



Virginia Information Technologies Agency

# 9-1-1 Call Handling Best Practice

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ISP Director

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Webinar  
March 16, 2016



## Webinar Agenda

- Background of Best Practices Effort
- Review of the 9-1-1 Call Handling Best Practice
- Best Practices Next Steps



## Comprehensive Plan for 9-1-1

- GOAL 1: Formalize baseline levels of service and capabilities that meet public expectations
- GOAL 2: Increase situational awareness through enhanced incident information sharing
- GOAL 7: Leverage GIS technology and data to better locate callers and improve response capabilities



## NG 9-1-1 Feasibility Study

- Best practices/Standards theme of Feasibility Study
  - Comprehensive review of the necessary technical and operational standards for the NG9-1-1 system (SO5A)
  - Ensure that the types of data collection the E-911 Services Board or VITA may need to manage the NG9-1-1 services is appropriate (Rec02A)
  - Monitor compliance of any adopted standards for the 9-1-1 system, the PSAP, or call handling, adopted by the Board (Gov04B)



## Best Practice/Standards Approach

- RAC to serve as resource for topic determination/prioritization and as SMEs
- Form work groups (may have RAC members)
- Task work group to:
  - Develop list of all technical and operational standards needed for NG-911
  - Prioritize that list
  - Begin developing those standards as best practices



## ISP Activities

- Developed a list of possible best practices
- 9-1-1 Addressing and 9-1-1 Call Handling chosen as first two for development
- Several localities and associations consulted
- Drafts now complete
- Will be presented to the Regional Advisory Council
- Evolving documents



*Virginia Information Technologies Agency*

# 9-1-1 Call Handling Best Practice

**Stefanie McGuffin**

ISP Regional Coordinator

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Webinar

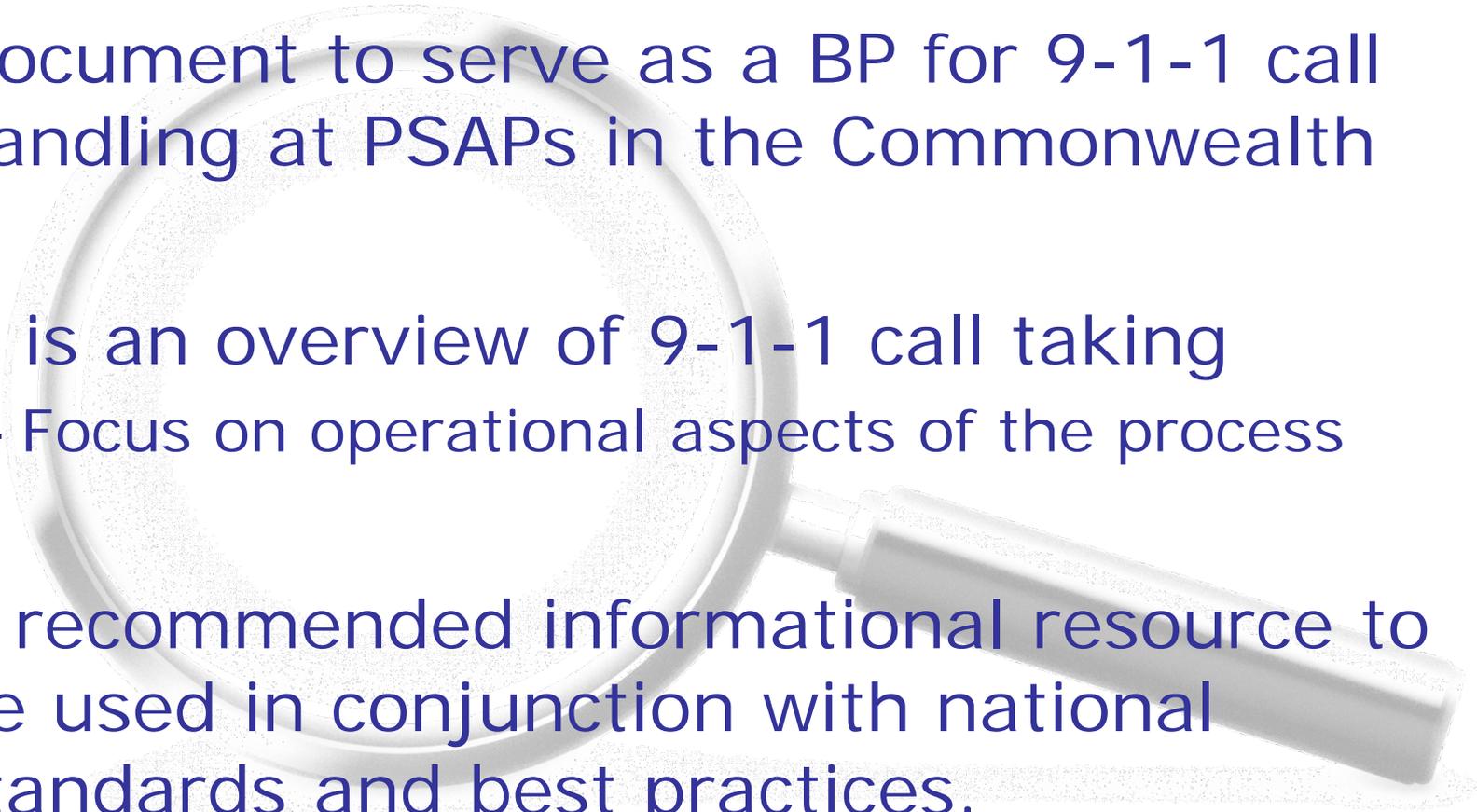
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## Best Practice Defined

- A best practice (BP) is a consistent method that shows superior results.
  - Used as benchmark.
- Adherence to common benchmarks allows processes, systems, data and etc to be more easily integrated.
- Serve as a guide/reference that can be used when developing or refining PSAP processes.

## Focus of the Document

- Document to serve as a BP for 9-1-1 call handling at PSAPs in the Commonwealth
  - It is an overview of 9-1-1 call taking
    - Focus on operational aspects of the process
  - A recommended informational resource to be used in conjunction with national standards and best practices.
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- A large, semi-transparent magnifying glass is positioned over the text, with its handle pointing towards the bottom right. The lens is centered over the second bullet point.

## 9-1-1 Call Handling BP Topics

- Focus/purpose of the Document
- The call process from delivery to distribution, answering & processing
- Emergency Medical Dispatch
- Call Transfers
- Telematics and Alarms
- Text to 9-1-1
- Non-standard Calls
- Error Reporting, Correction and QA





## The 9-1-1 Call Handling BPs

- Call Delivery
  - Minimum number of dedicated trunks from two diverse selective routers.
  - Analysis of call volumes and/or LEC traffic studies necessary to assure proper number of trunks.
- Disaster Recovery
  - Recommends each PSAP works with LEC to develop disaster recovery plan.
  - Test the plan annually.



## 9-1-1 Call Handling BPs

(continued)

- Call Distribution
  - First Available or Automatic Call Distribution
- Call Answering
  - Call to Answer Time = 90% in 10 seconds
  - Answering Priorities
  - Language/Protocol (what is the address/where is)
  - Address/Location Verification
    - Wireline = verify ALI with caller
    - Wireless = determine COS; rebid; always verify with caller
      - Evaluate ability of CHE to auto-rebid



## 9-1-1 Call Handling BPs

(continued)

- Communication with Caller
  - Location/address
  - Call back number
  - Type of emergency
  - Potential Hazards
  - Each PSAP should have established policy for call processing based on type of call
- Emergency Medical Dispatch
  - Due to the highly effective, life-saving success of EMD, each PSAP in Virginia should have an established EMD protocol in place, and have call takers certified on the system.



# 9-1-1 Call Handling BPs

(continued)

- Call Transfers
  - Emergency; without delay by originating PSAP
    - “one button transfers”; program 9-1-1 direct or 10 digit emergency for adjacent PSAPs and frequent transfers(ex VSP, poison control, etc)
    - Have a PSAP call list for PSAPs further away.
    - “blind transfers” of emergency calls should never occur
  - Non-emergency calls
    - If received on 9-1-1 trunk the caller should be given number to call
    - If transferred 9-1-1 trunk can be held in busy status



## 9-1-1 Call Handling BPs

(continued)

- Telematics and Alarms
  - Should be treated like emergency calls
  - Have a 10 digit line dedicated for telematics and alarms
- Text to 9-1-1
  - Pursue web based or direct IP
  - Goal to have service available statewide
    - Integrate statewide deployment with NG9-1-1
  - Have proactive public education
    - Only use when voice isn't an option



## 9-1-1 Call Handling BPs

(continued)

- Non-standard Calls (nature undetermined)
  - Call takers should listen for background sounds, tone of caller, word choice, any possible location clues, etc to help determine the nature of the call and if emergency dispatch is warranted
  - Abandoned Calls/Disconnects – Attempt a call back
  - Silent Calls – Respond with TDD/TTY
  - Misdials – Caller admits error
  - Unintentional Calls – Call taker determines no emergency
  - Prank Calls – Call back; have policy for handling



## 9-1-1 Call Handling BPs

(continued)

- Error Reporting & Correction and Quality Assurance Programs
  - Each PSAP should establish these programs
  - The programs should define staff roles and responsibilities, timeframes, resolution reporting and error correction.
  - Try to recreate errors to assure correction was successful.



## Conclusions

- 9-1-1 call handling is complex
- Establish detailed procedures
- Carry out adequate training on procedures
- Best practices included in the document should be incorporated into local policies and procedures



# Audience Participation

We want your thoughts  
and feedback regarding  
Best Practices

