety require the student be provided with practice sessions on models or simulated lab experiences at least once prior to attempting procedures on actual patients. If minimum skill and safety is not demonstrated, the student will be expected to refrain from performing these tasks on patients until he/she can qualify as a “safe beginner.”

When the student is initially exposed to a new clinical task, he/she will function better in a low-stress environment, which allows freedom to learn from errors. For any given clinical task, at least one (and usually more) non-timed and non-graded evaluation of a practical experience will be provided.

Our concern for patient safety is reflected by requiring minimum levels for testing of didactic information on specified clinical skills. The student will be expected to meet these minimum levels before such skills may be performed on patients. These areas will be identified in the course outlines and re-tested to the required competency. Certain questions on an examination may be identified as critical information that must be met at the specified percent for the unit objective. Students will be utilizing didactic information learned in clinic seminars to perform clinical skills on patients. The student will be tested on this information in a manner that will allow the student to demonstrate ability to apply and understand concepts, rather than just memorize facts. Testing items, at least in part, will provide simulations of encounter.

A variety of special-needs patients will be encountered in private practice. Therefore, students will benefit by gaining exposure to these individuals in an educational setting that provides greater help and supervision than in the private dental office. Several requirements, over the course of the program, have been established to provide students with exposure to such patients prior to graduation. A goal is to prepare the student to function in a variety of clinical settings. This would require that he/she operate independently with confidence and skill.

We believe, in order to accomplish this goal, the student should progress through their education with decreasing instructor supervision and evaluation in the areas of attained competency and increasing self-evaluation of clinical performance and behavior.

Continuing analysis by the student, in the form of written goals and time-utilization plans will help him/her attain personal accountability and successful progress toward the entry level performance necessary for private practice.

**EMPHASIS FOR EVALUATION**

Dental Assisting involves both the process of performing technical skills and the final result of that process. We believe the process is as important as the final product in that it has a great effect on the patient’s safety and comfort, in addition to the operator’s effectiveness and comfort. Therefore, initial learning will be structured toward a basic understanding of the processes or components involved in the skills being taught. The student will be given the opportunity to be evaluated more than once until he/she has demonstrated acceptable performance of a given method. We do not believe there is only one appropriate “technique” or way to perform a given task. However, psychomotor skills should be taught initially with one basic approach describing specific task components. This encourages uniformity in the teaching approach and evaluation, as well as facilitating the student understanding.

Performance evaluations will, with a specified minimum competency level, be a part of the requirements for each lab, pre-clinical, and clinical course. After minimum competency has been demonstrated, consistency in subsequent trials will be expected. To demonstrate consistency in major skills, the student may be required to duplicate minimum competency in future clinical courses. When this has occurred, the student will then be allowed greater freedom to explore alternative techniques and choose those individual methods which produce the best results. Therefore, during the student’s continued learning of clinical procedures, primary emphasis will shift from process evaluation to final product evaluation. The student will be expected to demonstrate increased competency and efficiency each semester. Requirements will be structured to reflect this belief. If the final product becomes significantly lowered, additional individualized performance evaluations will be assigned as appropriate to help identify and correct problems.

Students and instructors should remember no evaluation system is perfect or infallible. Many factors such as student performance, instructor individuality, and patient variability, may account for what appears to be inconsistencies in evaluation scores. The process of learning these psychomotor skills for patient care, inevitably involves many “ups and down” for the learner. The goal of this lab, pre-clinical, and clinical evaluation is not to erect barriers for the student, but rather to provide sufficient feedback and help so major problems are detected and the student is prepared to succeed in his/her chosen career.

## Appendix II: Clinical Abbreviations

The following list of abbreviations will be used for purposes of clinical charting and recording services rendered.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Terminology*** | ***Abbreviation*** |  | ***Terminology*** | ***Abbreviation*** |
| Acidulated phosphate fluoride | APF | New patient | NP |
| Amalgam | Amal | New patient assessment | NPA |
| Amalgam polish | Amal pol | Next visit | NV |
| Anterior | Ant | Nitrous Oxide | N2O - O2 |
| Anterior superior alveolar | ASA | No adverse reactions | NAR |
| Bitewing | BW | None/no | ∅ |
| Bleeding on probing | BOP | Occlusal | O |
| Blood pressure | BP | Occlusion | Occ |
| Buccal | B | Oral hygiene instruction | OHI |
| Carpule | Carp | Panorex | Pano |
| Cartridge | Cart | Partial lower denture | PLD |
| Carbocaine | Carbo | Partial upper denture | PUD |
| Check | √ | Patient | Pt |
| Composite | Comp | Periapical | PA |
| Coronal Polish | Pol | Periodontal Ligament | PDL |
| Decalcification | Decal | Periodontal Maintenance | Perio Main |
| Desensitization | DS | Periodontal Maintenance Procedure | PMP |
| Diagnosis | Dx | Plaque Control | PC |
| Distal | D or Dist | Polocaine | Polo |
| Epinephrine | Epi | Posterior | Post |
| Facial | F | Posterior superior alveolar | PSA |
| Fluoride | Fl | Post operative | PO |
| Full lower denture | FLD | Pre-medication | Pre-med |
| Full mouth | FM | Prescription | Rx |
| Full mouth series | FMX | Prophylaxis | Prophy |
| Full upper denture | FUD | Quadrant | Quad or Q |
| Greater Palatine | GP | Recall | RC |
| Health history | HHx | Recession | Rec |
| Heavy | Hvy | Recommend | Recomm |
| Home care | HC | Respiration | Resp |
| Hydrogen peroxide | H2O2 | Returning Patient Assessment | RPA |
| Incisal | I or Inc | Reviewed Health History | RHHx |
| Incomplete | IC | Root planing | RP |
| Inferior Alveolar | IA | Septocaine | Septo |
| Infiltration | Infil | Scale and root plane | SRP |
| Interproximal | IP | Supportive periodontal therapy | SPT |
| Intra/extraoral examination | I/E exam | Tidal Volume | TV |
| Levonordefrin | Levo | Toothache | TA |
| Lidocaine | Lido | Tooth brush | TB |
| Light | Lt | Tooth brushing instructions | TBI |
| Lingual | L or Ling | Treatment | Tx |
| Lower left | LL | Upper left | UL |
| Lower right | LR | Upper right | UR |
| Marcaine | Mar | Vasconstrictor | Vaso |
| Mesial | M or Mes | With | c or w/ |
| Middle superior alveolar | MSA | Within normal limits | WNL |
| Moderate | Mod | Without | c/o or w/o |
| Nasopalatine | Naso | Xylocaine | Xylo |
| Neo-cobefrin | Neo |  |  |

## 

## Appendix III: Clinical Duties

**Assistant Duties**

**Duties of** **Student Assistant**:

1. Assist students with patients as needed, including but not limited to:
   1. Dental charting
   2. Sealant application
   3. Evacuation
   4. Operatory Preparation
   5. Infection Control Procedures
2. Replenish each unit with paper towels, cups, 4 X 4 gauze, etc. Fill soap dispensers. Stock each unit with other items as needed.
3. At the end of the day, flush the evacuation system in each unit with the appropriate solution.
4. At the end of the day, sanitize the pass-through doors and clean the window in the sterilization area.
5. Notify instructor of any needed supplies.

**Sterilization Duties**

**Daily**

1. Check water level in sterilizers, add distilled water as needed and 1 capful of rust inhibitor.
2. Autoclave any leftover instruments from previous clinic.
3. Put away sterilized instruments.
4. Wipe areas with intermediate disinfectant (according to manufacturer’s instructions) as needed and keep area clean and neat.
5. Dispense sterile supplies as needed.
6. Assist in cleaning patient removable appliances.
7. Put away supplies received.
8. Review stock and make list of needed supplies.
9. Cover trays with tray covers after they have been allowed to air dry for 10 minutes.
10. Set up trays to include: Gauze (at least 4 2 X 2’s), cotton tip applicator, saliva ejector, air/water syringe tip, barriers, patient bib, etc.
11. Empty all instruments from ultrasonic cleaner.
12. Instruments that are not sterile must be packaged before leaving.
13. Turn off autoclave.
14. Dispose of biohazardous waste appropriately.

***As used instruments come in:***

1. Don PPE.
2. Place instruments in ultrasonic. Run ultrasonic for preset time.
3. Dispose of disposables on tray.
4. Remove plastic barrier from tray. Drop onto island. If the tray has been contaminated, use disinfectant 4X4 to wipe down tray, set on clean side and allow drying for 10 minutes.
5. When ultrasonic is complete, remove basket, rinse with water in sink and place on white towel to drain (about 5 minutes).
6. Wearing latex gloves, wrap cassette in blue sterilization paper and tape. Group instruments and place in sterilization bags. In pencil, write student’s name and date on tape or bag. (The student’s name is engraved on the cassette.)
7. Place on the left side of the sterilizer:
   1. Load sterilizer loosely - air must be able to circulate freely between cassettes and bags.
   2. As you face the sterilizer, the dirty side is on the LEFT (see signage).
   3. The clean side is on the RIGHT (see signage).
   4. The center island is clean.
   5. DO NOT MIX SIDES!
   6. Do not touch clean side with nitrile or with contaminated latex gloves
8. When sterilizer is filled with instruments, turn dial to **FILL** and watch as water covers the metal plate.
9. Quickly close and lock the door and
10. Quickly turn dial to **STERILIZE**.
11. Set the timer to 40 minutes – timer will start automatically when correct temperature and pressure is reached.
12. When timer buzzes, turn dial to **VENT**.
13. Let cool and put cassettes/instruments in proper receptacle.

**Weekly**

*To be performed on Mondays or first clinic day of each week*

1. **Clean and Refill the Sterilizers:** 
   1. Prior to turning the sterilizers on, drain the water reservoir completely.
   2. Fill reservoir of sterilizer distilled water and appropriate sterilizer cleansing agent (according to manufacturer’s instructions).
   3. Run one 20-minute sterilizing cycle to remove all grease and grime from the system. **Do not sterilize instruments while cleaning the autoclave**.
   4. Drain cleaning solutions from reservoir and chamber. Rinse thoroughly with clean water.
   5. Add 1 gallon of distilled water to magna Clave and 1 quart of distilled water to smaller sterilizer and run a rinse cycle for 15 minutes.
   6. Drain rinse solution and wipe inside of water reservoir out with paper towel. If scale or lime deposits remain on inside of chamber, wait until chamber is cool and then clean with plastic or nylon scouring pads and vinegar.
   7. Refill reservoir with distilled water and rust inhibitor to fill line – on Magna Clave approximately 2 ½ gallons and 5 oz. of Credo Clave; on smaller sterilizer approximately 1 gallon of distilled water and 2 oz. of Credo Clave (located in cupboard under sterilizer).
2. **Clean and Refill Ultrasonic Units:**
   1. The ultrasonic solution is to be drained at the end of clinic on Thursday afternoon and the tanks are to be wiped clean with the white nylon scrub.
   2. Monday morning assistants are to fill them.
   3. Fill with only general-purpose solution. Each unit holds 2 ½ gallons.
   4. The current ratio of solution is 4 ounces to 2 ½ gallons.

**Do Not Use Tartar and Stain Remover!**

**This will Ruin the Instruments!**

Tartar and stain remover is to be used to clean partial or full dentures.

**READ THE LABEL!**

1. **Change Disinfectant Solutions:**
   1. On Mondays, midway during morning clinic session, gather the disinfectant bottles from each unit.
   2. Mix disinfectant according to manufacturer’s instructions. Refill and return disinfectant bottles to appropriate unit.
2. **Change Cold Sterilization Solution:**
   1. Empty cold sterile solution.
   2. Refill with fresh solution from bottle under sink. (Make sure solution is still within 28 days of when it was first mixed in bottle.) When needed, mix fresh gallon of cold sterile solution by adding the small bottle to the large one and shaking well.
3. **Run Spore Test in Sterilizers:**
   1. Locate spore test strips.
   2. Follow Instructions and log into notebook the date on which the test is being performed.
4. **Patient Care Competency (PC.5)**
   1. When results come in, log into notebook and place in 3-ring binder.

**Radiology Assistant**

1. Both automatic processors must have the water replenished at the beginning of the clinic session and emptied at the end of each clinic session. These procedures will be performed or supervised by an instructor.

Push ‘On’ button to warm up unit. Do not run any films until the ready light goes on. To develop films, push the ‘Run’ button. Further instructions for care of the Gendex are available in the clinic.

1. Turn on processor (switch on the *left*) to allow it to warm up.

The switch on the r*i*ght is turned *on* only when films are being run through and processed. It is turned *off* when no films are being processed.

1. Check all rooms to be sure they are ready for patients. If they are not clean, sanitize and prepare them with barriers.

NOTE: Personal protective gear must be worn during sanitizing procedures.

Barriers should be placed on chair, x-ray head, dial, and the switch outside the room.

After use, spray the lead apron with disinfectant and wipe.

DO NOT SPRAY DISINFECTANT DIRECTLY INTO ANY ELECTRICAL AREA OR X-RAY COMPONENT. If needed, saturate 4 X 4 gauze and disinfect the area by wiping.

1. Make BW’s and FMX sets in down time.
2. Develop films following instructions below. REMEMBER – double films are being used and must be separated before placing in developer.
   1. Quality Assurance Test: A Step Wedge film should be ran prior to processing each clinical radiographic set and compared to a master film. Any changes of two or more steps indicate solutions must be replenished or changed.
   2. Place cup with exposed film and a paper towel inside daylight loader.
   3. Close lid and put on two pairs of non-powdered gloves.
   4. Enter hands inside daylight loader, remove films from wrappers and drop films onto paper towel inside of daylight loader
   5. Separate lead foil from rest of film package refuse.
   6. Remove outer (contaminated) pair of gloves.
   7. Place films to the developer rollers making certain films are spaced so as not to overlap.
   8. Wait until the last film has completely entered the developer.
   9. Remove gloves inside the daylight loader and take hands out.
   10. Put on new gloves, open lid, remove and dispose of trash. Place the lead foil in the proper receptacle.

A special holder must be used when developing # 0 (pedo) and # 1 (anterior) film. Only # 2 film can be developed as is.

The Gendex does not require any special film holders; however, the same aseptic procedures apply.

1. With gloves on take equipment to sterilization for processing.
2. Mount both sets of films, placing any retakes in coin envelope. Deliver to appropriate student.
3. Clean the rooms (wearing Nitrile gloves) and set up for the next patient. Place tube head against the wall.
4. Keep the radiology area clean and neat.
5. At the end of clinic session:
   1. Make sure that all x-ray units are turned off and the x-ray heads are placed in the proper position against the wall.
   2. Put the processor on standby
   3. If the processor has been used, take roller assembly out, rinse and scrub rollers. Set on roller assembly on designated stand.
   4. Bag all used equipment and deliver to sterilization
   5. Put away all other supplies and leave the counters clean and neat.

## 

## Appendix IV: Policy for the Control and Use of Ionizing Radiation

The following policy has been developed in the interest of establishing a consistent standard concerning the use of ionizing radiation within the dental assisting department. The primary goal of this policy is to assure the safe and effective use of ionizing radiation and to minimize, as much as possible, any potential risk from adverse biological effects to patients, students, faculty, and staff.

1. Deliberate exposure of an individual to dental diagnostic radiographic procedures for training or demonstration purposes shall not be permitted unless there is a documented diagnostic need for the exposure by a method of the dental assisting faculty.
2. The operator or dental auxiliary shall not hold the film in place for the patient during the exposure. The use of film-holding devices, bite tabs, or other aids are appropriate to position the film during exposure.
3. The operator must stand behind the barrier provided for each x-ray cubicle in the dental clinic at ***San Joaquin Valley College*** and directly observe the patient during each exposure.
4. Neither the tube housing, nor the cone (PID) should be hand held during the exposure. If equipment is nonstable, report the problem to a dental assisting instructor and go to another unit.
5. Only shielded, open-ended cones (PID’s) will be used in order to minimize scatter radiation.
6. When a cylindrically collimated x-ray machine is being used, the circular beam striking the face should not be more than 2.75 inches in diameter.
7. Only film with ANSI (ASA) speed group rating of ‘F’ or faster shall be used.
8. Each dental x-ray machine should contain filtration of 1.5mm of aluminum equivalent if operation at less than 70 kilovolt peak (Kvp), and 2.5mm of aluminum equivalent if operation at 70Kvp or above.
9. Lead aprons with thyroid collar will be used on all x-ray patients in the ***SJVC*** Dental Assisting Department as an additional precaution to prevent unnecessary scatter radiation exposure to the body of the patient.
10. Periodic radiation protection surveys and inspections will be made by the radiation safety officer of the State of California. All recommendations by the radiation safety officer concerning collimation, filtration, beam alignment, roentgen output, radiation leakage, etc., will be implemented immediately.
11. Prescribed exposure and processing techniques will be followed: If the films are too dark in density, the exposure technique and/or processing procedure for that particular machine will be evaluated and corrected.
12. The Guidelines for Prescribing Dental Radiographs as developed by the American Dental Association and the U.S. Food and Drug Administration are used as selection criteria for prescribing radiographs along with the following stipulations:
    1. Dental exposure of the patient to x-radiation shall be kept at the minimum level consistent with clinical requirements of each individual patient. The limits on exposure, in each case, will be determined by the professional judgment of a dental assisting instructor.
    2. Partially edentulous patients will receive a combination of radiographs as deemed appropriate by a dental assisting instructor.
    3. Dental X-rays can be undertaken during pregnancy with no additional fetal or maternal risk when compared to the risk of not providing care.
13. No radiograph will be taken of a patient at ***SJVC*** Dental Assisting Program unless prescribed by a dentist.
14. Quality Assurance Program: This program is designed to produce radiographs of consistently high quality with minimal patient exposure.
    1. Projection Technique
       1. Before dental assisting students take an FMS on a patient, they have had didactic instruction in dental radiography and laboratory instruction in taking FMS on manikins.
       2. There will be direct supervision of all students during their first FMS of a patient.
       3. All radiographs are reviewed for errors by department faculty or a staff member as soon as possible, after they are taken and processed. Students who must retake films will be directly supervised and instructed by a dental assisting instructor. Retakes will be limited to three films per patient.
       4. The amount and type of radiographs taken for each patient are recorded on the FMX Evaluation Form.
       5. Film holder and alignment devices will be used to aid students in the correct alignment of the x-ray position indicating device (PID), film and area of interest.
    2. Infraction Policy
       1. A noted safety infraction requires an immediate corrective action from the instructor. Safety infractions also carry point penalties which may result in skill failure. Refer to the DA Skill Competency Packet and FMX Evaluation Form to properly document infractions.
    3. Evaluation of x-ray machine performance
       1. X-ray units will be inspected, and calibrated as necessary, by the State of California, on a regular basis. If the quality of x-ray films diminishes greatly between inspections, extra evaluations will be sought.
    4. All film is stored in a cool, locked cabinet, located in the clinic and films used according to age sequence. The Registered Dental Assistant on staff dispenses film when needed in each clinic session. For full mouth series 18 films are dispensed. Students are then required to contact their clinical instructor if in need of additional films for retakes. Retakes are to be taken under the supervision of the dental assisting instructor.
    5. Out-dated film will never be used on patients.
15. Disposal of Equipment
    1. You must report the final disposition of the X-ray machine on the Radiation Machine Registration form (RH2261). Upon receipt of proper documentation, the Radiologic Health Branch will remove the X-ray machine(s) from your machine registration inventory. Proper and credible documentation (e.g. service reports evidencing disassembly or disabling of the machine, photos, sales contract, etc.) must clearly demonstrate the disposition of the X-ray machine..
16. Dental Assisting faculty members ensure that the ***SJVC*** x-ray procedures are in compliance with regulations of the State of California Department of Health.

## Appendix V: Guidelines for Prescribing Dental Radiographs

\*The recommendations in this chart are subject to clinical judgment and may not apply to every patient. They are to be used by dentists only after reviewing the patient’s health history and completing a clinical examination. Because every precaution should be taken to minimize radiation exposure, protective thyroid collars and aprons should be used whenever possible. This practice is strongly recommended for children, women of childbearing age and pregnant women.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **TYPE OF ENCOUNTER** | **PATIENT AGE AND DENTAL DEVELOPMENT STAGE** | | | | | | |
| Child | | **Adolescent** | **Adult** | | \* Clinical situations for which radiographs may be indicated include but are not limited to:  **Positive Historical Findings**  Previous periodontal or endodontic therapy  History of pain or trauma  Familial history of dental anomalies  Postoperative evaluation of healing  Remineralization monitoring  Presence of implants or evaluation for implant placement  **Positive Clinical Signs/ Symptoms**  Clinical evidence of periodontal disease  Large or deep restorations  Deep carious lesions  Malposed or clinically impacted teeth  Swelling  Evidence of dental/facial trauma  Mobility of teeth  Sinus tract (“fistula”  Clinically suspected sinus pathology  Growth abnormalities  Oral involvement in known or suspected systemic disease  Positive neurologic findings in the head and neck  Evidence of foreign objects  Pain and/or dysfunction of the temporomandibular joint  Facial asymmetry  Abutment teeth for fixed or removable partial prosthesis  Unexplained bleeding  Unexplained sensitivity of teeth  Unusual eruption, spacing or migration of teeth  Unusual tooth morphology, calcification or color  Unexplained absence of teeth  Clinical erosion | **\*\* Factors increasing risk for caries may include but are not limited to:**  High level of carious experience or demineralization  History of recurrent caries  High titers of cariogenic bacteria  Existing restoration(s) of poor quality  Poor oral hygiene  Inadequate fluoride exposure  Prolonged nursing (bottle or breast)  Frequent high sucrose content in diet  Poor family dental health  Developmental or acquired enamel defects  Developmental or acquired disability  Xerostomia  Genetic abnormality of teeth  Many multisurface restorations  Chemo/radiation therapy  Eating disorders  Drug/alcohol abuse  Irregular dental care |
| **Primary Dentition** (prior to eruption of first permanent tooth) | **Transitional Dentition** (after eruption of first permanent tooth) | **Permanent Dentition** (prior to eruption of third molars) | Dentate or Partially Edentulous | Edentulous |
| New Patient\*  All new patients to assess dental diseases and growth and development | Individualized radiographic exam consisting of selected periapical/occlusal views and/or posterior bite-wings if proximal surfaces cannot be visualized or probed.  Patients without evidence of disease and with open proximal contacts may not require a radiographic exam at this time. | Individualized radiographic exam consisting of posterior bitewings with panoramic exam or posterior bitewings and selected periapical images. | Individualized radiographic exam consisting of posterior bitewings with panoramic exam or posterior bitewings and selected periapical images. A full mouth intraoral radiographic exam is preferred when the patient has clinical evidence of generalized dental disease or a history of extensive dental treatment. | | Individualized radiographic exam, based on clinical signs and symptoms |
| **Recall Patient\***  with clinical caries or high-risk factors for caries\*\* | Posterior bitewing exam at 6-12 month intervals if proximal surfaces cannot be examined visually or with a probe. | | | Posterior bite-wing exam at 6- to 18-month intervals | Not applicable |
| **Recall patient\*** with no clinical caries and not at increased risk for caries\*\* | Posterior bite-wing exam at 12- to 24- month intervals if proximal surfaces cannot be visualized or probed | | Posterior bite-wing exam at 18- to 36-month intervals | Posterior bite-wing exam at 24- to 36-month intervals | Not applicable |
| **Recall patient \*** with periodontal disease | Clinical judgment as to the need for and type of radiographic images for the evaluation of periodontal disease. Imaging may consist of, but is not limited to, selected bitewing and/or periapical images of areas where periodontal disease (other than nonspecific gingivitis) can be identified clinically. | | | | Not applicable |
| **Patient** for monitoring growth and development | Clinical judgment as to need for and type of radiographic images for evaluation and/or monitoring of dentofacial growth and development | | Clinical judgment as to need for and type of radiographic images for evaluation and/or monitoring of dentofacial growth and development. Panoramic or periapical exam to assess developing third molars | Usually not indicated | |
| **Patient** with other circumstances including, but not limited to, proposed or existing implants, pathology, restorative/endodontic needs, treated periodontal disease and caries remineralization |  | |  |  | |

The recommendations contained in this table have been taken from the American Dental Association, U.S. Food & Drug Administration. The Selection of Patients for Dental Radiograph Examinations. Available on [www.ada.org](http://www.ada.org) Nov. 2004

## Appendix VI: Guidelines for Unit Setup and Breakdown

For infection control purposes, the following aseptic protocols should be observed while treating patients. These are general guidelines, which follow a usual format for treatment procedures. This listing should be followed in order, however when treatment sequences depart from the usual format, it may be necessary to modify your process but not the protocols. Asepsis must be maintained at all times. The infection control protocol for all procedures can be located in the DA Skill Competency Packet.

|  |  |
| --- | --- |
|  | Hand Washing Technique with Antimicrobial and Non-Antimicrobial Soap |
| 1. | Set up armamentarium. |
| 2. | Remove jewelry. |
| 3. | Adjust water flow and temperature. |
| 4. | Wet hands first with water. |
| 5. | Apply plain or antimicrobial soap to hands and rub hands together to create a lather. |
| 6. | Rub hands together vigorously for at least 15 seconds, covering all surfaces of the hands and fingers. |
| 7. | Work lather between index finger and thumb. |
| 8. | Work lather between each finger. |
| 9. | Work lather from little finger around wrist to forearm. (Optional: With soft brush scrub under nail beds of each finger.) |
| 10. | Rinse hands with finger tips in an upward position; allowing water and soap to flow off elbow. |
| 11. | Dry hands thoroughly with a disposable towel. |
|  | Donning and Removing Personal Protective Equipment |
| 1. | Unit dose all items needed. |
| 2. | Put on long-sleeved lab jacket over scrubs. |
| 3. | Put on surgical mask and surgical cap. |
| 4. | Add protective eyewear (safety glasses, goggles, face shield) |
| 5. | Wash and dry hands thoroughly. |
| 6. | Holding one glove at the cuff, place the opposite hand inside the glove and pull it onto the hand. Adjust for fit. |
| 7. | Repeat with a new glove on the other hand. |
| 8. | Place overgloves over gloved hands. |
| 9. | Practice asepsis techniques; avoid touching non-clinically prepared surfaces. |
| 10. | ***Eyewear*:** Remove eye and face protection; if contaminated with blood or debris, disinfect using a spray-wipe-spray technique. |
| 11. | ***Overgloves:*** remove one glove by grabbing the fingers of the glove. |
| 12. | Use removed glove as a barrier to remove second glove from hand. |
| 13. | ***Gloves:*** Use your gloved hand to grab the other glove at the outside cuff. |
| 14. | Pull downward, turning the glove inside out as it pulls away from your hand. |
| 15. | For the other hand, use your ungloved fingers to grab the inside (uncontaminated area) of the cuff of the remaining glove. |
| 16. | Pull downward, turning the glove inside out as it pulls away from your hand. |
| 17. | Discard gloves in proper disposable receptacle. |
| 18. | ***Mask & surgical cap:*** Remove mask, with ungloved hands, by elastic strap or ties; remove surgical cap. |
| 19. | ***Lab Jacket:***Fold visibly soiled area away from the body to remove. Be careful not to contaminate your hands. |
| 20. | Discard disposable garment or place reusable protective apparel into designated container for contaminated laundry. |
| 21. | Wash and dry hands. |
|  | Operatory Preparation and Disinfection |
| 1. | Ensure treatment room is properly disinfected and place barriers. |
| 2. | Gather and set-up appropriate armamentarium for patient procedure. |
| 3. | ***After clinical treatment has been given:*** Remove surface barriers with utility gloves. |
| 4. | Dispose used covers in designated trash receptacle. |
| 5. | Determine the degree of cleaning/disinfection required and select the appropriate product compatible with surfaces to be cleaned/disinfected. |
| 6. | Confirm cleaning/disinfectant product has been properly prepared and is fresh. Reviewed manufactures instructions regarding time requirements for cleaning and disinfection. |
| 7. | ***Cleaning:*** Wipe a premoistened cleaner-disinfectant towelette over clinical contact surfaces or spray surfaces with a cleaning agent; vigorously wipe with paper towels. |
| 8. | ***Disinfect:*** Place saturated towelette or spray the disinfectant over the entire clinical contact surfaces.   * Tip: Spray towels to reduces overspray |
| 9. | Let the surface remain moist for the contact time stated on the manufacturer’s label. |
| 10. | Cover procedure tray with contaminated items and transport to sterilization area. |
| 11. | Remove contaminated utility gloves and disinfect; at the end of the day, sterilize gloves. |
| 12. | Wash hands. |
|  | Instrument Processing and Sharps Management |
| 1. | Confirm ultrasonic cleaning product has been properly prepared according to manufactures instructions. |
| 2. | Don all PPE (utility gloves) |
| 3. | Discard all contaminated single-use disposable items into appropriate trash receptacle. |
| 4. | Discard all sharps into appropriate sharp receptacles.   * ***Sharps***: needles, broken instruments, glass ampules, wires, and teeth without amalgam |
| 5. | Place reusable patient-care items in a leak-proof, puncture-resistant container with solid sides and bottom. |
| 6. | Cover container to prevent accidental exposure. |
| 7. | Walk container of contaminated reusable instruments to the designated processing area. |
| 8. | Transfer loose instruments from tray to ultrasonic; rinse items under running water to remove loose debris. |
| 9. | Load the tank, being careful not to overload or splash. |
| 10. | Place lid on the unit and set timer and run. |
| 11. | Remove basket and rinse instruments. Inspect for remaining debris. |
| 12. | Allow instruments to air dry or carefully pat dry with several thicknesses of towels, avoiding injury to yourself. |
| 13. | Arrange instruments into functional sets by procedure or grouping. **Optional:** Include a chemical indicator inside each package. |
| 14. | Seal each instrument pack or wrap kit according to instructions. |
| 15. | Write initial and date on packaging. (Include kit number if available) |

## Appendix VII: Signs and Symptoms and Emergency Procedures

|  |  |  |
| --- | --- | --- |
| **Emergency** | **Signs/Symptoms** | **Procedure** |
| All Cases |  | 1. Determine consciousness (shake & shout):  Yell for help  2. Place in supine position (unconscious)  3. Identify major problem  A. Airway  B. Breathing  C. Circulation  4. Act in accord with findings  5. Activate EMS |
| Respiratory Failure | Labored or weak respirations or cessation of breathing  Cyanosis or ashen-white with blood loss  Pupils dilated  Loss of consciousness | Position: supine (not breathing)  upright (breathing)  Check for and remove foreign material from mouth  Establish airway  Rescue  Adult: 1 breath every 5 seconds  Child (1-8): 1 breath every 4 seconds  Infant (younger than 1 year): 1 breath every 3 seconds  Monitor vital signs: blood pressure, pulse, respirations  Administer oxygen by nonrebreather bag |
| Airway Obstruction | Good air exchange, coughing, wheezing | Sit patient up  Loosen tight collar, belt  No treatment; let patient cough |
| Partial | Poor air exchange, noisy breathing, weak, ineffective cough, difficult respirations, gasping  Patient is panicky | Reassure patient  Treat for complete obstruction |
| Complete | Gasping with great effort; no noises  Patient clutches throat  Unable to speak, breathe, | *Conscious Patient*  Perform Heimlich maneuver  Patient becomes unconscious: proceed for unconscious |
|  | cough  Cyanosis  Dilated pupils | *Unconscious Patient*  Initiate A-B-C of Basic Life Support  Unsuccessful breathing attempts: proceed with airway obstruction management  Perform Heimlich maneuver: 6 - 10 thrusts  Examine mouth: apply finger sweep  Open airway: give 2 ventilations  Repeat manual thrusts and finger sweep until object is expelled  Try rescue breathing again  *Obtain medical assistance* |
| Hyperventilation Syndrome | Lightheadedness, giddiness  Anxiety, confusion  Dizziness  Overbreathing (25 to 30 respirations per minute)  Feelings of suffocation  Deep respirations  Palpitations (heart pounds)  Tingling or numbness in the extremities | Terminate oral procedure  Remove rubber dam and objects from mouth  Position upright or best for comfortable breathing  Loosen tight collar  Reassure patient. Explain overbreathing: request that each breath be held to a count of 10  Ask patient to breathe deeply (7 - 10 per minute) into a paper bag adapted closely over nose and mouth. Never use a bag for a patient with diabetes.  Carbon dioxide is indicated, NOT oxygen. |
| Hemorrhage | Prolonged bleeding  a. Spurting blood: artery  b. Oozing blood: vein | Compression over bleeding area  a. Apply gauze pack with pressure  b. Bandage pack into place firmly where possible  Severe bleeding: digital pressure on pressure point for supplying vessel  Watch for shock symptoms |
|  | Bleeding from tooth socket | Pack with folded gauze: do not dab  Have patient bit down firmly  Do not rinse |
|  | Bleeding from an extremity | Elevate the part: support with pillows or substitute  Apply tourniquet only when limb is amputated, mangled, or crushed |
|  | Nosebleed | Tell patient to breathe through mouth  Apply cold application to nose  Press nostril on bleeding side for a few minutes  Advise patient not to blow nose for an hour or more |
| Syncope (fainting) | Pale gray face, anxiety  Dilated pupils  Weakness, giddiness, dizziness, faintness, nausea  Profuse cold perspiration  Rapid pulse at first, followed by slow pulse  Shallow breathing  Drop in blood pressure  Loss of consciousness | Position: Trendelenburg  Loosen tight collar, belt  Place cold, damp towel on forehead  Crush ammonia vaporole under patient’s nose  Keep warm (blanket)  Monitor vital signs: blood pressure, pulse, respirations  Keep airway open  Administer oxygen by nasal cannula  Keep in supine position 10 minutes after recovery to prevent nausea and dizziness  Reassure patient, especially during recovery |
| Shock | Skin: pale, moist, clammy  Rapid, shallow breathing  Low blood pressure  Weakness and/or restlessness  Nausea, vomiting  Thirst, if shock is from bleeding  Eventual unconsciousness if untreated | Position: Trendelenburg  Keep quiet and warm  Monitor vital signs: blood pressure, respirations, pulse  Keep airway open  Administer oxygen by nonrebreather bag  *Summon medical assistance* |
| Stroke (cerebrovascular accident) | *Premonitory*  Dizziness, vertigo  Transient paresthesia or weakness on one side  Transient speech defects  *Serious*  Headache (with cerebral hemorrhage)  Breathing labored, deep, slow  Chills  Paralysis one side of body  Nausea, vomiting  Convulsions  Loss of consciousness (slow or sudden onset) | *Conscious Patient*  Turn patient on paralyzed side; semiupright  Loosen clothing about the throat  Reassure patient; keep calm, quiet  Monitor vital signs: blood pressure, pulse, respirations  Administer oxygen by nasal cannula  Clear airway; suction vomitus because the throat muscles may be paralyzed  *Seek medical assistance promptly*  *Unconscious Patient*  Position: supine  Basic life support  Cardiopulmonary resuscitation if indicated |
| Cardiovascular Diseases | Symptoms vary depending on cause | For all patients  Be calm and reassure patient  Keep patient warm and quiet; restrict effort  Always administer oxygen when there is chest pain  *Call for medical assistance* |
| Angina Pectoris | Sudden crushing, paroxysmal pain in substernal area  Pain may radiate to shoulder, neck, arms  Pallor, faintness  Shallow breathing  Anxiety, fear | Position: upright, as patient requests, for comfortable breathing  Place nitroglycerin sublingually only when the blood pressure is at or above baseline  Administer oxygen by nasal cannula  Reassure patient  Without prompt relief after a second nitroglycerin, treat as a myocardial infarction |
| Myocardial Infarction (heart attack) | Sudden pain similar to angina pectoris, which also may radiate, but of longer duration  Pallor: cold, clammy skin  Cyanosis  Nausea  Breathing difficulty  Marked weakness  Anxiety, fear  Possible loss of consciousness | Position: with head up for comfortable breathing  Symptoms are not relieved with nitroglycerin  Monitor vital signs: blood pressure, pulse, respirations  Administer oxygen by nonrebreather bag  Alleviate anxiety: reassure  *Call for medical assistance for transfer to hospital* |
| Heart Failure | Difficult or labored breathing  Pulmonary congestion with cough  May cough up blood  Rapid, weak pulse  Dilated pupils  May have chest pain | *Urgent medical assistance needed*  Place patient in upright position  Make patient comfortable: cover with blanket  Administer oxygen by nonrebreather bag  Reassure patient |
| Cardiac Arrest | Skin: ashen gray, cold, clammy  No pulse  No heart sounds  No respirations  Eyes fixed, with dilated pupils: no constriction with light  Unconscious | Position: supine  Basic life support  Check oral cavity for debris or vomitus: leave dentures in place for a seal  Begin cardiopulmonary resuscitation: minutes count |
| Adrenal Crisis (cortisol deficiency) | Anxious, stressed  Mental confusion  Pain in abdomen, back, legs  Muscle weakness  Extreme fatigue  Nausea, vomiting  Lowered blood pressure  Elevated pulse  Loss of consciousness  Coma | Conscious Patient  Terminate oral procedure  Call for help and emergency kit  Place patient in supine position with legs slightly raised  Request telephone call for medical assistance  Administer oxygen by nonrebreather bag  Monitor blood pressure and pulse  *Unconscious Patient*  Place patient in supine position with legs slightly raised  Basic life support  Try ammonia vaporole when cause is undecided  Administer oxygen  Summon medical assistance  Transport to hospital |
| Insulin Reaction  (hyperinsulinism)  (hypoglycemia) | Sudden onset  Skin: moist, cold, pale  Confused, nervous, anxious  Bounding pulse  Salivation  Normal to shallow respirations  Convulsions (late) | Conscious Patient  Administer oral sugar (cubes, orange juice, candy or frosting)  Observe patient for 1 hour before dismissal  Determine time since previous meal, and arrange next appointment after food intake  Unconscious Patient  Basic life support  Position: supine  Maintain airway  Administer oxygen by nonrebreather bag  Monitor vital signs  Summon medical assistance  Administer intravenous glucose |
| Diabetic Coma  (ketoacidosis)  (hyperglycemia) | Slow onset  Skin: flushed and dry  Breath: fruity odor  Dry mouth, thirst  Low blood pressure  Weak, rapid pulse  Exaggerated respirations  Coma | Conscious Patient  Terminate oral procedure  Obtain medical care: hospitalize  Keep patient warm  Administer oxygen by nasal cannula  Unconscious patient  Basic life support  *Urgent medical assistance needed* |
| Allergic Reaction  1. Delayed | Skin  Erythema (rash)  Urticaria (wheals, itching)  Angioedema (localized swelling of mucous membranes, lips, larynx, pharynx)  Respiration  Distress, dyspnea  Wheezing  Extension of angioedema to larynx: may have obstruction from swelling of vocal apparatus | Skin  Administer antihistamine  Respiration  Position: upright  Administer oxygen by nasal cannula  Epinephrine  Airway obstruction  Position: supine  Airway maintenance  Epinephrine  *Summon medical assistance* |
| 2. Immediate Anaphylaxis (anaphylactic shock) | Skin: Urticaria (wheals, itching)  Flushing  Nausea, abdominal cramps, vomiting, diarrhea  Angioedema  Swelling of lips, membranes, eyelids  Laryngeal edema with difficult swallowing  Respiration distress  Cough, wheezing  Dyspnea  Airway obstruction  Cyanosis  Cardiovascular collapse  Profound drop in blood pressure  Rapid, weak pulse  Palpitations  Dilation of pupils  Loss of consciousness (sudden)  Cardiac arrest | Rapid treatment needed (epinephrine)  Position: supine when dyspnea predominates)  Administer oxygen by nonrebreather bag  Basic life support  Monitor vital signs  Cardiopulmonary resuscitation  *Summon medical assistance; transfer to hospital* |
| Local Anesthesia Reactions  1. Psychogenic | Reaction to injection, not the anesthetic  Syncope  Hyperventilation syndrome | See earlier in this table |
| 2. Allergic (very rare) | Anaphylactic shock  Allergic skin and mucous membrane reactions  Allergic bronchial asthma attack | See earlier in this table |
| 3. Toxic Overdose | Effects of intravascular injection rather than increased quantity of drug are more common  a. Stimulation phase  Anxious, restless, apprehensive, confused  Rapid pulse and respirations  Elevated blood pressure  Tremors  Convulsions  b. Depressive phase  Follows stimulation phase  Drowsiness, lethargy  Shock-like symptoms: pallor, sweating  Rapid, weak pulse and respirations  Drop in blood pressure  Respiratory depression or respiratory arrest  Unconsciousness | Mild reaction  Stop injection  Position: supine  Loosen tight clothing  Reassure patient  Monitor blood pressure, heart rate, respirations  Administer oxygen by nasal cannula  Summon medical assistance  Severe reaction  Basic life support: maintain airway  Administer oxygen by nonrebreather bag  Continue to monitor vital signs  Cardiopulmonary resuscitation  Administration of anticonvulsant |
| Epileptic Seizure  1. Generalized tonic-clonic | Anxiety or depression  Pale, may become cyanotic  Muscular contractions  Loss of consciousness | Position: supine. Do not attempt to remove from dental chair  Make safe by placing movable equipment out of reach  Do not force anything between the teeth; a soft towel or large sponges may be placed while mouth is open  Open airway: monitor vital signs  Administer oxygen by nasal cannula  Allow patient to sleep during postconvulsive stage  Do not dismiss the patient if unaccompanied |
| 2. Generalized absence | Brief loss of consciousness  Fixed posture  Rhythmic twitching of eyelids, eyebrows, or head  May be pale | Take objects from patient’s hands to prevent their being dropped |
| Burns 2 |  | First and Second-degree Burns |
| 1. First degree  2. Second degree  (partial thickness) | Skin reddened  Swelling  Pain  Skin reddened, blisters  Swelling  Wet surface  Pain (more than third degree)  Heightened sensitivity to touch | Do not give food or liquids, anticipate nausea  Be alert for signs of shock  Do not apply ointment, grease, or bicarbonate of soda  Immerse in cool water to relieve pain, not ice  Gently clean with a mild antiseptic  Dress lightly with bandage  Elevate burned part  *Obtain medical assistance* |
| Burns, continued  3. Third Degree (full thickness) | Leathery look  Insensitive to touch | *Request medical assistance and transport system*  Treat for shock  Basic life support; maintain airway  Check for other injuries  Wrap in clean sheet; transport |
| 4. Chemical Burn | Reddened, discolored | Immediate, copious irrigation with water for 1/2 hour |
|  |  | Check directions on container from which the chemical came for antidote or other advice  Burn caused by an acid may be rinsed with bicarbonate of soda, burn caused by alkali may be rinsed in weak acid such as acetic (vinegar)  *Medical assistance needed* |
| Internal Poisoning 3 | Signs of corrosive burn around or in oral cavity  Evidence of empty container or information from patient  Nausea, vomiting, cramps | Be calm and supportive  Basic life support; airway maintenance  Artificial ventilation (inhaled poison)  Record vital signs  *Call Poison Control Center*  *Conscious Patient*  Dilute poison in the stomach with 1 or 2 glasses of water or milk  Induce vomiting by giving 1 tablespoon of syrup of ipecac followed by 1 to 2 glasses of water.  Do not induce vomiting if caustic, corrosive, or petroleum products have been ingested  Avoid nonspecific and questionably effective antidotes, stimulants, sedatives, or other agents, which may do more harm  *Obtain medical assistance* |
| Foreign Body in Eye | Tears Blinking | Wash hands  Ask patient to look down  Bring upper lid down over lower lid for a moment; move it upward  Turn down lower lid and examine; if particle is visible, remove with moistened cotton applicator  Use eye cup; wash out eye with plain water  When unsuccessful, seek medical attention: prevent patient from rubbing eye by placing gauze pack over eye and stabilizing with adhesive tape |
| Chemical Solution in Eye | Tears  Stinging | Irrigate promptly with copious amounts of water. Turn head so water flows away from inner aspect of the eye. Continue for 15 to 20 minutes. |
| Dislocated Jaw | Mouth is open; patient is unable to close | Stand in front of seated patient  Wrap thumbs in towels and place on occlusal surfaces of mandibular posterior teeth  Curve fingers and place under body of the mandible  Press down and back with thumbs, and at same time pull up and forward with fingers  As joint slips into place, quickly move thumbs outward  Place bandage around head to support jaw |
| Facial Fracture | Pain, swelling  Ecchymoses  Deformity, limitation of movement  Crepitation on manipulation  Zygoma fracture; depression of cheek  Mandibular fracture; abnormal occlusion | Place patient on side  Basic life support  Support with bandage around face, under chin, and tied on the top of the head (Barton)  *Seek prompt transport to emergency care facility* |
| Tooth Forcibly Displaced (avulsed tooth) | Swelling, bruises, or other signs of trauma, depending on the type of accident | Instruct patient or parent to rinse tooth gently in cool water and place in water or wrap in wet cloth  Bring to the dental office or clinic immediately  The longer the time lapse between avulsion and replantation, the poorer the prognosis |

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## Appendix VIII: Stages of Psychomotor Skill Development

Several *levels or stages of skill development* must be mastered before it is possible for an individual to become a competent professional:

1. **Novice/Fundamental or Basic Movement**

* This is the preclinical practice stage of skill development

1. **Beginner Skill Level**

* In this stage, the *skill practice stage*, the student is able to perform simple treatment procedures with faculty supervision and assistance.

1. **Competent/Intermediate Skill Level (Entry-level to profession)**

* At this stage, a student frequently is able to correctly perform a procedure and demonstrate sound clinical judgment integrating theory into practice; however, still may experience difficulty if a patient is nervous, uncooperative, or has an oral condition which differs from that of previous patients.
* Often referred to as *entry-level skill*, this is the level, which must be attained before a student is ready to graduate, and ‘gain entry’ to the profession.
* Entry-level skills represent the minimum level of skill attainment needed before a clinician can consistently provide safe, individualized, quality care for patients possessing a wide range of oral conditions.
* This third level is the appropriate and realistic level for graduation.

1. **Proficient/Certification Skill Level (Usually achieved 3-5 years after graduating)**

* Mixes analytic thinking with intuitive “know how”
* Demonstrates abilities with a wide range of clinical cases
* Shows a greater breadth and depth of understanding

1. **Expert/Highest Skill Level**

* This level of skill is achieved through the graduate dental assistant’s high motivation to improve his or her skills combined with years of clinical practice and by attending continuing education classes.
* The expert uses intuition and experience, without conscious analytic thinking.
* The expert effortlessly completes tasks as normal.
* The expert blends the highest level of judgment and skill.

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