Training Bulletin

BLS PCS v3.0 Summary of Changes

Issue Number 119 – Version 1.0
July 2016

Emergency Health Services Branch
Ministry of Health and Long-Term Care

Ontario

To all users of this publication:

The information contained in this training bulletin has been carefully compiled and is believed to be accurate at date of publication.

For further information on *Training Bulletin 119 – BLS PCS v3.0 Summary of Changes* please contact:

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Document Control

Version Number	Date of Issue	Brief Description of Change
1.0	July 2016	Finalized Version 1.0

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BLS PCS v3.0 Summary of Changes

Document Purpose

In 2007, the Ministry of Health and Long-Term Care (MOHLTC) Emergency Health Services Branch (EHSB) published Version 2.0 of the *Basic Life Support Patient Care Standard*s (BLS PCS). In 2014, work began on a full revision to the BLS PCS; in the summer of 2016, BLS PCS v3.0 was finalized.

This training bulletin provides paramedics a Summary of Changes between Version 2.0 and 3.0 of the BLS PCS, as well as lists proposed learning objectives to assist in the transition of versions (*Appendix A*). Development of this bulletin has been made in consultation with the Ontario Association of Paramedic Chiefs (OAPC), the Ontario Base Hospital Group - Executive Committee (OBHG-Executive), the Ontario Base Hospital Group - Medical Advisory Committee (OBHG-MAC), Toronto Paramedic Services (TPS), and Ornge.

Living Standard Project

In accordance with the *Living Standard Project*, an update initiation memo was released to the field in August of 2015 detailing that the full update was underway, and confirmed Working Group representation.

Revisions to the BLS PCS were made in accordance with the *Living Standard Project*. Use of concepts such as version control, document standardization, and communication pathways were sustained throughout the revision process.

Revision Process

Due to the amount of material that was revised in the BLS PCS, the updated drafts were released to the Working Group in sections to allow for effective review and timely input.

Working Group

Working Group representation included:

- OAPC – Greg Sage
- OBHG-Executive – Rob Burgess
- OBHG-MAC – Dr. Rick Verbeek
- Ornge – Justin Pyke

- MOHLTC – Narendra Shah, Chris Georgakopoulos, Preston Holmes, Mary Vahaviolos, Cathy Francis, Corey Freedman
- Subject Matter Expert – Lynne Urszenyi
- Sunnybrook Base Hospital (under the direction of the MOHLTC) – Scott Gorsline, Scott Kline
- TPS – Frank Hurlehey

Guiding Principles

In order to assist the revision process, proposed changes were measured against six guiding principles, which aimed to ensure that the BLS PCS v3.0:

- is streamlined;
- is without redundancy;
- represents one source of truth;
- is relevant and purposeful;
- is enforceable; and
- is evidence-based and based upon best-practice.

The BLS PCS is aligned with other provincial and federal acts, regulations and standards. The *2015 Canadian Guidelines Update for CPR and Emergency Cardiovascular Care* (Heart and Stroke Foundation of Canada) were also considered.

Overview of Revisions

The BLS PCS has undergone a full revision. Version 2.0 of the BLS PCS included eight sections; Version 3.0 includes five sections (including the appendix):

- *Section 1 – General Standard of Care*
- *Section 2 – Medical Standards*
- *Section 3 – Trauma Standards*
- *Section 4 – Obstetrical Standards*
- *Appendix A – Supplemental*

The BLS PCS sets the standard by which paramedics shall provide the minimum mandatory level of patient care in Ontario. Teaching points previously listed in Version 2.0, which instructed paramedics how to perform patient care as opposed to ‘what to do’, have been removed, as appropriate.

Section 1 – General Standard of Care has been revised with the various standards updated, streamlined, and re-sequenced to better guide patient care and outline how paramedics interact with patients, the public, and other health care professionals. Elements of general patient care, such as patient assessment and management, are outlined in this section; these elements are no longer repeated on a per standard basis in the remainder of sections. *Section 1 – General Standard of Care* is ordered based on logical groupings for an ambulance call.

Section 2 – Medical Standards has been revised with the various standards updated, streamlined, and re-sequenced to better guide patient care for specific non-trauma based patient complaints/presenting problems. Except for the *Introduction*, the section is ordered alphabetically.

Section 3 – Trauma Standards has been reorganized and revised. Whereas previously the standards were broken down by specific complaint (*e.g.* abdominal pain, chest pain), they are now organized by type of injury (*e.g.* blunt/penetrating trauma). The standards have also been updated, streamlined, and re-sequenced. Except for the *Introduction* and *General Trauma Standard*, the section is ordered alphabetically.

For both *Sections 2* and *3*, the principle of 'factoring' was utilized, with common elements brought to the front of the standard and thus not repeated for each standard thereafter.

Section 4 – Environment-Related Disorders, from Version 2.0 of the BLS PCS, has been removed; standards from this section have been incorporated, as appropriate, into either *Section 2 – Medical Standards* or *Section 3 – Trauma Standards*. This change was based upon the fact that environment-related disorders are types of medical or trauma conditions. Furthermore, as described in the granular changes listed below, some standards were incorporated into existing standards (*e.g. Bites – Animal/Human* from Version 2.0 of the BLS PCS is now part of the revised *Blunt/Penetrating Trauma Standard* located in *Section 3 – Trauma Standards* of Version 3.0 of the BLS PCS).

Section 5 – Obstetrical Conditions, from Version 2.0 of the BLS PCS, is now *Section 4 – Obstetrical Standards*. This section has been revised in collaboration with the College of Midwives Ontario and the Association of Ontario Midwives. Whereas there were previously 15 standards in the section, the revised BLS PCS now only includes two. Some standards were removed while others were incorporated into existing standards in other sections. It should be noted that certain materials previously contained in this section have been incorporated into the *Advanced Life Support Patient Care Standards* (ALS PCS); these materials concern controlled acts as per the *Regulated Health Professions Act, 1991* (Ontario).

Section 6 – Pediatrics, from Version 2.0 of the BLS PCS, has been removed; standards from this section have been revised and incorporated, as appropriate, into *Section 1 – General Standard of Care*.

Section 7 – Geriatrics, from Version 2.0 of the BLS PCS, has been removed; standards from this section have been revised and incorporated, as appropriate, into *Section 1 – General Standard of Care*.

Section 8 – Psychiatric Disorders, from Version 2.0 of the BLS PCS, has been removed; standards from this section have been revised and incorporated, as appropriate, into *Section 1 – General Standard of Care*. These standards maintain alignment with the *Health Care Consent Act, 1996* (Ontario) and the *Mental Health Act* (Ontario).

Summary of Changes

The Summary of Changes below summarizes revisions made to the BLS PCS on a high-level, based upon the organization of Version 3.0. **Please note that due to the number of changes made, descriptions of all revisions have not been listed.**

Preamble

Preface

The *Preface* has been revised to provide a concise statement outlining the purpose of the BLS PCS.

Definitions

The *Definitions* section has been updated to include: "Patient".

The definition of "Standards" has been removed, as it is included in the *Preface*.

Introduction

The *Introduction* has been rewritten and now incorporates parts of several other standards from Version 2.0 of the BLS PCS.

The revised *Introduction* includes language describing 'how to read' the BLS PCS. Furthermore, it outlines revised expectations and obligations of paramedics with regards to when the BLS PCS applies, as well as potential extenuating circumstances.

The following sections from Version 2.0 of the BLS PCS have been removed or revised and incorporated into the new *Introduction*:

- *Purpose of Basic Life Support Patient Care Standards*
- *Purpose of Basic Life Support Patient Care Guidelines*
- *Objectives of Implementation of the Standards*
- *Practice and the Basic Life Support Patient Care Standard*
- *Review and Revision of the Basic Life Support Patient Care Standards*
- *Conditions*
- *Givens*

Research

A new section on research has been added to acknowledge the potential for paramedic research. The majority of the phrasing has been adapted from the complimentary section included in the *Advanced Care Life Support Patient Care Standards* (ALS PCS).

Quality Assurance

A new section on quality assurance has been added to confirm the role of ambulance service operators with respect to quality assurance programs.

Commonly Used Abbreviations

Commonly Used Abbreviations have been updated to include those used in the revised BLS PCS.

Section 1 – General Standard of Care

Paramedic Conduct Standard

The *Paramedic Conduct Standard* within Version 2.0 of the BLS PCS was positioned between the *Oxygen Therapy Standard* and the *Patient with Vital Signs Absent (Transportation) Standard*. This standard has been moved up, to become the first standard in *Section 1 – General Standard of Care*, based on its importance and implications on the remainder of the document. In addition, the *Paramedic Conduct Standard* has been reorganized into "Paramedic Conduct" and "Paramedic Misconduct", and revised, as appropriate. Prior to reviewing this standard, an environmental scan of other conduct standards and codes of ethics was completed.

It should be noted that "Paramedic Misconduct" paragraph 7(c), "disclosing information obtained through one's position as a paramedic, which is not available to the public in general", includes disclosing information through social media.

Subsections from the *Paramedic Conduct Standard* of Version 2.0 of the BLS PCS, such as "3. Discrimination and Harassment", "4. Confidentiality" and "5. Disclosure of Confidential Information" have been removed, with relevant content incorporated elsewhere in the revised standard.

General Measures Standard

A. Personal and Patient Safety and Protection from Version 2.0 of the BLS PCS has been renamed and adapted as the *General Measures Standard*. The former section, along with many of the subsequent sections from Version 2.0 of the BLS PCS (*e.g. Patient Assessment – General Principles, Patient Assessment – Historical Assessments*) were previously written in a step-wise fashion; Version 3.0 of the BLS PCS is authored from a more holistic approach, and does not break down assessment and management elements to such a granular level. As such, the *General Measures Standard* now includes information from not just "Pre-Arrival, At Scene" (as per Version 2.0 of the BLS PCS), but also other general information that applies. For example, material from the now-removed *Patient Communication* from Version 2.0 of the BLS PCS has been revised and incorporated into the *General Measures Standard*.

Patient Assessment Standard

The following sections from Version 2.0 of the BLS PCS have been incorporated into a new standard, entitled the *Patient Assessment Standard*:

- *Patient Assessment – General Principles*
- *Patient Assessment – Environmental Assessments*
- *Patient Assessment – Historical Assessments*
- *Patient Assessment –Physical Assessments*

The new standard encompasses the assessments a paramedic must perform, and includes other considerations, such as the frequency of reassessment of vital signs, and the requirements for both auscultation and cardiac monitoring. Furthermore, conditions requiring assessment of a patient's temperature are outlined.

Patient Management Standard

As with the *Patient Assessment Standard* above, the revised *Patient Management Standard* encompasses the management a paramedic must perform. As such, it now includes content from varying sections of Version 2.0 of the BLS PCS, such as: *Patient Management* and *Patient Care Enroute to the Receiving Facility*.

Patient Transport Standard

The *Patient Transport Standard* has been updated and streamlined. Factors which may contribute to a paramedic's transport destination decision (as confirmed or directed by an ambulance communications officer) under the standard include:

- Bypass protocols listed in the BLS PCS
- Approved local Patient Priority System bypass agreements
- Base Hospital Physicians
- Other Regulated Health Professionals on scene
- Patient requests

The requirements for a paramedic requesting a medically-responsible escort have been revised.

Version 2.0 of the BLS PCS required paramedics to "secure, lift and carry" all patients to and from the ambulance; the revised standard permits ambulatory assistance in certain circumstances for CTAS 3-5 patients.

The standard now outlines temperature and lighting conditions that must be maintained by a paramedic while attending to a patient inside the patient compartment.

Patient Refusal/Emergency Treatment Standard

Patient Refusal of Treatment and/or Transport from Version 2.0 of the BLS PCS has been renamed as the *Patient Refusal/Emergency Treatment Standard*. The standard has been updated, streamlined, and re-sequenced. The new standard acknowledges three situations: where a patient refuses care

and/or transportation and has capacity, where a patient requires emergency care yet is incapable and cannot provide consent, and where a patient requires emergency care, is capable, yet does not provide consent. Much of the content from the *Patient Refusal of Treatment and/or Transport* from Version 2.0 of the BLS PCS has been removed as it is included in other MOHLTC EHSB standards, such as the *Ontario Ambulance Service Documentation Standards* and the *Ambulance Call Report Completion Manual*. Mentions of restraints have been removed as they are covered in the revised *Violent/Aggressive Patient Standard*.

Reporting of Patient Care to Receiving Facility Standard

Radio Reporting of Patient Care to Receiving Facility from Version 2.0 of the BLS PCS has been renamed as the *Reporting of Patient Care to Receiving Facility Standard*. This standard has been updated; the revised standard confirms that paramedics must provide additional reports if a patient's CTAS changes to a higher acuity while en route to the receiving facility.

Patch to Base Hospital Physician Standard

Radio Patch to Base Hospital or other Attending Physician from Version 2.0 of the BLS PCS has been renamed as the *Patch to Base Hospital Physician Standard*. The standard has been updated.

Regulated Health Professionals Standard

The *Regulated Health Professionals Standard* is a new standard in Version 3.0 of the BLS PCS. The majority of the standard has been adapted from the previously included *Midwives at the Scene Standard* from Version 2.0 of the BLS PCS (as well previously included *Physician's Order Standard*). The standard outlines expectations for paramedics interacting with other regulated health professionals (*e.g.* physicians, nurses, midwives, respiratory therapists, etc.), and emphasizes collaboration.

Transfer of Care (TOC) Standard

Transfer of Responsibility for Patient Care (TOC) from Version 2.0 of the BLS PCS has been renamed as the *Transfer of Care (TOC) Standard*. The standard aligns with other EHSB standards (*e.g.* the *Ontario Ambulance Service Documentation Standards* and the *Ambulance Call Report Completion Manual*).

Documentation of Patient Care Standard

The *Documentation of Patient Care Standard* aligns with the *Ontario Ambulance Service Documentation Standards* and the *Ambulance Call Report Completion Manual*, and has been streamlined. The requirement for paramedics to document clinical response to treatments and procedures performed has been added to allow for more efficient retrospective analysis of the care paramedics provide.

Patient Care Equipment Use Standard

Patient Care Skills from Version 2.0 of the BLS PCS has been renamed as the *Patient Care Equipment Use Standard*. The former standard included three subsections: "A. Equipment Use", "B. Patient Care Interventions", and "C. Patient Care Skills List – Minimum Requirements"; content from A. has been streamlined, content from B. is covered by the revised *Paramedic Conduct Standard*, and C. has been removed.

Oxygen Therapy Standard

Based upon medical evidence, the *Oxygen Therapy Standard* has been updated and streamlined; the standard has also been moved to an earlier spot in the BLS PCS. The revised standard now includes: "General Directive" and "Oxygen Therapy and COPD", and outlines provisions based on pulse oximetry assessments or certain conditions that require continuous oxygen. It also takes into account situations in which the pulse oximetry device does not provide an interpretable waveform and when/how COPD patients should be treated with oxygen.

Field Trauma Triage Standard

The *Field Trauma Triage Standard* has been updated to include the amendment made by *Training Bulletin Number 113 – Field Trauma Triage and Air Ambulance Utilization Standard*. The standard has also been moved in front of the *Air Ambulance Utilization Standard*. In addition, the standard has been rewritten to reflect the new style of the BLS PCS. Furthermore, it states that the thirty-minute time parameter also applies to Steps 3 and 4.

Air Ambulance Utilization Standard

The *Air Ambulance Utilization Standard* has been updated to include the amendment made by *Training Bulletin Number 113 – Field Trauma Triage and Air Ambulance Utilization Standard*. The standard has also been rewritten to reflect the new writing style of the BLS PCS. It should be noted that if paramedics arrive at a hospital with the patient and the air ambulance has already landed, paramedics may proceed directly to rendezvous with the air ambulance crew.

Spinal Motion Restriction (SMR) Standard

The *Spinal Motion Restriction (SMR) Standard* is a new standard based upon medical evidence and best practice. The standard does not allow paramedics to "clear the spine" (for blunt trauma patients), but alternatively, provides paramedics direction in the most appropriate method of SMR. The new standard also includes multiple guidelines to help clarify its elements. Please see *Appendix B* for questions and answers regarding the new standard.

Do Not Resuscitate (DNR) Standard

The *Do Not Resuscitate (DNR) Standard* replaces the *DNR Standard* from Version 2.0 of the BLS PCS, and includes the content from the amendment made by *Training Bulletin Number 108 – Do Not Resuscitate (DNR) Standard* (as well as the removal of *Policy 4.6 – Inter-Facility Do No Resuscitate Orders*). The content has been updated and streamlined. Subsections: "Purpose", "References" and

"Appendix" have been removed, and "Definitions" now only includes definitions explicitly required for the standard. The remainder of the standard, which included: "General Directives", "On Scene Directives", "Transport Directives" and "Post-Transport Directives", have all been incorporated into "General Directive". A sample of the MOHLTC DNR Confirmation Form is included under: "Sample – MOHLTC DNR Confirmation Form".

Deceased Patient Standard

The *Deceased Patient Standard* replaces the *Patient with Vital Signs Absent (Transportation) Standard* from Version 2.0 of the BLS PCS, and includes the content from the amendment made by *Training Bulletin Number 111 – Deceased Patient Standard*. The standard has been revised, and aligns with the Office of the Chief Coroner's *Best Practice Guideline #5 – Management of Deaths Occurring Outside of Health Care Facilities* (Revised 2015-01-20).

General Pediatric Standard

The *General Pediatric Standard* is a new standard composed of relevant materials previously included in the *Pediatric General Assessment and Management Standard* and *Pediatric General Assessment and Management – Additional Guidelines* from Version 2.0 of the BLS PCS (*Section 6 – Pediatrics*). The standard includes general elements of care when treating pediatric patients.

Child in Need of Protection Standard

The *Child in Need of Protection Standard* replaces *Child Abuse (Suspect)* from Version 2.0 of the BLS PCS (*Section 6 – Pediatrics*), and includes the content from the amendment made by *Training Bulletin Number 116 – Child in Need of Protection Standard.* The majority of the content from the training bulletin remains the same but has been evaluated against the guiding principles of the BLS PCS v3.0. Additionally, a guideline has been added reminding paramedics that the duty to report extends to all children they encounter in their duties.

General Geriatric Standard

The *General Geriatric Standard* is a new standard composed of relevant materials previously included in the *Geriatric Assessment and Management Standard* and *Elder Abuse (Suspect) Standard* (*Section 7 – Geriatrics*) from Version 2.0 of the BLS PCS. The standard includes general elements of care when treating geriatric patients.

Mental Health Standard

The *Mental Health Standard* is a new standard composed of relevant materials from the *Psychiatric Patient General Assessment and Management Standard, Emotionally Disturbed Patients – Care and Transport Standard* and *Restraint of Patients Standard* from Version 2.0 of the BLS PCS (*Section 8 – Psychiatric Disorders*). The standard includes general elements of care when treating a patient with an emotional disturbance. Specifically, the standard outlines when/how a patient may be restrained and transported without consent. The standard emphasizes the appropriate linkage to the *Mental Health Act* (Ontario).

Violent/Aggressive Patient Standard

The *Violent, Aggressive or Agitated Patient* from Version 2.0 of the BLS PCS (*Section 8 – Psychiatric Disorders*) has been renamed as the *Violent/Aggressive Patient Standard*. The standard has been updated and streamlined. The standard references an 'active shooter scenario' – this refers to a situation where an individual is actively engaged in life-threatening violence against others.

Intravenous Line Maintenance Standard

The revised *Intravenous Line Maintenance Standard* now includes the following subsections: "General Directive", "Use of Escorts", and "Procedure". Furthermore, much of the old "Procedure" subsection from Version 2.0 of the BLS PCS has been streamlined.

Load and Go Patient Standard

The *Load and Go Patient Standard* has been revised and now only includes two paragraphs outlining when paramedics should initiate rapid transport, or when they are permitted to stay on scene and provide further care for patients potentially indicated for rapid transport.

Police Notification Standard

The *Police Notification Standard* has been revised to include only a "General Directive". Content from "Requesting Police Assistance", "Suspected Foul Play" and "Hanging", from Version 2.0 of the BLS PCS, has either been removed or made into a guideline. "Sexual Assault", "Child in Need of Protection", and "Call Completion" from Version 2.0 of the BLS PCS have been removed, as their content is covered elsewhere in the revised BLS PCS.

Sexual Assault (Reported) Standard

Sexual Assault (Suspect) from Version 2.0 of the BLS PCS (*Section 3 – Trauma Patient Categories*) has been renamed as the *Sexual Assault (Reported) Standard*. The standard has been revised.

Section 2 – Medical Standards

Introduction

The *Introduction* for *Section 2 – Medical Standards* includes a statement outlining a paramedic's obligation to be prepared for a change in patient status. A statement regarding simultaneous care in accordance with the ALS PCS has been reiterated.

As a result of the provisions in the revised *Section 1 – General Standard of Care*, *Medical Patient Assessment (Overview)* and *Medical Format, Short Form of General Standard of Care* from Version 2.0 of the BLS PCS have been removed, with any relevant content incorporated into the various other standards within the revised BLS PCS.

Abdominal Pain (Non-Traumatic) Standard

The *Abdominal Pain (Non-Traumatic) Standard* has been revised. Details of an abdominal assessment, which were included in *Key Code for Short Forms and Abbreviations* from Version 2.0 of the BLS PCS, have been incorporated into the standard.

Airway Obstruction Standard

The *Airway Obstruction Standard* has been revised, and is no longer divided into three sections ("I. Complete Airway Obstruction", "II. Partial Airway Obstruction" and "III. Complete/Partial Airway Obstruction – Known Bee Sting or Similar Insect Sting; Other Allergic Reaction").

The standard cross-references the *Heart and Stroke Foundation of Canada Guidelines* for airway clearance maneuvers.

Allergic Reaction (Known or Suspected) Standard

The *Allergic Reaction (Known or Suspected) Standard* has been revised.

Altered Level of Consciousness Standard

Coma (Unconscious) – Markedly Decreased Level of Consciousness, No Known History of Trauma from Version 2.0 of the BLS PCS has been renamed as the *Altered Level of Consciousness Standard*. The standard has been revised.

Back Pain (Non-Traumatic) Standard

The *Back Pain (Non-Traumatic) Standard* has been revised.

Cardiac Arrest Standard

Cardiac Arrest – Adult and *Cardiac Arrest – Children* from Version 2.0 of the BLS PCS have been combined into the *Cardiac Arrest Standard*. Much of the standard's content remains as it was, but has been updated, streamlined, and re-sequenced based on *Heart and Stroke Foundation of Canada Guidelines*. The standard stresses the importance of high quality CPR, minimizing disruptions, etc. For patients who experience a return of spontaneous circulation, additional vital sign parameters/patient care elements are outlined.

Cerebrovascular Accident (CVA, "Stroke") Standard

The *Cerebrovascular Accident (CVA, "Stroke") Standard* has been revised and re-sequenced. Most significantly, wording from the *Paramedic Prompt Card for Acute Stroke Protocol* has been incorporated into the standard. The bypass parameters have been updated based on recommendations from OBHG-MAC/the Ontario Stroke Network (*i.e.* time last seen normal, and blood glucose provisions). A revised prompt card is included in *Appendix A* of Version 3.0 of the BLS PCS.

Chest Pain (Non-Traumatic) Standard

The *Chest Pain (Non-Traumatic) Standard* has been revised. Specific reference to 12-lead ECG acquisition as per the ALS PCS has been included. Additionally, the standard now includes the content from the amendment made by *Training Bulletin Number 118 – STEMI Hospital Bypass Protocol.*

Dysphagia Standard

Swallowing Difficulty or Pain from Version 2.0 of the BLS PCS has been renamed as the *Dysphagia Standard*. A focus on epiglottitis and potential risks are emphasized.

Epistaxis (Non-Traumatic) Standard

Epistaxis (Non-Traumatic) Standard has been revised.

Excited Delirium Standard

The *Excited Delirium Standard* is a new standard, developed to acknowledge that excited delirium is a medical condition. The standard incorporates information previously contained in *The Violent, Aggressive or Agitated Patient* from Version 2.0 of the BLS PCS.

Extremity Pain (Non-Traumatic) Standard

The *Extremity Pain (Non-Traumatic) Standard* has been revised. Management regarding arterial occlusions has been removed.

Fever Standard

The *Fever Standard* has been revised. A new guideline on sepsis recognition has been included.

Headache (Non-Traumatic) Standard

The *Headache (Non-Traumatic) Standard* has been revised.

Heat-Related Illness Standard

The *Heat-Related Illness Standard* has been moved from its previous location in Version 2.0 of the BLS PCS (*Section 4 – Environment-Related Disorders*). Care provisions for heat exhaustion and heat stroke have been revised.

Hematemesis/Hematochezia Standard

GI Bleeding, Vomiting, Coughing Blood, Passing Blood Rectally from Version 2.0 of the BLS PCS has been renamed as the *Hematemesis/Hematochezia Standard*. The standard has been revised.

Nausea/Vomiting Standard

The *Nausea/Vomiting Standard* is a new standard.

Respiratory Failure Standard

Respiratory Arrest – Adult and *Respiratory Arrest – Children* from Version 2.0 of the BLS PCS have been combined into the *Respiratory Failure Standard*. The standard cross-references the *Heart and Stroke Foundation of Canada Guidelines* for ventilation parameters. A guideline regarding end-tidal carbon dioxide monitoring has been added.

Seizure Standard

The *Seizure Standard* has been revised.

Shortness of Breath Standard

Shortness of Breath, Breathing Difficulty in Adults and Children – Not Related to Trauma from Version 2.0 of the BLS PCS has been renamed as the *Shortness of Breath Standard*. The standard has been updated, streamlined, and re-sequenced.

Syncope/Dizziness/Vertigo Standard

Syncope (Faint) – No History of Preceding Trauma from Version 2.0 of the BLS PCS has been renamed as the *Syncope/Dizziness/Vertigo Standard*. The standard has been updated, streamlined, and re-sequenced.

Toxicological Emergency Standard

Overdose, Poisoning, Drug Ingestion - Known or Suspect from Version 2.0 of the BLS PCS has been renamed as the *Toxicological Emergency Standard*. The standard has been updated, streamlined, and re-sequenced to remove material that is covered elsewhere in the BLS PCS. Previous content regarding dilution of ingested agents has been removed. Information regarding carbon monoxide poisoning, previously featured in the *Inhalation Injury Standard – Smoke, Steam, Fumes, Other Noxious Gases* from Version 2.0 of the BLS PCS has been included as a guideline, and revised.

Vaginal Bleeding Standard

Vaginal Bleeding (Non-Pregnant Patient, Pregnancy Unknown) from Version 2.0 of the BLS PCS has been renamed as the *Vaginal Bleeding Standard*. The standard has been revised. Materials from *Vaginal Bleeding – Known Pregnancy, No History of Trauma* from Version 2.0 of the BLS PCS (*Section 5 – Obstetrical Conditions*) have been incorporated into the standard, as appropriate.

Visual Disturbance Standard

Vision Problem – Non-traumatic, No History of Foreign Body from Version 2.0 of the BLS PCS has been renamed as the *Visual Disturbance Standard*. The standard has been revised.

Section 3 – Trauma Standards

Introduction

The *Introduction* has been rewritten to capture how the section is now organized (*i.e.* by type of injury). Similar to the *Introduction* of *Section 2 – Medical Standards,* the introduction outlines the paramedic's requirement to prepare for common problems, and also reiterates that simultaneous care must be provided in accordance with the ALS PCS.

General Trauma Standard

The *General Trauma Standard* has been written to identify common practices that are to be applied to all trauma patients. The standard itself is new, yet the majority of its content has been adapted from other standards previously featured in this section from Version 2.0 of the BLS PCS. *Key Code for Trauma Mnemonics and Short Forms* has been incorporated into the standard, as appropriate.

Amputation/Avulsion Standard

Amputation, Avulsion – Complete/Partial from Version 2.0 of the BLS PCS has been renamed as the *Amputation /Avulsion Standard*. The standard has been revised.

Blunt/Penetrating Injury Standard

Blunt/Penetrating Injury Standard is a new standard. The standard incorporates content from previous standards related to blunt or penetrating trauma from Version 2.0 of the BLS PCS (*e.g. Abdominal/Pelvic Injury [Blunt, Penetrating Standard], Chest Injury [Blunt, Penetrating] Standard, Eye Injury [Blunt, Penetrating Standard], Facial/Nose Injury [Blunt, Penetrating Standard], Head Injury [Blunt, Penetrating Standard], Neck/Back Injury [Blunt, Penetrating Standard]*). Revisions include changes to practice for care of flail chests, pelvic fractures and head injuries.

A *Bite Injury* subsection includes content previously featured in *Bites – Animal/Human* and *Snake Bites* from Version 2.0 of the BLS PCS (*Section 4 – Environment-Related Disorders*). Although much of the content from *Bites – Animal/Human* standard remains, most of the content from *Snake Bites* has been removed.

Burns (Thermal) Standard

The *Burns (Thermal) Standard* has been moved from its previous location in Version 2.0 of the BLS PCS (*Section 4 – Environment-Related Disorders*). The standard has been updated, streamlined, and re-sequenced. A guideline reminding paramedics to use the "Rule of Nines" has been added.

Cold Injury Standard

Cold Injury –Frostbite, Hypothermia from Version 2.0 of the BLS PCS has been renamed as the *Cold Injury Standard*, and moved from its previous location (*Section 4 – Environment-Related Disorders*). The standard has been revised.

Electrocution/Electrical Injury Standard

The *Electrocution/Electrical Injury Standard* has been moved from its previous location in Version 2.0 of the BLS PCS (*Section 4 – Environment-Related Disorders*). The standard has been revised.

Extremity Injury Standard

The *Extremity Injury Standard* has been revised. Changes surround manipulation of joints and management of open fractures.

Foreign Bodies (Eye/Ear/Nose) Standard

The *Foreign Bodies (Eye/Ear/Nose) Standard* has been revised.

Hazardous Materials Injury Standard

The *Hazardous Materials Injury Standard* has been moved from its previous location in Version 2.0 of the BLS PCS (*Section 4 – Environment-Related Disorders*). The standard is composed of relevant material from the *Chemical Injury – Eye/Skin* and the *Hazardous Materials Exposure – Assessment and Management Guidelines* from Version 2.0 of the BLS PCS. The majority of content from the *Hazardous Materials Exposure – Assessment and Management Guidelines* has been removed, and alternatively, covered by a procedure point to consult the *Transport Canada Emergency Response Guidebook*.

Soft Tissue Injuries Standard

Soft Tissue Injuries (Wounds) – General Assessment and Management Standard from Version 2.0 of the BLS PCS has been renamed as the *Soft Tissue Injuries Standard*. Updates to the standard include how paramedics control wound hemorrhage on a priority basis; both arterial tourniquets and hemostatic dressings are now included.

Submersion Injury Standard

The *Submersion Injury Standard* is a new standard composed of relevant materials previously included in *Drowning and Near-Drowning* and *Scuba-diving Related Injuries/Disorders* from Version 2.0 of the BLS PCS (*Section 4 – Environment-Related Disorders*).

Section 4 – Obstetrical Standards

Neonate Standard

The *Neonate Standard* is a new standard, although much of the material was adapted from the following standards from Version 2.0 of the BLS PCS (*Section 5 – Obstetrical Conditions*): *Emergency Delivery Standard, Neonatal Assessment and Management Standard* and *Premature Labour and Delivery – (Onset of labour at <35 completed weeks of gestation).* The standard is built

around the care that a paramedic must provide a neonatal patient. The standard provides linkages to the ALS PCS, specifically concerning neonatal resuscitation and cutting the umbilical cord.

Pregnancy Standard

The *Pregnancy Standard* is a new standard, although much of the material was adapted from the *Pregnant Patient – General Assessment and Management Standard* from Version 2.0 of the BLS PCS (*Section 5 – Obstetrical Conditions*). The standard includes general information about the assessment and management of a pregnant patient. This includes, but is not limited to, types of secondary surveys to perform and patient positioning. The standard also provides linkages to the ALS PCS, specifically concerning the controlled act of managing labour and conducting delivery.

Appendix A – Supplemental

Appendix A features prompt cards, as appropriate.

Miscellaneous

The following are changes that have been made between Version 2.0 and Version 3.0 of the BLS PCS yet are not noted above:

- *Acknowledgements* – removed, in accordance with the *Living Standard Project*.
- *Self-Administered Medications Standard for EMAs/Paramedics* – removed.
- *Sudden Infant Death* – removed, as all aspects are covered in other standards.
- *Physiological Signs of Aging* – removed, with relevant materials incorporated into the guidelines in the *General Geriatric Standard*.
- *Key Code for Short Forms and Abbreviations* – removed.
- *Alcohol Ingestion/Withdrawal* – removed, as all aspects are covered in other standards.
- *Diabetic Problem* – removed, as all aspects are covered in other standards.
- *Testicular Pain No Trauma or Minor Trauma, Strain* – removed.
- *Key Code for Trauma Mnemonics and Short Forms* – removed, with relevant materials included in *General Trauma Standard*.
- *Trauma Patient Assessment (Overview)* – removed, as all elements have been outlined in *Section 1 – General Standard of Care*.
- *Trauma Format – Short Form of General Standard of Care* – removed, as all elements have been outlined in *Section 1 – General Standard of Care* and the *General Trauma Standard.*
- *Foreign Body Inhaled/Swallowed (Known/Suspect) – Conscious Patient* – removed, as all aspects are covered in other standards (*e.g. Airway Obstruction Standard, Oxygen Therapy Standard*).
- *Genital Injury in the Male – Isolated Injuries* – removed, as all aspects are covered in other standards (*e.g. Amputation/Avulsion Standard, Blunt/Penetrating Trauma Standard*).
- *Breech Delivery* – removed, with relevant materials incorporated into the *Pregnancy Standard* or ALS PCS, as applicable.

- *Emergency Delivery* – removed, with relevant materials incorporated into the *Neonate Standard* and the *Pregnancy Standard*, or ALS PCS, as applicable.
- *Labour* – removed, with relevant materials incorporated into the *Pregnancy Standard* or ALS PCS, as applicable.
- *Limb Presentation* – removed, with relevant materials incorporated into the *Pregnancy Standard* or ALS PCS, as applicable.
- *Mechanism of Normal Delivery* – removed, with relevant materials incorporated into the ALS PCS.
- *Midwives at the Scene Standard* – removed, as all aspects are covered in other standards.
- *Multiple Births* – removed, as all aspects are covered in other standards.
- *Premature Labour and Delivery – (Onset of labour at <35 completed weeks of gestation)* – removed, with relevant materials incorporated into the *Pregnancy Standard* or ALS PCS, as applicable.
- *Premature Rupture of Membranes/Prolapsed Umbilical Cord* – removed, with relevant materials incorporated into the *Pregnancy Standard* or ALS PCS, as applicable.
- *Seizure in the Pregnant Patient* – removed, as all aspects are covered in other standards.
- *Trauma in the Pregnant Patient Standard* – removed, with relevant materials incorporated into the *General Trauma Standard*.
- *Traumatic Maternal Cardiac Arrest Standard* – removed, with relevant materials incorporated into the *Cardiac Arrest Standard*.

Conclusion

This document outlines the Summary of Changes between Version 2.0 and 3.0 of the *Basic Life Support Patient Care Standards*. The BLS PCS has been revised to reflect medical evidence and best practice. The guiding principles that were used during the revision process resulted in the word count of the BLS PCS to be reduced by approximately 70% overall.

Future revisions will be completed in accordance with the *Living Standard Project*.

Appendix A – Learning Objectives

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Learning Objectives

The following are learning objectives to assist in the transition of versions of the BLS PCS.

Prior to implementation of Version 3.0 of the BLS PCS, a paramedic is expected to:

Cognitive

1. understand expectations regarding transition of practice to Version 3.0 of the BLS PCS;
2. understand all information/revisions in Version 3.0 of the BLS PCS/outlined in the Summary of Changes;
3. understand the difference between a 'Standard' and a 'Guideline';
4. understand 'how to read' the BLS PCS;
5. describe the indications for application of cardiac monitoring outlined in the *Patient Assessment Standard*;
6. describe the indications for auscultation of the patient's lungs outlined in the *Patient Assessment Standard*;
7. describe the indications for taking the patient's temperature outlined in the *Patient Assessment Standard*;
8. describe the frequency at which vital signs are expected outlined in the *Patient Assessment Standard*;
9. understand the rationale for the changes in the frequency of vital signs assessment;
10. understand the standard of care regarding patient positioning outlined in the *Patient Management Standard*;
11. describe the expectations regarding the lifting of patients outlined in the *Patient Transport Standard*;
12. understand the rationale to the changes regarding the lifting of patients;
13. describe the expectations outlined in the *Patient Refusal/Emergency Treatment Standard*;
14. describe the elements of the *Regulated Health Professionals Standard*;
15. understand the rationale behind the *Regulated Health Professionals Standard* and the relationship to the *Regulated Health Professions Act, 1991* (Ontario);
16. understand the relationship between the elements listed under the *Transfer of Care (TOC) Standard* and the revised *Ontario Ambulance Documentation Standards*;
17. describe the standard of care outlined in the *Oxygen Therapy Standard*;
18. understand the rationale to the changes in oxygen administration;
19. describe the standard of care outlined in the *Spinal Motion Restriction (SMR) Standard*;
20. understand the rationale to the changes in care outlined in the *Spinal Motion Restriction (SMR) Standard*;
21. describe the elements of the *General Pediatric Standard*;

22. describe the elements of the *General Geriatric Standard*;
23. describe the linkage between the *Mental Health Standard* and the *Health Care Consent Act, 1996* (Ontario) / *Mental Health Act* (Ontario);
24. describe the standard of care for use of restraints outlined in the *Mental Health Standard*;
25. describe the standard of care outlined in the *Violent/Aggressive Patient Standard*;
26. describe the standard of care outlined in the *Load and Go Patient Standard*;
27. describe the standard of care outlined in the *Cardiac Arrest Standard*;
28. describe the changes made to the *Acute Stroke Bypass Protocol* of the *CVA Standard*;
29. describe the elements of the *Excited Delirium Standard* and its relationship to the *Violent/Aggressive Patient Standard*;
30. understand the elements of sepsis outlined in the *Fever Standard*;
31. understand the changes in practice outlined in the *Heat-Related Illness Standard*;
32. understand the appropriate values and rationale for end-tidal carbon dioxide monitoring as outlined in the *Respiratory Failure Standard* and *Blunt/Penetrating Injury Standard – Head Injury*;
33. describe the elements of the *General Trauma Standard*;
34. understand the changes in practice with respect to "flail chest" in *Section 3 – Trauma Standards*;
35. understand the changes in practice with respect to the management of an unstable pelvis as outlined in the *Blunt/Penetrating Injury Standard – Abdominal/Pelvic Injury*;
36. understand the changes in practice with respect to extremity manipulation and management of open fractures outlined in the *Extremity Injury Standard*;
37. describe the standard of care for hemorrhage control on a priority basis outlined in the *Soft Tissue Injuries Standard*;
38. understand the rationale for the standard of care for hemorrhage control on a priority basis outlined in the *Soft Tissue Injuries Standard*;
39. describe the standard of care outlined in the *Neonate Standard*;
40. describe the standard of care outlined in the *Pregnancy Standard*;
41. understand which obstetrical materials have moved from the BLS PCS to the ALS PCS;

Psychomotor

42. demonstrate the use of SMR outlined in the *Spinal Motion Restriction (SMR) Standard*;
43. demonstrate wound hemorrhage control on a priority basis outlined in the *Soft Tissue Injuries Standard*;

Affective

44. appreciate the underlying factors which guided the overall updates/process;
45. appreciate the modified organization of the BLS PCS, including:
    a. the breakdown of Sections,
    b. the 'factoring' of elements into the *Section 1 – General Standard of Care*, and the introductions of *Sections 2* and *3* (*e.g.* prepare for expected problems),
    c. the cross-referencing of standards throughout,
    d. the formation of *General Trauma Standard*, and

e. the reorganization of *Section 3 – Trauma Standards*;

46. value the elements of the revised *Paramedic Conduct Standard*;
47. acknowledge the laws concerning patient refusal/emergency treatment outlined in the *Patient Refusal/Emergency Treatment Standard* (and as per the *Health Care Consent Act, 1996*);
48. appreciate the expectations regarding lifting of patients outlined in the *Patient Transport Standard*;
49. appreciate the renaming of standards (*e.g. Toxicological Emergency Standard*, *Respiratory Failure Standard*);
50. appreciate the precipitating factors which led to the transition of obstetrical materials from the BLS PCS to the ALS PCS;
51. appreciate the relationship between the BLS PCS and the ALS PCS; and
52. appreciate the purpose of 'Prompt Cards' and their relationship to their respective standards.

Appendix B – SMR Question & Answer

B

Appendix B – SMR Question & Answer

SMR Question & Answer

The following are questions and answers regarding the *Spinal Motion Restriction (SMR) Standard* from Version 3.0 of the BLS PCS.

Is the SMR Standard intended to "clear the spine"?

The standard does not allow the paramedic to "clear the spine" for blunt trauma patients. Rather, it identifies patients where the mechanism of injury, in combination with the absence of risk criteria, means a spinal injury does not have to be considered.

Does SMR require use of a backboard?

No. A backboard (referred to as a spinal board in the BLS PCS) may be part of SMR, but is not required to facilitate SMR. A C-collar alone can be considered SMR. As per the revised standard, backboards should be considered primarily as an extrication/lifting device (*e.g.* if the patient is on the ground).

It is important to note that spinal immobilization extrication devices (*e.g.* KEDs) may still be indicated for use for extrication/lifting purposes under the revised standard.

If using a backboard during extrication, is taping the patient's head still required?

No. Taping the patient's head is not required even if a backboard is used for extrication.

If a patient is on a backboard prior to paramedic arrival, can the patient's SMR be adjusted to the new standard?

Yes. For situations in which a first responder (*e.g.* fire personnel, lifeguard, etc.) has placed a patient on a backboard, the patient's SMR should be modified to meet the new standard.

For inter-facility transfers, decisions should be made in consultation with the sending physician/staff. In situations in which a form of SMR has been applied, yet is not indicated under the revised standard, recall the *Regulated Health Professionals Standard* and the *Paramedic Conduct Standard* – accordingly, paramedics should advocate for their patients, establish good working relationships with colleagues, and conduct themselves to encourage and merit the respect of the public.

Does a patient with SMR have to be positioned supine?

No. Patients with SMR may be placed in a semi-sitting or supine position, according to clinical condition/patient comfort.

If a C-collar is interferring with airway management (*e.g.* actively vomiting) or advanced airway placement, or cannot be made to fit, what should be done?

Paramedics should prioritize patient management techniques based on a patient's 'ABCs' (airway, breathing, circulation). If a patient is actively vomiting, paramedics should use suctioning, as appropriate, or position the patient to allow drainage while attempting to minimize spinal movement (*e.g.* use manual C-spine control with a two-person log-roll whenever possible).

With patients for whom a C-collar cannot be made to fit (*e.g.* patients with severe kyphosis), this would be considered an extenuating circumstance as per the *Introduction*, and paramedics should use alternative means to minimize spinal movements (*e.g.* towels, blanket rolls, etc.).

Paramedics shall document any reasons for deviating from the BLS PCS in accordance with the *Ontario Ambulance Documentation Standards* and the *Ambulance Call Report Completion Manual*.

How should a patient be moved to a hospital bed?

Paramedics should attempt to minimize spinal movements during patient transfers. Slider boards should be used whenever possible.

Does the SMR Standard apply to pediatric patients?

Yes. The standard applies to patients of all ages. Recall the requirement to be aware of problems arising due to pediatric anatomy and physiology as per the *General Pediatric Standard*.

What prompted the changes to spinal immobilization techniques in the BLS PCS?

Changes in medical evidence have informed the changes and acted as the impetus for the formation of the *Spinal Motion Restriction (SMR) Standard*. Since the release of the BLS PCS v2.0, various research findings have been published in medical journals supporting revised spinal immobilization techniques.

In accordance with the *Living Standard Project*, future revisions will continue to be made based upon new evidence, best practice, and consultation/review.


Ontario