News Q & A

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Q: When was CPR invented? Was anyone credited with bringing CPR to life?

A: Modern cardiopulmonary resuscitation was developed in the late 1950s and early 1960s. Drs. James Elam and Peter Safar began research in 1956 on mouth-to-mouth resuscitation.

In early 1960, Drs William Kouwenhoven, Guy Knickerbocker and James Jude discovered the benefit of chest compression to achieve a small amount of artificial circulation.

Later in 1960, mouth-to-mouth and chest compression were combined to form CPR similar to the way it is practiced today. Safar is credited with putting the steps together and winning worldwide acceptance of CPR. Recent research finds the ideal rhythm for CPR closely mirrors the beats in the Bee Gees song “Stayin’ Alive”.

To submit a question write to newsroom@oregonian.com
LG recognizes Emergency

Activate EAP

- survey scene
- basic precautions
- assess victim (consciousness); obtain consent, if necessary → call 911, request AED
LG recognizes Emergency

Activate EAP

Primary Assessment

Conscious Victim

Unconscious Victim

survey scene
basic precautions
assess victim (consciousness); obtain consent,
if necessary → call 911, request AED
LG recognizes Emergency

Activate EAP

Primary Assessment

Conscious Victim

Provide Care as Needed

survey scene
obtain consent, basic precautions
assess victim (consciousness)
if necessary → call 911, request AED
LG recognizes Emergency

Activate EAP

Primary Assessment

Unconscious Victim

A – B – C: Airway, Breathing, Circulation
look, listen, feel for <= 10 secs

If not already done, have someone Call 911!
request AED

survey scene
basic precautions
assess victim (consciousness); obtain consent,
if necessary → call 911, request AED

If not already done, have someone Call 911!
request AED
LG recognizes Emergency

Activate EAP

Primary Assessment

Unconscious Victim

A – B – C: Airway, Breathing, Circulation
look, listen, feel for <= 10 secs

Victim is Breathing
Yes, Circulation
No Bleeding

Victim is not Breathing

If not already done, have someone Call 911!
request AED

survey scene
basic precautions
assess victim (consciousness); obtain consent,
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LG recognizes Emergency

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Primary Assessment

Unconscious Victim

survey scene
basic precautions
assess victim (consciousness); obtain consent,
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If not already done, have someone Call 911!
request AED

A – B – C: Airway, Breathing, Circulation
look, listen, feel for <= 10 secs

Victim is Breathing
Yes, Circulation
No Bleeding

• Keep Airway open
• Continue to Monitor for Signs of
  Circulation and Breathing
• If necessary, Place Victim in
  H.A.in.E.S. (Recovery) Position
LG recognizes Emergency

Activate EAP

Primary Assessment

Unconscious Victim

If not already done, have someone Call 911! request AED

survey scene
basic precautions
assess victim (consciousness); obtain consent,
if necessary → call 911, request AED

A – B – C: Airway, Breathing, Circulation
look, listen, feel for <= 10 secs

Victim is not Breathing

Child/Infant → 2* Ventilations

Adult Hypoxia Drowning → 2* Ventilations

Adult Cardiac Emergency → No Ventilations
start CPR

Adult Drowning → No Ventilations
start CPR
LG recognizes Emergency

Activate EAP

Primary Assessment

survey scene
basic precautions
assess victim (consciousness); obtain consent, if necessary → call 911, request AED

If not already done, have someone Call 911! request AED

Unconscious Victim

A – B – C: Airway, Breathing, Circulation
look, listen, feel for <= 10 secs

Victim is not Breathing

*2 Ventilations

Ventilations don’t go in

Ventilations Go In

Child/Infant → 2* Ventilations

Adult Hypoxia Drowning → 2* Ventilations

Adult Cardiac Emergency → No Ventilations start CPR
LG recognizes Emergency

Activate EAP

Primary Assessment

Unconscious Victim

survey scene basic precautions assess victim (consciousness); obtain consent, if necessary → call 911, request AED

If not already done, have someone Call 911! request AED

A – B – C: Airway, Breathing, Circulation look, listen, feel for <= 10 secs

Victim is not Breathing

*2 Ventilations; If

Child/Infant 2* Ventilations

Adult Hypoxia Drowning 2* Ventilations

Adult Cardiac Emergency No Ventilations start CPR

Ventilations Go In

No Breathing No Circulation Begin CPR

No Breathing Yes, Circulation Begin RB
LG recognizes Emergency

Activate EAP

Primary Assessment

Unconscious Victim

If not already done, have someone **Call 911**! request AED

Survey scene
basic precautions
assess victim (consciousness); obtain consent, if necessary → call 911, request AED

A – B – C: Airway, Breathing, Circulation
look, listen, feel for <= 10 secs

Victim is not Breathing

*2 Ventilations; If

1st Ventilation doesn’t go in

Reposition Airway
Try 1-2 more Ventilations

Ventilations go in

Ventilations don’t go in

Child/Infant → 2* Ventilations
Adult Hypoxia Drowning → 2* Ventilations
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Try 1-2 more Ventilations

Ventilations go in

No Breathing
No Circulation

Begin CPR

No Breathing
Yes, Circulation

Begin RB

Child/Infant
2* Ventilations

Adult Hypoxia
2* Ventilations

Drowning

Adult Cardiac
Emergency
No Ventilations
start CPR
LG recognizes Emergency

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Primary Assessment

Unconscious Victim

If not already done, have someone **Call 911!** request AED

**A – B – C:** Airway, Breathing, Circulation
  - look, listen, feel for <= 10 secs

Victim is not Breathing

*2 Ventilations; If

1st Ventilation doesn’t go in

Reposition Airway
  - Try 1-2 more Ventilations

Ventilations don’t go in

Give Care for Unconscious Choking Victim

Survey scene
  - basic precautions
  - assess victim (consciousness); obtain consent, if necessary → call 911, request AED

Child/Infant
  - 2* Ventilations

Adult Hypoxia Drowning
  - 2* Ventilations

Adult Cardiac Emergency
  - No Ventilations start CPR
LG recognizes Emergency

Activate EAP

Primary Assessment

Unconscious Victim

If not already done, have someone **Call 911!** request AED

**Victim is not Breathing**

A – B – C: Airway, Breathing, Circulation
look, listen, feel for <= 10 secs

- Child/Infant → 2* Ventilations
- Adult Hypoxia Drowning → 2* Ventilations
- Adult Cardiac Emergency → No Ventilations start CPR

If 1st Ventilation doesn’t go in

Reposition Airway
Try 1-2 more Ventilations

- 30 Chest Thrusts
- Check for Foreign Object
- 2 Ventilations
- Repeat until
  - 2 Ventilations Go In
  - Victim Begins Breathing on Own
  - EMS Arrive

Ventilations don’t go in

Give Care for Unconscious Choking Victim
LG recognizes Emergency

Activate EAP

Primary Assessment

Unconscious Victim

If not already done, have someone Call 911! request AED

A – B – C: Airway, Breathing, Circulation
look, listen, feel for <= 10 secs

Victim is not Breathing

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1st Ventilation doesn’t go in

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Try 1-2 more Ventilations

Ventilations don’t go in

Give Care for Unconscious Choking Victim

A – B – C: Airway, Breathing, Circulation
look, listen, feel for <= 10 secs
Care for Conditions You Find

- 30 Chest Thrusts
- Check for Foreign Object
- 2 Ventilations
- Repeat until
  - 2 Ventilations Go In
  - Victim Begins Breathing on Own
  - EMS Arrive

survey scene
basic precautions
assess victim (consciousness); obtain consent, if necessary → call 911, request AED

Child/Infant

2* Ventilations

Adult Hypoxia Drowning

2* Ventilations

Adult Cardiac Emergency

No Ventilations start CPR
LG recognizes Emergency

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Primary Assessment

Unconscious Victim

- A – B – C: Airway, Breathing, Circulation
  - look, listen, feel for <= 10 secs

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1st Ventilation doesn’t go in

- Reposition Airway
  - Try 1-2 more Ventilations

Ventilations go in

Ventilations don’t go in

- Give Care for Unconscious Choking Victim

No Breathing

- No Ventilations
  - start CPR

No Breathing Yes, Circulation

- Begin RB

Adult Cardiac Emergency

- No Ventilations

Adult Hypoxia Drowning

- 2* Ventilations

Child/Infant

- 2* Ventilations

survey scene
basic precautions
assess victim (consciousness); obtain consent, if necessary → call 911, request AED

If not already done, have someone Call 911! request AED

30 Chest Thrusts
Check for Foreign Object
2 Ventilations
Repeat until
- 2 Ventilations Go In
- Victim Begins Breathing on Own
- EMS Arrive

Care for Conditions You Find

Begin CPR

Begin CPR
LG recognizes Emergency
Activate EAP
Primary Assessment

Unconscious Victim

Victim is not Breathing
2 Rescue Breaths

A – B – C: Airway, Breathing, Circulation
look, listen, feel for <= 10 secs

Child/Infant
2* Ventilations

Adult Hypoxia
Drowning
2* Ventilations

Adult Cardiac
Emergency
No Ventilations
start CPR

Ventilations go in
No Breathing
Yes, Circulation

Begin RB

1 sec long Breath
• every 5 secs (Adult)
• every 3 secs (Child, Infant)
Check Pulse every 2 mins
• = 24 cycles (Adult)
• = 40 cycles (Child, Infant)
Continue RB until
• Victim Begins Breathing on Own
• EMS Arrive
• Victim has no longer a Pulse
  • = if so, Begin CPR

survey scene
basic precautions
assess victim (consciousness); obtain consent,
if necessary → call 911, request AED

If not already done,
have someone Call 911!
request AED
LG recognizes Emergency

Activate EAP

Primary Assessment

Unconscious Victim

survey scene
basic precautions
assess victim (consciousness); obtain consent,
if necessary → call 911, request AED

If not already done, have someone Call 911! request AED

A – B – C: Airway, Breathing, Circulation
look, listen, feel for <= 10 secs

Child/Infant

2* Ventilations

Adult Hypoxia
Drowning

2* Ventilations

Adult Cardiac
Emergency

No Ventilations
start CPR

Victim is not Breathing

2 Rescue Breaths

Ventilations go in

No Breathing
No Circulation

Begin CPR

30 Compressions & 2 Breaths
• at rate of at least
100 Compressions/min
(=30 in 18 secs)
• to Depth of
  • at least 2” (Adult)
  • about 2” (Child)
  • about 1½” (Infant)

Continue CPR “forever”, until
• Victim shows Signs of Life
• AED becomes Available
• EMS Arrive
LG recognizes Emergency

Activate EAP

Primary Assessment

Unconscious Victim

Victim is not Breathing

A – B – C: Airway, Breathing, Circulation look, listen, feel for <= 10 secs

Child/Infant

Child/Infant → 2* Ventilations

Adult Hypoxia Drowning

Adult Hypoxia Drowning → 2* Ventilations

Adult Cardiac Emergency

Adult Cardiac Emergency → No Ventilations start CPR

Ventilations go in

No Breathing No Circulation

Begin CPR

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• at rate of at least 100 Compressions/min (=30 in 18 secs)
• to Depth of
  • at least 2” (Adult)
  • about 2” (Child)
  • about 1½” (Infant)

Continue CPR “forever”, until

• Victim shows Signs of Life
• AED becomes Available
• EMS Arrive

If not already done, have someone Call 911! request AED

survey scene basic precautions assess victim (consciousness); obtain consent, if necessary → call 911, request AED

Switch on AED
Wipe Victim’s Chest
Attach Pads (upper right/lower left)
(Plug Connector into AED)
“Clear!” and Analyze
If needed, “Clear!” and Shock, then 5 Cycles of CPR
Else, 5 Cycles of CPR (~ 2 min)
Repeat Analyze, Shock and CPR cycles
LG recognizes Emergency

Activate EAP

Primary Assessment

Conscious Victim
- Provide Care as Needed

Unconscious Victim
- A – B – C: Airway, Breathing, Circulation
  - look, listen, feel for <= 10 secs
- Victim is Breathing Yes, Circulation No Bleeding
  - Keep Airway open
  - Continue to Monitor for Signs of Circulation and Breathing
  - If necessary, Place Victim in H.A.in.E.S. (Recovery) Position
- Victim is not Breathing
  - *2 Ventilations; If
    - 1st Ventilation doesn’t go in
      - Reposition Airway
        - Try 1-2 more Ventilations
      - Ventilations go in
        - No Breathing No Circulation
          - Begin CPR
          - 30 Compressions & 2 Breaths
            - at rate of at least
              - 100 Compressions/min (=30 in 18 secs)
            - to Depth of
              - at least 2” (Adult)
              - about 2” (Child)
              - about 1½” (Infant)
            - Continue CPR “forever”, until
              - Victim shows Signs of Life
            - AED becomes Available
            - EMS Arrive
          - No Breathing
            - No Bleeding
              - Give Care for Unconscious Choking Victim
              - 30 Chest Thrusts
              - Check for Foreign Object
              - 2 Ventilations
              - Repeat until
                - 2 Ventilations Go In
                - Victim begins Breathing on Own
                - EMS Arrive
            - Adult Cardiac Emergency
              - No Ventilations start CPR
              - Adult Hypoxia
                - 2* Ventilations
            - Drowning
              - 2* Ventilations
            - Child/Infant
              - Vents go in
                - No Breathing
                  - No Circulation
                    - Begin RB
                    - 1 sec long Breath
                      - every 5 secs (Adult)
                      - every 3 secs (Child, Infant)
                      - Check Pulse every 2 mins
                      - = 24 cycles (Adult)
                      - = 40 cycles (Child, Infant)
                      - Continue RB until
                        - Victim begins Breathing on Own
                        - EMS Arrive
                        - Victim has no longer a Pulse
                          • = if so, Begin CPR

- Adult Hypoxia
  - 2* Ventilations

- Adult Cardiac Emergency
  - No Ventilations start CPR

- Drowning
  - 2* Ventilations

- Child/Infant
  - 2 Ventilations

- No Breathing
  - No Circulation
  - Give Care for Unconscious Choking Victim
  - 30 Chest Thrusts
  - Check for Foreign Object
  - 2 Ventilations
  - Repeat until
    - 2 Ventilations Go In
    - Victim begins Breathing on Own
    - EMS Arrive

No Breathing
- No Circulation
- Begin RB
- 1 sec long Breath
  - every 5 secs (Adult)
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    - Victim begins Breathing on Own
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survey scene
- basic precautions
- assess victim (consciousness); obtain consent,
  if necessary → call 911, request AED

If not already done,
- have someone Call 911!
  - request AED

survey scene
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Lia Kidoguchi - Jan2012