

Invest to Save-

A Quality Improvement Program in

Systematic Resuscitation Training



for nurses to **Improve** Patients' **Survival rate**
in Cardiopulmonary Resuscitation (CPR)

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內科及老人科

DEPARTMENT
OF
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膽固醇 CHOLESTEROL

膽固醇是一種血脂肪，人體所需的膽固醇有三分之二在肝臟內合成，其餘的可從食物中吸收。肝臟將膽固醇包裝成脂蛋白，脂蛋白由脂質（膽固醇及膽酸）及蛋白質組成，在血液中可分作低密度、低密度及高密度脂蛋白三種。

三酸甘油酯 TRIGLYCE

三酸甘油酯是血內甘油和脂肪酸合成的脂肪，和膽固醇一起，是血液中的主要成分。

A) 「壞膽固醇」
來自動物性脂肪，容易積少於每日所需的量，使人 LDL 上升，造成血管硬化。

B) 「好膽固醇」
來自植物性脂肪，能降低膽固醇，可避免血管硬化，且有助降低血液中的三酸甘油酯，對心臟和血管健康有益。

膽固醇精華篇內·均衡飲食最重要

原則

- 1. 飲食均衡，每日要包括五大類基本食物，例如：肉類、蔬菜、水果、全穀類。
- 2. 定期檢查膽固醇，避免肥胖，儘量少用油。
- 3. 選擇低脂低糖食物，例如：新鮮蔬菜、水果、全穀類。
- 4. 減少飽食，減少飽食時間，例如：全蛋、牛奶、肥肉、油炸食品。
- 5. 減少飽食，減少飽食時間，例如：全蛋、牛奶、肥肉、油炸食品。
- 6. 減少飽食，減少飽食時間，例如：全蛋、牛奶、肥肉、油炸食品。

PLEASE DON'T TOUCH

Health information Board



Self-learning corner



Post Resuscitation (in-hospital) ROSC and Survival rate



Rate	International (2001-2009)	Hong Kong (2005)	5B, UCH (2009)
ROSC (Return of spontaneous circulation)	~45-50%	28-33% (QMH) 27% (PWH)	58.8%
Survival to Discharge	~18%	~5% (PWH)	17.2%

(Hong Kong Medical Journal 2007; Volume 13)

(Eisenberg MS, Mengert TJ. Cardiac resuscitation. *N Engl J Med*. Apr 26 2001; 344(17): 1304-13)

(Ehlenbach WJ, Barnato AE, Curtis JR, et al. Epidemiologic study of in-hospital cardiopulmonary resuscitation in the elderly. *N Engl J Med* 2009; 361:22-31.)



What have we done?



1. Knowledge

- Theory input

2. Skills

- Basic concepts and **divided parts** practice
- **Scenario-based** practice

3. + Review

- Quarterly drill reports

Competent!



1. Knowledge



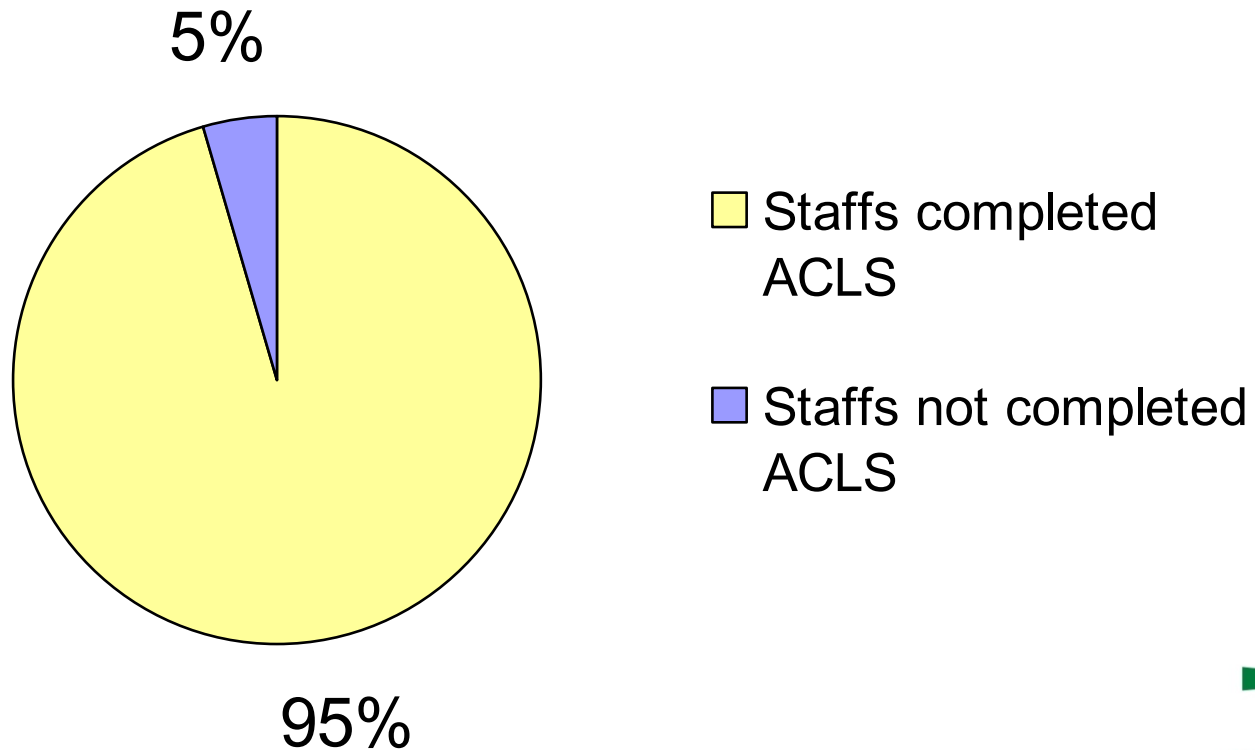
- Encourage Nursing Staffs in attending **ACLS** workshop
 - Basic resuscitation concepts
 - Familiar to all resuscitation algorithm and usage of drugs



ACLS workshop completion ratio in 5B UCH



- Excluding staffs in preceptorship scheme



2. Skills



Stage I -

Divided parts practice

- Basic practice

- **Timely & Accuracy**

3 main categories:

- **Finder**

- **Breathing**

- **Defibrillator**

Easier to:

Pick up, practice & monitor

Preceptors & new staffs:

- Complete in first 3 months

Stage II -

Scenario- based practice

- Combined practice

- **Collaboration** (teamwork)

○ Practice on **“Scenario”**

○ Level of skills & knowledge

○ + algorithms will be tested

- **“Real-life”**

+ immediate debriefing

- Bi-monthly drill



Drill Scenario

Scenario 2 (ACS, chest pain > VF)

During night shift- with minimal manpower. (3 Nurses, 1 HCA)

Case- 50/M, ACS, admitted for 3 days, on CRP phase I.

Condition	Action
Patient complain chest pain	- TNG given, keep bed rest
is the effect of TNG	- Found patient dull looking - check vital signs
usness- unconscious g- gasping	- Lie flat - Maximize O2 (if with breathing) - Keep airway clear (finger swipe after gloves)
ot palpable ot measure	- Start resuscitation - Mark time - Call for help - ECM (wear face shield first)
d with Zoll d with E-trolley	- F- present case, report time, continue - D assist in connecting Zoll then see - B wearing PPE after called 4999 - HCA- assist in preparing IV stand, cu - wear PPE
	- Prepare Defibrillation by D - F- continue ECM until Def. Ready
	- 1st Shock once - Biphasic 200J Monophasic 360J - Using paddles in selecting energy and - NOT CHECK PULSE after defibrillat - Resume CPR (30:2) immediately (5 - Check rhythm ONLY after 5 cycles c
ck pulse after 5 cycles ECM pleted iac monitor - Asystole	- F- continue ECM (30:2) immediate - B backed and started bagging (use h - +/- watch for vomiting) - D - assist in holding mask while attac - strap, then wear PPE and call relativ
	- Continue CPR 30:2 (5 cycles) - Check pulse and see rhythm when 5 cycles - completed
D back	- Replace F for ECM - F - stay at E-trolley preparing drugs and - recording, not wearing PPE in view of low risk
	- Continue CPR 30:2 (5 cycles) - Start resuscitation

Scenario 1 (Basic – Asystole)

During night shift – In minimal manpower. (3 Nurses, 1 HCA)

Case:

70/M, old MI. Admitted for recent MI, CRP not started yet.

Condition	Action
- Noticed patient dull looking	- Check consciousness and breathing - check pulse over 5 seconds
- Loss of consciousness & breathing - NO pulse detected	- Start Resuscitation - Mark time - Call for help - Lie flat/ head position - Finger swipe (wear gloves) - Maximize O2 if ready - ECM (wear face shield- placed outside every cubicles / under ZOLL)
- D arrived with Zoll - B arrived with E-trolley - HCA- prepare IV stand + curtain	- F - present case, report time, continue ECM - D - connect Zoll then see rhythm - B - called 4999 and then wear PPE
Cardiac monitor - Asystole	- F- continue ECM (30:2) immediately (5 cycles) - B backed and started bagging (use head-strap, +/- watch for vomiting) - D - assist in holding mask while attaching head-strap, then wear PPE and call relatives
	- Continue CPR 30:2 (5 cycles) - Check pulse and see rhythm when 5 cycles completed
D back	- Replace F for ECM - F - stay at E-trolley preparing drugs and recording, not wearing PPE in view of low risk

Scenario- Aims



- **Apply** skills & knowledge into clinical practice
- Being **Competent**
 - Encouraged to be **proactive**
 - Able to give **constructive** advices
- **↑↑Efficiency & Effectiveness**



5B 二零零八年七月至九月份 CPR Drill 報告

5B 二零零八年四月至六月份 CPR Drill 報告

稽核員：梁苑華 余鍵雄

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**是次報告重點：

- 重溫 **Early Defibrillation** 之重要性
- 觀察各位同事應用新 **Philips defibrillator**

F – FINDER :

1. 各同事明顯提昇了 leadership，能於救急過程加強主導性。如：主動提議給藥；或提示各組員之工作分配，互相補足，大大增進救急之暢順度。
2. 維持心外壓之連續及連貫性(Continuity)大有進步，電擊後能即時接着 ECM；及沒有不定時停止心外壓 check pulse。謹記：每次停止 ECM 後，需再 compress 一段時間才能建立一定的心輸出量。(AHA, 2005)
3. 能定時交替角色或 compressor 疲倦時主動要求換手，以維持有質素之心外壓及 cardiac output，值得鼓勵。

B – BREATHING

1. 少部份同事仍不熟習 Head Strap 之使用，建議多自行練習。
鑑於現時不建議 early intubation (AHA, 2005)，需作長時間 bagging，建議多善用 Head Strap。
2. 大部份同事皆能熟練地於 Intubation 後，即時 Inflate ETT cuff 及接駁

黃寶華 林桂祝 李秀慧 方偉妍

性

生同事因時間關係暫未能配合。
及 BLS 之重溫。

質素之心外壓及 cardiac output。另
備，避免間斷 ECM。

員能互相提示，互補不足，增進救急

algorithm，能有效提昇主動性。

y)亦表現優秀。沒有不定時停止心外
ECM。(因每次停止 ECM 後，需再
出量。- AHA, 2005)

itation record。

質素，亦容易數錯 cycle。建議由 B 作
第一個 cycle 完」第五個 cycle 完，

Post CPR Survival rate in **5B** UCH



Rate	2007 (n=28)	2008 (n=33)	2009 (n=34)
ROSC	35.7%	48.5%	58.8%
Survive over 24 hours	18%	27.3%	29.4%
Survive to Discharged	7.2%	18.2%	17.6%



Nurses performing Defibrillation



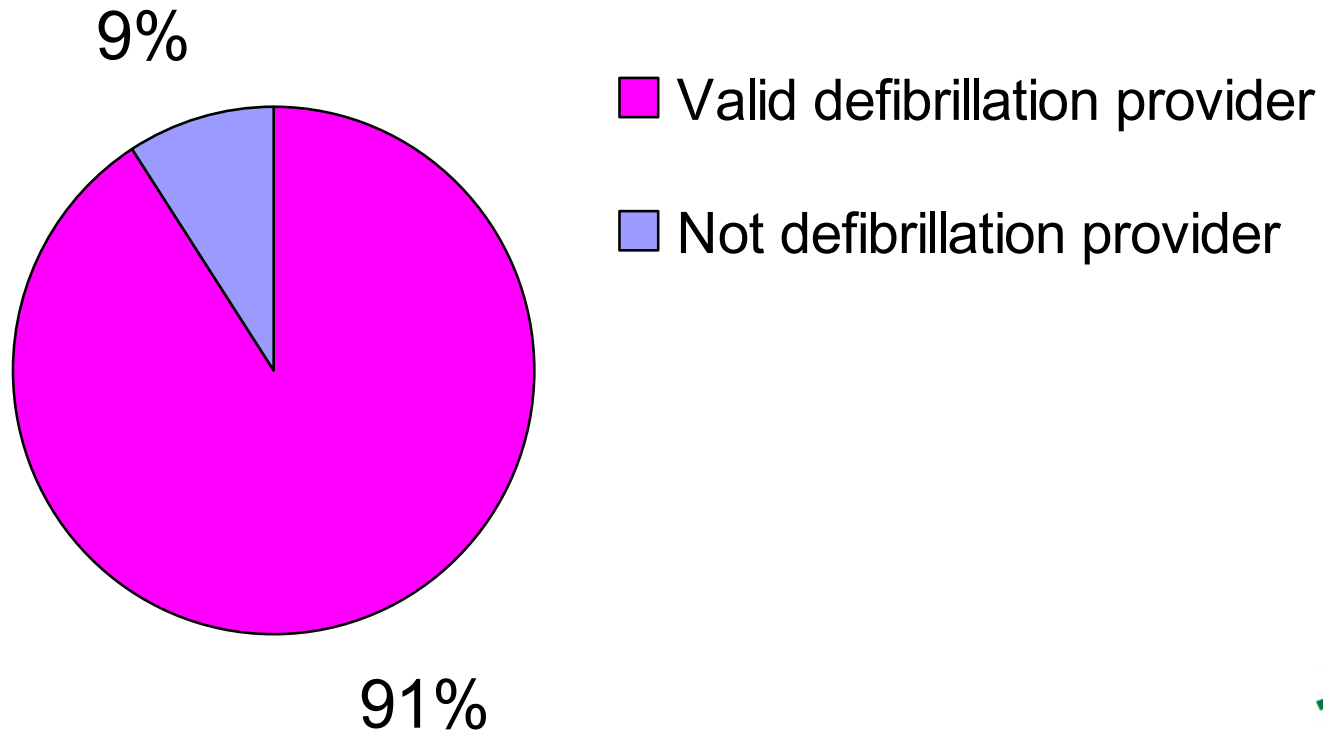
- Since 1995 in UCH
- Nurses are most appropriate person in performing EARLY defibrillation
- Defibrillation providers should be:
 - Certified
 - Authorized
 - **Competent**



Certified defibrillation provider in 5B, UCH



- Totally **20** certified defibrillation providers
 - Excluding staffs in preceptorship program



Nurses Defibrillation rate (5B, UCH in 2009)



- **44** episodes of defibrillation performed by nurses in 2009
- **35** of them (**80%**) with **rhythm converted** back immediately



Time for Advertisement!

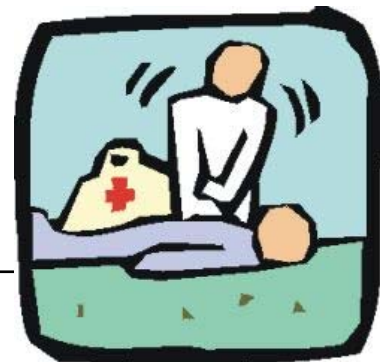


你今日睇咗未呀!?

Have you view our
poster today!?

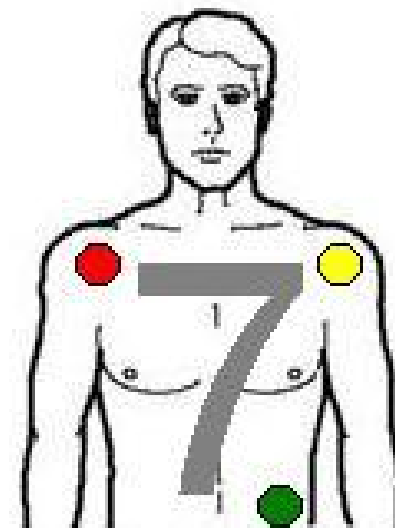
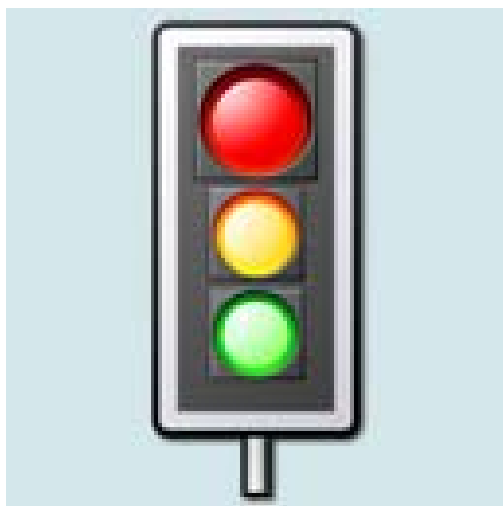
(SPP-P4-25)

Slogan! 口訣! (SPP-P4-25)



『交通燈、紅黃綠、變成7!』

“Traffic light, red yellow green, line up into 7!”





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Thank you!!!

