

## DoD Smallpox Response Plan

### ANNEX A TO SMALLPOX RESPONSE PLAN

29 September 2002

### SURVEILLANCE, CONTACT TRACING, AND EPIDEMIOLOGIC INVESTIGATION.

#### REFERENCES.

a. CDC Smallpox Response Plan, Guide A, Surveillance, Contact Tracing, And Epidemiologic Investigation, 23 September 2002.

<http://www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/GuideA/Guide-A.doc>.

b. CDC Smallpox Response Plan, Annex 5, Suggested Pre-Event Activities for State & Local Health Authorities, 23 September 2002.

<http://www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/annex/annex-5.doc>.

c. CDC Smallpox Response Plan, Annex 8, Checklists for State/Local/CDC Personnel Actions in a Smallpox Emergency, 23 September 2002.

<http://www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/annex/annex-8.doc>.

d. Department of Defense. Triservice Reportable Events Guidelines & Case Definitions, version 1.0. Washington, DC, July 1998.

[http://amsa.army.mil/documents/DoD\\_PDFs/Jul98TriServREGuide.pdf](http://amsa.army.mil/documents/DoD_PDFs/Jul98TriServREGuide.pdf).

1. General. This DoD Annex augments CDC Guide A. Appendix A-1 summarizes CDC Guide A and this DoD Annex on one page.

2. Mission. DoD personnel will conduct surveillance, contact tracing, and epidemiologic investigations of smallpox outbreaks that affect DoD units and installations, anywhere in the world. For outbreaks that span the borders between federal and local property or territory, DoD personnel will support and assist disease-control efforts, taking advantage of the resources in references a and b. On order, DoD personnel will provide support to civil authorities.

3. Pre-outbreak Rash Medical Surveillance.

a. Generalized Febrile Vesicular-Pustular Rash Illness (GFVPRI).

(1) GFVPRI is submitted for addition to the Tri-Service Reportable Medical Event List (reference c).

(2) The Services and the Joint Staff will establish medical surveillance for GFVPRI through existing disease-reporting channels. Military treatment facilities (MTFs), both hospitals and clinics, will use ICD9 code 057.9 (viral exanthem unspecified) to report GFVPRI and generalized vesicular-pustular rash illness (GVPRI) patient encounters in automated data systems, unless a more specific ICD9 code is appropriate clinically. Surveillance systems currently operated by the military track health-care visits related to

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potential bioterrorist agents through the Ambulatory Data Set (ADS) (e.g., Electronic Surveillance System for the Early Notification of Community Based Epidemics, ESSENCE). This medical surveillance can detect simultaneous outbreaks at different locations, so it is important that MTF staff enter ADS information precisely and promptly.

(3) Each military treatment facility (MTF) will periodically train its staff in the clinical recognition of GFVPRI and smallpox, and the application of the CDC GVPRI protocol for evaluating patients for smallpox (including how to differentiate smallpox from chickenpox). Such training programs can focus on documents listed in Appendix B-5.

(4) Each MTF will post the CDC “Generalized Vesicular or Pustular Rash Illness Protocol” Poster [[www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/annex/annex-4-rash-color.pdf](http://www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/annex/annex-4-rash-color.pdf) or .ppt] in appropriate locations, adding specific MTF telephone numbers for reporting a suspicious case.

(5) Within an MTF, any illness consistent with GFVPRI will be evaluated per CDC guidelines and GVPRI protocol (see references a and b). MTFs will develop internal procedures for notification of the preventive-medicine or public-health service, infection-control service, dermatology service, and the command group regarding patients with GFVPRI. DoD medical personnel will expeditiously seek specialist consultation for assistance with diagnosis of smallpox cases. Telemedicine capabilities will be useful for remote consultations.

(6) Consultation will require dermatology and/or infectious disease specialists. Additionally, laboratory testing of specimens will likely be required in the early stages of a smallpox outbreak (Annex D). Because these assets are not readily available, obtain assistance via CDC. As explained in Annex D, CDC will coordinate with the US Army Medical Research Institute of Infectious Diseases (USAMRIID) and the Laboratory Response Network for the appropriate laboratory asset to support. Overseas units will receive support through military channels.

(7) If a smallpox case is recognized within an MTF, secure the entrances and exits of the affected unit, until a roster of names, addresses, and telephone numbers can be created of all people present, including degree of exposure (e.g., face-to-face contact) with the suspected smallpox case (CDC Form 8). After this roster is completed, these people may be released, with instructions that they will be contacted by preventive-medicine or public-health personnel about the possible need for smallpox vaccination within the next few days. Advise these people not to travel more than 20 miles from their city of residence. In the case of an individual considered likely to flee and be uncooperative regarding medical follow-up, seek legal counsel and consider possible individual detention. When communicating this request, use someone skilled in health risk communication. There is little need to close installation gates, unless this effort would be useful to find named face-to-face contact(s) ( $\leq 6$  feet) of a suspected smallpox case. The MTF should then prepare to isolate the case (Appendix C-4) and initiate

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contact tracing (Appendix A-3). MTFs will coordinate with local health departments to provide for contact tracing of civilians who are not DoD beneficiaries.

### b. Reporting a Suspected Case of Smallpox.

(1) In the civilian sector, CDC requires immediate reporting of a suspected case of smallpox. DoD activities will comply with similar requirements, in the following sequence:

(a) MTF personnel will use the CDC GVPRI protocol to evaluate unusual clinical cases, synchronizing medical and infection-control expertise with the command group.

(b) After ruling out more plausible explanations, submit GFVPRI report immediately through established Service disease-reporting systems (Appendix A-2), regardless of time of day. These reporting systems typically begin with the local preventive-medicine or public-health service.

(c) Also submit Serious Incident Report (SIR) to higher military headquarters (i.e., operational forces command communications channels), regardless of time of day. Operational forces command communications will be the primary/only means of reporting in certain situations (e.g., deployed forces).

(d) Also notify CDC Emergency Preparedness & Response Branch, 770-488-7100, if within the United States, its possessions, or its territories.

(e) Also notify State Health Department (see <http://www.cdc.gov/other.htm#states>), as applicable.

(f) Also notify other appropriate authorities (e.g., local health department; host nation public-health authorities), as applicable.

(2) As a smallpox outbreak develops, the Combatant Commander with responsibility for conducting consequence-management operations (e.g., Northern Command for the United States) in response to CBRNE incidents may designate a Smallpox Coordination Cell to augment the usual crisis-action process. Specific instructions to clarify and focus reporting expectations and requirements across the global Military Health System (MHS) will be issued according to the specific circumstances encountered. The Smallpox Coordination Cell will:

(a) Consist of medical, logistics, and other relevant subject-matter experts.

(b) Coordinate smallpox response efforts for that Unified Command.

(c) Receive reports of smallpox cases and advise on medical and logistical support.

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(d) Coordinate with smallpox-response staff at the Military Services, the CDC and other agencies. For example, the Cell will coordinate with the Federal Emergency Management Agency's Disaster Field Office (DFO), Federal Coordinating Officer (FCO), and State-level DFOs.

(e) Arrange headquarters-level consultations with designated military preventive-medicine and infectious-disease subject matter experts.

(f) Synchronize information exchange for military chains of command.

(g) Coordinate communication with local, state, national, and international public-health authorities.

(h) Coordinate activities of DoD smallpox response teams.

(i) Coordinate with Disaster Medical Assistance Teams.

4. Smallpox Clinical Presentations and Differential Diagnosis. See Appendix A-7.

5. Smallpox Case Definitions and Case Classification.

a. DoD adopts CDC definitions and classifications without change, to assure DoD consistency with CDC (Appendix A-8, Appendix A-12).

b. Case definitions are likely to change with time, especially as an outbreak develops. Such change is consistent with good public-health practice. DoD will follow evolving CDC guidance to assure currency, quality, and compatibility.

c. Case classification as confirmed, probable, or suspected carry national, international, and military implications.

(1) DoD headquarters will exert no effort to constrain reporting by local military clinicians or MTFs. Nonetheless, it is prudent to assure that the clinician and the MTF coordinate and consult with DoD subject-matter experts *before* independently reporting the possibility of a case outside of professional channels. Subject-matter experts include: Infectious-disease (ID) physicians, dermatologists, preventive-medicine (PM) centers (i.e., USACHPPM, NEPMU), or members of Smallpox Epidemiologic Response Teams (i.e., smallpox-specific "Epi-Teams"). The contradictory needs for timely diagnosis and minimizing false-positive alerts must be balanced.

(2) MTFs may initially classify a potential case as suspected or probable. Classification of a first case in a geographic area as "confirmed" requires consultation with DoD and/or CDC infectious disease experts (e.g., DoD or CDC smallpox Epi-Team), including laboratory confirmation. Outside the United States, host nation and/or WHO experts may provide confirmation.

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(3) ICD9 code 050 (smallpox) or 050.0 (variola major) will be used to report smallpox cases in automated data systems, unless another ICD9 code is more appropriate clinically.

### 6. Post-Outbreak Response — Epidemiological Investigation.

#### a. Concept of Operations.

(1) Upon recognition of any probable or confirmed case of smallpox, established with expert consultation, initiate a case investigation immediately. Coordinate investigation with local officials, seeking expert consultation as needed. A case investigation may also be initiated for suspected cases (in conjunction with expert consultation), depending upon probability of smallpox diagnosis and level of suspected threat.

(2) Local or regional medical personnel will complete most case investigations (e.g., community health nurses). Regional preventive-medicine or public-health personnel, MTFs, and DoD Smallpox Epi-Teams will provide consultative and logistical support.

(3) Case investigations (as detailed in Appendix A-3 and Appendix A-13) will serve to establish smallpox diagnoses, identify contacts of the case for vaccination and medical surveillance, identify the most likely source of infection, monitor outcomes, and conduct epidemiologic analysis.

#### b. Case Investigations.

(1) Establish the diagnosis (if not already confirmed). Responders will begin case investigations by establishing (confirming) the diagnosis.

(a) Case investigations can be initiated for cases based on clinical presentation. However, obtain consultation from infectious-disease physicians, dermatologists, preventive-medicine physicians, CDC experts, or other subject-matter experts.

(b) Refer to Annex D for disposition of clinical specimens for laboratory confirmation.

(2) Identify Close Contacts. Once a suspected, probable, or confirmed case is identified, the highest priorities are to reduce risk of transmission by (a) promptly identifying, placing under fever surveillance, and vaccinating close contacts of cases and (b) isolating the cases.

(a) Begin contact tracing within hours of identifying a case of smallpox. Conduct contact tracing as detailed in Appendix A-3 and Appendix A-13.

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(b) All individuals conducting case interviews should be vaccinated before initiating their first face-to-face interviews with suspected, probable, or confirmed smallpox cases or contacts. Personal protective equipment will provide an additional layer of protection (Annex C).

(c) There are significant ethical issues in asking unvaccinated personnel to conduct interviews with smallpox cases or their contacts. In the absence of force-wide vaccination, consider these options for initiating case investigations before arrival of a smallpox Epi-Team. Personal protective equipment is especially important until vaccine becomes available (Annex C).

(i) In the United States, use vaccinated state or county response personnel for case investigation.

(ii) Designate a small number of local or regional personnel (worldwide) for initiating the case investigation (e.g., EPMU-7 personnel for Southern Italy). These case investigators would need pre-outbreak vaccination and initial training.

(iii) Designate one or more smallpox responders at each major MTF. These case investigators would need pre-outbreak vaccination and initial training.

(iv) Use vaccinated CDC/WHO response teams, if available.

(v) Use volunteer interviewers who understand the risks and who agree to be vaccinated as rapidly as possible, ideally within 3 days of exposure, if smallpox is not ruled out. Preference may be given to people vaccinated against smallpox in the past, as they may respond to repeat vaccination more quickly. Examples include health-care providers already in contact with the case or other unvaccinated personnel. These people should use personal protective equipment, as discussed in Annex C.

(d) DoD adopts all CDC Forms (Appendix A-14) for use in case investigations, including expected revisions issued by CDC, to promote interoperability between DoD and civilian agencies.

(e) Certain military-specific demographic information may be useful to simplify location of contacts. Specific items may include, but are not limited to: Social Security numbers with family-member prefix (FMP), personal Social Security number, military unit name, military service, and personnel status (e.g., active-duty, Reserve/Guard, retiree, family member). Other data fields that may be useful include unit identification codes (UICs), reporting unit codes (RUCs), installation name, APO or FPO address, DSN telephone number, immediate supervisor, and commanding officer. These items may be added as "write-ins" on the existing CDC Forms. In addition to Appendix A-14, forms may be obtained via Internet at <http://www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/index.asp>. Forms 1A, 1B, 8, 9, 10-1 and 10-2 are provided with DoD overlays to collect Service-specific information. Once

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CDC finalizes its current form-redesign program, DoD will modify the CDC Forms to add the DoD-specific fields on readily distributable templates. MTFs will coordinate with local health departments to provide for contact tracing of civilians who are not DoD beneficiaries.

(f) Under CDC guidance, people performing case interviews and follow-up will assign each case and each contact a specific case/contact identification number. Cases and contacts will be differentiated based on state. DoD will adopt a case/contact identification system to avoid duplicate case-identification numbers. The numbering system will include two parts, a prefix and a suffix. The prefix will be the 5-digit zip code of the installation conducting the contact tracing. The suffix will be a serial number.

(g) MTFs will establish an appropriate procedure for notifying and obtaining access to contacts. For example, a case investigator could notify the installation or unit commander, or the case investigator would notify local medical personnel who make appropriate linkages.

(h) Contacts of smallpox cases should be vaccinated and/or isolated, as per guidance in Annex B and Annex C.

(3) Identify most likely source of initial exposure.

(a) Attempt to complete this step within 24 hours.

(b) Provide timely notification of where initial exposure or virus release may have occurred to appropriate authorities (e.g., commander of installation, Service medical operations center, local or nearest MTF).

(4) Identify or estimate the population at risk, as described in reference a. Be especially aware of close contact conditions typical in military communities (e.g., recruit barracks, shipboard, group dining facility).

(5) Compare epidemiologic features of outbreak with expected features of smallpox and varicella (chickenpox) (Appendix A-7, Appendix A-9). Identify unexpected epidemiologic features of the outbreak.

(a) Note health status and vaccination status of affected population.

(b) With an intentional release of smallpox as a terrorist event or as part of a military conflict, MTFs will report any unexpected or unusual presentation, morbidity, mortality, incubation period, or transmission to higher medical headquarters.

(6) Develop effective containment strategies, by evaluating the characteristics and extent of the outbreak.

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(a) Control methods may include installation closure, isolation of personnel, restriction of travel, ban on use of large transport vehicles (e.g., buses, airplanes), closure of crowded central facilities (e.g., gym, dining facilities, shopping center).

Note: Installation closures and restrictions of movement have limited value, because the installation may already harbor people incubating a smallpox infection but who do not yet manifest symptoms. See the DoD Smallpox Response Plan and Annex C for additional considerations for restriction of movement.

(b) Installation and unit smallpox response plans will include methods for notifying security personnel for assistance with implementing control measures.

c. Levels of Response. Responses to a smallpox outbreak will be delivered in three levels of response: Local, Regional, and Global. Responsibilities and actions for each level are delineated below.

### (1) Local Response.

(a) Local commands and/or operational units will maintain primary responsibility for conducting case investigations. Installation commanders or operational commanders (e.g., joint task force commander) will be responsible for rapid execution of smallpox response plans. Local responders will be responsible primarily for establishing the diagnosis, contact identification and tracing, and identification of the source of infection.

(b) Immediate reporting of suspected, probable, or confirmed cases via established Service disease-reporting systems and Serious Incident Reports (SIRs) to higher military headquarters are required. In addition, US facilities will promptly notify local and state health departments. Overseas facilities will promptly notify the appropriate host-nation health authority.

(c) Smallpox Response Coordinator. Local commands will identify a Smallpox Response Coordinator, to function as the local coordinator for case investigations. This coordinator will also serve as a liaison between the local command, local response personnel, Smallpox Epi-Teams, and DoD and civilian authorities.

(d) Because external support (e.g., Smallpox Epi-Teams) may not arrive on-site for 24 to 48 hours or longer, local personnel and resources will be required to initiate case investigations.

(e) Case investigators will report all findings to Smallpox Epi-Teams once they arrive. Smallpox Epi-Teams will be attached under the operational control (OPCON) of the Joint Task Force, Combatant Command, or installation commander, as applicable, who may delegate OPCON to subordinate commanders. The Epi-Teams will communicate with the local senior military medical authority and higher medical headquarters without restriction.



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### (2) Regional Response.

(a) Regional Smallpox Epidemiologic Response Teams (Smallpox Epi-Teams), MTFs, and preventive-medicine centers (e.g., NEPMU, CHPPM) will provide consultative and logistical support to local event responders. Within the US, consultative and logistical support may also be obtained from CDC and the state health department.

(b) Regional responders will provide key support for identifying the population at risk, identifying unexpected epidemiologic features, and developing containment and control strategies.

(c) Smallpox Epidemiologic Response Teams (Smallpox Epi-Teams). Each Service will identify, train, prepare, and equip at least two rapidly deployable Smallpox Epi-Teams. Proposed capabilities and composition of Epi-Teams is detailed in Appendix A-4 of this DoD Annex.

(i) All Smallpox Epi-Team members will be vaccinated before conducting face-to-face case interviews, contact tracing, or handling specimens (Annex B).

(ii) Smallpox Epi-Teams will be attached under the operational control (OPCON) of the Joint Task Force, Combatant Command, or installation commander, as applicable, who may delegate OPCON to subordinate commanders. The Epi-Teams will communicate with the local senior military medical authority and higher medical headquarters without restriction.

(iii) Smallpox Epi-Teams and regional PM assets will assist with notification of CDC, state health department, host-nation public-health authorities, WHO, or other appropriate entities.

(iv) Smallpox Epi-Teams will have capability (i.e., organic training and supplies) to administer smallpox vaccine.

### (d) Regional MTFs.

(i) MTFs located in the region of smallpox outbreak will provide logistical support, consultative assistance, and medical-care assets as appropriate and available.

(ii) MTFs with infectious-disease specialists will provide consultative assistance with diagnosis and treatment and laboratory support.

(iii) Larger MTFs may provide a number of pre-vaccinated personnel to assist with early case investigative efforts before arrival of a smallpox Epi-Team.

(iv) If available, MTFs may also have a limited supply of smallpox vaccine for rapid distribution to local responders and contacts.

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### (3) Global Response.

(a) As a smallpox outbreak develops, the Combatant Commander responsible for conducting consequence-management operations (e.g., Northern Command for the United States) in response to CBRNE incidents may designate a Smallpox Coordination Cell to augment the usual crisis-action process. This Smallpox Coordination Cell will receive reports of smallpox cases and direct logistical efforts. The Smallpox Coordination Cell will provide a focal liaison with CDC and other smallpox response coordinators, synchronize information exchange for military chains of command, coordinate communication with local, state, national, and international public-health authorities, and coordinate activities of DoD smallpox response teams.

(b) Command Smallpox Response Coordinator. In the event of a smallpox case, a single person within the Unified Command, skilled in health risk communication, located at the Smallpox Coordination Cell, shall be designated to oversee Command-wide coordination of contact identification, tracing, vaccination, medical surveillance, and other response activities.

(c) The Smallpox Coordination Cell will coordinate with CDC (United States) and host nation or WHO (overseas), to ensure proper execution of epidemiologic responses for both DoD personnel and civilians in the local area or host-nation of an outbreak.

(d) DoD will provide support to the lead federal agency (under the Federal Response Plan) for contact tracing, medical surveillance, and epidemiologic investigation.

### 7. Post-Outbreak Surveillance.

a. Under normal circumstances, disease reporting in the Services is passive. After a smallpox case or outbreak, Services will shift to active medical surveillance to ensure rapid and complete case ascertainment. Appendix A-6 can be used to assist nonmedical members of a military community in distinguishing illnesses of concern from routine illnesses. The Services and Joint Staff will develop plans for active medical surveillance of GFVPRI.

(1) Such plans will be coordinated among the Services and Joint Staff.

(2) Such plans will incorporate guidance found in Appendix A-11.

b. The Services and Joint Staff will initiate daily active medical surveillance immediately after a confirmed case of smallpox.

c. Enhanced Hospital-based Surveillance (EHBS). Service plans will incorporate EHBS, based on guidance in Appendix A-11.

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d. Reporting. During an outbreak, MTFs will report smallpox cases periodically (e.g., daily) to Service disease-reporting centers (typically beginning with local preventive-medicine or public-health service), their higher military headquarters, the state health department, the CDC, and other appropriate public-health authorities (e.g., host nation, if overseas) (Appendix A-10).

### 8. Contact Identification, Tracing, Vaccination, and Surveillance.

#### a. Planning Conditions.

(1) MTFs will follow CDC recommendations for public health and clinical processes and practices of these functions, unless doing so conflicts with operational requirements. DoD medical units may need to conduct contact identification, tracing, vaccination and medical surveillance functions in United States or overseas locations.

(2) Whenever possible, DoD will employ definitions, protocols and forms developed by CDC, adjusting as the CDC definitions evolve.

(3) DoD may work with other federal, international, state and local agencies and non-governmental organizations to accomplish these functions.

(4) Pre-established Smallpox Epi-Teams will have skills, preparation (including recent vaccination), equipment, and resources to perform contact identification, tracing, vaccination, and medical surveillance functions on short notice.

(5) DoD's local investigators and Smallpox Epi-Teams will cooperate with law enforcement, intelligence, and security operations.

#### b. Responsibility.

(1) The local commander responsible for smallpox response will assign a single person (Smallpox Response Coordinator) to oversee functions of contact identification, tracing and medical surveillance.

(2) The MTF will follow the CDC GVPRI protocol, seeking infectious disease or dermatology consultation as clinically indicated. Laboratory confirmation is important for a first case in a geographic area (Annex D).

(3) The local response coordinator, skilled in health risk communication, will establish liaison and coordination with local, state, other federal, and international response agencies.

(4) The local response coordinator will direct all local activities of the team(s) assigned to these functions.

#### c. Team members assigned to identify, trace, and monitor contacts will:

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- (1) Be recently vaccinated (within 3 to 10 years) before initiating contact interviewing, tracing or medical surveillance functions.
- (2) Receive at least the minimum training required to perform these functions.
- (3) Follow procedures outlined in Appendix A-3 and Appendix A-13.
- (4) Be able to identify symptomatic contacts with fever or rash (i.e., suspected cases), for their immediate transport for medical evaluation.
- (5) Prioritize contacts for vaccination, in accordance with Appendix A-3.
- (6) Make arrangements for immediate vaccination of contacts.
- (7) Conduct active medical surveillance of contacts in accordance with Appendix A-3 and Appendix A-13.
- (8) Assess contacts and their household contacts for vaccine “take” and for adverse events (Annex B). Refer those with adverse events for medical evaluation, as appropriate.
- (9) Conduct impromptu training for local personnel who unexpectedly take on the role of contact-tracer or interviewer (Appendix A-3).

### d. Guidance for Identification of Close Contacts.

- (1) Identify people who had close personal contact with the smallpox case (confirmed or probable) since the date fever began.
- (2) Since smallpox is a contagious disease, once a case is confirmed, the highest priorities for case investigators are to reduce risk of ongoing transmission by (a) immediately identifying and vaccinating close contacts of cases and (b) isolating the cases.
- (3) DoD will use CDC Forms 1 thru 11 in case investigations, adapting as CDC issues any subsequent changes (Appendix A-14). DoD overlays for several of these forms appear at that appendix.
- (4) Under CDC guidance, each case and each contact is assigned a specific case/contact identification number. Cases/contacts are also differentiated based on state. DoD will adopt a case/contact identification system to avoid duplicate case-identification numbers. The numbering system will include two parts, a prefix and a suffix. The prefix will be the 5-digit zip code of the installation conducting the contact tracing. The suffix will be a serial number.

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(5) In addition to Appendix A-14, local or regional responders and case investigators who are initiating the investigation may obtain forms via the Internet at [www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/index.asp](http://www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/index.asp). Local responders may also obtain forms, technical consultation, and other assistance from the Unified Command's Smallpox Coordination Cell, a DoD or CDC smallpox response team, or other regional infectious-disease or preventive-medicine centers (e.g., USACHPPM, NEPMUs).

(6) MTFs will establish an appropriate procedure for notifying and obtaining access to contacts. For example, a case investigator could notify the installation or unit commander, or the case investigator would notify local medical personnel who make appropriate linkages.

(7) Case investigators will report all findings to Smallpox Epi-Teams once they arrive. Smallpox Epi-Teams will be attached under the operational control (OPCON) of the Joint Task Force, Combatant Command, or installation commander, as applicable, who may delegate OPCON to subordinate commanders. The Epi-Teams will communicate with the local senior military medical authority and higher medical headquarters without restriction.

e. If team functions include vaccinating contacts, team members assigned will:

(1) Assess contacts for contraindications to vaccination.

(2) Vaccinate contacts according to Annex B.

f. The contact identification, tracing and surveillance team will provide daily reports to the commanding DoD authority (and other authorities as directed by commanding DoD authority) summarizing information on contacts found and those not found, as outlined in Appendix A-3 and Appendix A-13.

### 9. Special Situations.

a. Ships Underway. If a suspected smallpox case breaks out on board ship, the commanding officer will contact higher headquarters immediately.

b. Air Crews on Missions Away From Home Base. In coordination with US Transportation Command and the Combatant Command, military air traffic between installations should be minimized upon notification of a confirmed case of smallpox, until the extent of the outbreak is determined and medical personnel can interview affected aircrew for presence of fever or rash, travel history and plans, and smallpox vaccination status. Surveillance and clearance will be coordinated between medical authorities and installation and aviation commanders, recognizing the risk of spreading infection to the crews' destination(s). If appropriate, aircrews will begin daily fever surveillance until 14 days after successful vaccination, promptly reporting fever  $> 101^{\circ}\text{F}$  ( $38.3^{\circ}\text{C}$ ).

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c. Title 42 United States Code section 97 (42 USC 97; Appendix A-5) provides that quarantines and other restraints established by the health laws of any State, respecting any vessels arriving in any port shall be duly observed by coastal military installations. And “all such officers of the United States shall faithfully aid in the execution of such quarantines and health laws, according to their respective powers and within their respective precincts, and as they shall be directed, from time to time, by the Secretary of Health and Human Services.”

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### APPENDIX A-1

#### Surveillance, Contact Tracing, & Epidemiology – Summary.

1. Training. Each military treatment facility (MTF) will periodically train its staff in the clinical recognition of smallpox. Post CDC “Generalized Vesicular or Pustular Rash Illness Protocol” Poster [[www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/annex/annex-4-rash-color.pdf](http://www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/annex/annex-4-rash-color.pdf) or .ppt], in MTFs, adding specific telephone numbers to report GFVPRI.
2. Reporting. Promptly report cases of “Generalized Febrile Vesicular-Pustular Rash Illness” (GFVPRI) (cases of fever with blistery or pus-filled blistery rash) as follows:
  - a. Submit report immediately through Service disease-reporting systems, beginning with local preventive-medicine or public-health service.
  - b. Submit Serious Incident Report (SIR) to higher headquarters.
  - c. Notify CDC Emergency Preparedness & Response Branch, 770-488-7100.
  - d. Notify State Health Department (see <http://www.cdc.gov/other.htm#states>).
  - e. Notify other appropriate authorities. If overseas, coordinate with host nation.
3. Source. Initially, the most critical information about cases to report to headquarters may be facts about visits to transportation hubs (e.g., airports) or large congregations (e.g., arenas, malls) in the interval ~ 7 to 17 days before smallpox diagnosis.
4. Coordination. MTF appoints Response Coordinator. MTF follows GVPRI protocol, seeking infectious-disease or dermatology consultation as indicated. Laboratory confirmation is important for a first case in a geographic area. Begin contact tracing.
5. Specimens. MTF coordinates with CDC regarding specimen collection (Annex D). Headquarters support deployment of DoD Smallpox Epidemiologic Response Team(s). Local staff and Epi-Team(s) investigate case(s) to confirm the diagnosis of smallpox.
6. Priorities. Once a suspected, probable, or confirmed case is identified, the highest priorities are to reduce risk of transmission by (a) isolating the cases and (b) promptly identifying and vaccinating close contacts of cases. Transport contacts with fever or rash to Type C facility to rule out smallpox (Annex C, DoD Appendix 7).
7. Contacts. Conduct contact tracing if case suspected or confirmed. Use detailed CDC Forms 1-4 at first. For ongoing outbreaks, use CDC Forms 5A and 5B. Key goals of contact tracing are identification, vaccination, and describing distribution of outbreak. Report medical surveillance data daily to higher headquarters and to CDC (method to be provided by CDC). Contacts remain under active medical surveillance (e.g., telephone acceptable, CDC Forms 10 and 11) for 18 days after last contact with case or 14 days after successful vaccination.
8. Medical Surveillance. Investigation may warrant additional active surveillance, Forms 10 through 13. Compare outbreak’s epidemiologic features with expectations of smallpox and varicella (chickenpox).

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### APPENDIX A-2

Service Reportable-Disease Surveillance Centers.

Army Medical Surveillance Activity  
Building T-20, Room 213 (Attn: MCHB-EDS)  
6825 16th Street, NW  
Washington, DC 20307-5000  
Phone: 202-782-0471 (DSN 662)  
Fax: 202-782-0612  
[http://amsa.army.mil/AMSA/amsa\\_home.htm](http://amsa.army.mil/AMSA/amsa_home.htm)

Navy Environmental Health Center (for both US Navy and US Marine Corps)  
620 John Paul Jones Road  
Portsmouth, VA 23708  
Phone: 757-953-0763 (DSN 377), after hours 757-621-1967  
Fax: 757-953-0680  
<http://www-nehc.med.navy.mil/>

Air Force Force Health Protection and Surveillance Branch  
Institute for Environment, Safety and Occupational Health (ESOH) Risk Analysis  
2513 Kennedy Circle  
Brooks AFB, TX 78235-5123  
Phone: 210-536-5454 (DSN 240)  
Fax: 210-536-6841  
<http://iera.satx.disa.mil/iera/index.html>

Coast Guard Headquarters Directorate of Health and Safety  
Commandant (G-WKH)  
2100 Second Street SW  
Washington, DC 20593  
Phone: 202-267-1098  
Fax: 202-267-4338



## DoD Smallpox Response Plan

### APPENDIX A-3

Impromptu Training Curriculum for Contact Tracers And Interviewers.

*SITUATION: Smallpox cases have been diagnosed in our community. When you finish this training, you will be helping find possible contacts, people who might have been exposed to smallpox. Before you begin interviews, you will receive smallpox vaccine for your own protection.*

1. Goal. Your job is to help find the people who had face-to-face contact with smallpox cases and their contacts. Once you find them, you will help them get vaccinated to avoid contracting smallpox themselves. By finding them, you help slow and stop the spread of smallpox in the community. As you work with these individuals, listen well and use words and phrases that get your message across clearly. You will be assigned one or more of the following jobs:

a. Identification and tracing (asking about and finding) the contacts of people infected with smallpox, as well as the people who are contacts of those contacts.

b. Interviewing these people about their travels, their symptoms, and their own contacts.

c. Arranging for vaccination of these people. And

d. Helping with fever surveillance of these contacts, in case they go on to develop symptoms of smallpox themselves.

2. You will notice how often the word "contact" is used in the sections above. The definition of contact is "face-to-face contact with a suspected, probable, or confirmed case of smallpox. Risk of disease transmission increases with close contact ( $\leq 6$  feet), increasing time of exposure (e.g.,  $>1$  hour), and presence of rash or cough."

3. The Centers for Disease Control & Prevention (CDC) developed a set of forms to help perform this work. The purpose and master copies of each form appear in Appendix A-14, including several with DoD overlays. Master copies are also available at <http://www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/index.asp>.

4. Interview Case to Identify Contacts.

a. Using CDC Forms 2, 2A, 2B, 2C and 2D (the contact-identification module), interview each suspected, probable, or confirmed smallpox case. The forms collect detailed name and contact information for all people with whom case had face-to-face contact (within 6 feet) from onset of fever until the time of the interview. Enter how long the cases were exposed to non-household contacts, if that information is known. List the names of household and non-household contacts on the appropriate forms.

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b. Obtain as much locating information as possible (e.g., names, addresses, telephone numbers) for each person with whom the case had known face-to-face contact after onset of fever. Ask the cases what they did and who they saw each day; beginning with the day their fever began. Include specific questions in the interview to help the case remember various types of contacts (e.g., work-related activities, social activities). For example, “Who did you have lunch with that day?”

c. Ask for detailed information about places visited since the fever began. This will help identify places where unknown people may have been exposed to an infectious case. These include physician offices, hospital emergency departments, health clinics, work and school locations, regular activities, and occasional activities.

d. This module also requests in-town and out-of-town travel history since onset of fever.

e. If time or personnel constraints permit, or if the case is unable to answer questions because of illness, interview the case’s family, close friends, and work associates to verify the case’s travel and contact history since onset of fever.

f. If only contacts in one state are involved, give all the information obtained to the people responsible for tracing, interviewing, and medical surveillance of contacts within the state. Provide the names of the contact and household members of contacts to personnel or clinics responsible for completing contact information (e.g., name, address, phone number) and for vaccinating contacts.

g. If the case names out-of-state contacts or places of travel, arrange for the information to be given to the CDC Coordination Group.

h. After listing all contacts, group the contacts into priority categories for vaccination, based on duration of exposure. Use the following guidelines:

(1) Highest priority. Household contacts, immediate family members, and people who work full time in the household.

(2) Second priority. Named contacts who spent time in the case’s home, but who do not live there (e.g., close friends who visited, any person who spent the night).

Named non-household contacts with > 3 hours of exposure.

People exposed in a physician office or other medical facility.

(3) Third priority. Named non-household contacts with 1-3 hours of exposure.

(4) Fourth priority. Named non-household contacts with < 1 hour of exposure.

(5) Fifth priority. Non-household contacts with < 1 hour of exposure at a designated location.

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i. Other factors for contact tracers to consider when assigning contacts to priority groups include case's status (e.g., fever, rash, presence of cough, closeness of exposure). For example, did the contact sit next to a potentially infectious case for 2 hours at a meeting versus sitting across the room for the same meeting?

### 5. Tracing and Interviewing Contacts.

a. Staff assigned to trace contacts will receive names and any known address, telephone number(s), or other locating information for these contacts from people who interview the cases.

b. Contact-tracing personnel should:

(1) Find locating or contact information for each contact of each smallpox case. If contact information is incomplete or unknown, use work and school contact numbers, telephone directories, voting lists, neighborhood interviews, site visits, "hangouts," and similar methods. If contacts cannot be found through these mechanisms, other means of notifying potential contacts, such as media announcements, may be appropriate.

(2) Locate each contact.

(3) Interview each contact to confirm contact with the suspected, probable, or confirmed smallpox case, the presence or absence of symptoms in the contact (e.g., fever and/or rash) and to identify additional contacts who may not have been listed by the case. Record this information on CDC Form 8.

(4) Make arrangements for immediate vaccination of the contact and his or her household contacts. If this is not performed at the household by the contact tracer, provide a form that documents names and identifying information of all people in the household referred for vaccination on CDC Form 9.

(5) If the contact has symptoms of fever > 101°F (38.3°C) or rash, immediately transport the contact to a Type C facility or other designated site for medical evaluation to rule out smallpox (Annex C). Interview the person as a suspected case using the Smallpox Case Investigation Form (CDC Forms 1A and 1B). Identify, interview, and vaccinate his or her contacts while the evaluation for smallpox is being undertaken.

(6) If the contact does not have fever or rash, place the contact under fever surveillance, so that if he or she develops fever or rash, the contact can be immediately isolated to prevent exposure to other people.

(7) Identify household contacts (including regular household visitors and people who work in the home) of the contact of the smallpox case. Record their names, ages, relationship to the case, and other information on CDC Form 8 or 10 (page 2, Secondary Contact Information).

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(8) If household members cannot be vaccinated due to valid contraindications, they should be housed separately from the contact, until the end of the contact's isolation period, or until all vaccination scabs of people in the household separate (14 to 21 days after vaccination).

(9) Notify the person responsible for reporting out-of-state contacts to the CDC Coordination Group, if a contact has left the state.

### 3. Monitoring for Fever and Vaccine Take of Contacts.

a. Contacts who do not have fever or rash at the time of interview must remain under active fever surveillance for 18 days after their last contact with the smallpox case, or for 14 days after successful vaccination. The contact-tracer and the contact will agree on a method for daily communication. Creative solutions may be needed if the contact does not have access to a home telephone.

b. Contacts must monitor and record their temperature in the morning and early evening each day (using CDC Form 10). Each day before 8 p.m., the contact must call or be called by health staff to report daily temperatures, health status, and any unexpected adverse reaction after vaccination.

c. During medical surveillance, the contacts may continue their usual daily activities, going to work or attending school, as long as no temperatures  $> 101^{\circ}\text{F}$  ( $38.3^{\circ}\text{C}$ ) occur. The contacts should not, however, travel away from their city of residence (not more than  $\sim 20$  miles from city of residence).

d. If contacts develop a temperature  $> 101^{\circ}\text{F}$  ( $38.3^{\circ}\text{C}$ ), they must remain in their own homes. If they have two temperature readings in a row  $> 101^{\circ}\text{F}$ , the contacts must contact health-department personnel immediately, and remain at home. The contacts should have contact only with their vaccinated household members, until further evaluated by health-department personnel.

e. Seven days after vaccination, depending on local arrangements and staff availability, contacts must either visit the health department or report the status of their vaccine site, and the status of the vaccination sites of their household members. The question for vaccinated people is this: Does the area of their arm where they were vaccinated look like the picture they were given when they were vaccinated? In other words, does the site involve a pus-filled blister or an area of hardened swelling (i.e., induration or congestion) around a central lesion? For telephone conversations, it will generally be better to ask the contact to describe the vaccination site, rather than asking a yes/no question, such as "Does the site look like the picture?" More useful questions might include: "Does the site have any blister or pus-filled white area?" "Don't touch it, but tell me if it looks soft and squishy." Successful smallpox vaccination results in a pustular lesion in previously unvaccinated people 6 to 8 days after vaccination (Appendix B-13). In previously vaccinated people, either a pustular lesion or an area of

## DoD Smallpox Response Plan

definite induration or congestion around a central lesion develops by 6 to 8 days after vaccination.

f. Using CDC Form 10, personnel assigned to monitor the health status of contacts will:

(1) Record daily temperature readings and health status,

(2) Record information on vaccine take and severe adverse reactions after vaccination among contacts and their household members,

(3) Refer for in-home follow-up any contacts who fail to report in and cannot be contacted by telephone, and

(4) Answer questions of contacts who are under fever surveillance.

(5) If resources permit, visit the household on day 6 to 8 after vaccination to record vaccine "take."

g. Maintain CDC Form 10 for each contact. Record information on the date and type of follow up (i.e., in person or by telephone), recorded temperature, other symptoms of illness, and vaccination-site reaction on day 6 to 8.

h. Obtain information on the vaccine take of other people in the household and record it on CDC Form 10 or 11.

i. In addition, use CDC Form 11 as a daily tracking form to record summary information from all contacts monitored.

j. If personnel are limited, state and Federal health authorities may institute a passive system of monitoring health status [may use CDC Form 12, in development]. In this approach, contacts only call health department personnel if any of the following occur:

(1) They have 2 consecutive temperatures  $> 101^{\circ}$  F ( $38.3^{\circ}$ C) or develop a rash.

(2) They have no reaction at the vaccine site on day 6 to 8.

(3) They developed a serious adverse reaction to vaccination.

(4) They completed the period of monitoring (i.e., 18 days from last contact with the case or 14 days after successful vaccination) and request to be officially released from monitoring.

k. For coordination of contact tracing with vaccination, personnel should:

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(1) Using CDC Form 8 or 9, make a list of names and Social Security numbers (or driving license numbers) of contact and household members referred for vaccination. Provide this list to the vaccination clinic site where the contacts/household members will be sent.

(2) Provide a daily Master Report (CDC Form 13, in development) to the person responsible for coordinating contact tracing that includes:

- Contacts found
- Contacts not found
- Disposition of found contacts
- Interviewed and vaccinated/referred for vaccination
- Interviewed and referred for illness evaluation
- Isolated if fever or rash develops
- Status of contacts not found
- Whereabouts known but unable to contact for interview
- Whereabouts unknown
- Number of contacts' household members
- Number of contacts' household members vaccinated/referred for vaccination

I. Refer to Appendix C-10 for flow charts for recommended contact identification and tracing activities.

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### APPENDIX A-4

#### Characteristics of Smallpox Epidemiologic Response Teams (“Smallpox Epi-Teams”).

1. Purpose. To describe the composition, capabilities, activation, and activities of Smallpox Epidemiologic Response Teams (Smallpox Epi-Teams) that would respond to any report of possible exposure or occurrence of cases of smallpox.

2. Background. Smallpox is unique as a bioterrorist weapon in its high case-fatality rate and ability to spread from person-to-person in an open society such as the United States. Routine vaccination of US military recruits against smallpox was intermittent after 1984 and discontinued in 1990. Routine vaccination of US civilians ceased in about 1972. Thus, susceptibility to smallpox is universal among children and young adults, and widespread among older adults (Appendix 7).

3. Assumptions.

a. Smallpox virus may be used in a terrorist attack against US civilian or military targets anywhere in the world. Such attacks may occur silently, with case appearance as the first evidence of such an attack. Other attacks may be associated with detectable events, in which case a suspicious substance and potentially exposed personnel would be the immediate issues of concern.

b. DoD will be expected to respond with its own resources to any such incidents that occur on its own installations in the United States or on other bases around the world. Some assistance may be possible from civilian authorities when an attack involves a community near a military installation. Civilian resources may be overwhelmed and civilian authorities will likely be unable to fully support activities on military installations.

c. In the event of an attack in the US that does not directly involve military installations, civilian resources may be overwhelmed and civilian authorities could call upon DoD resources to assist in providing response support.

d. In the event of an outbreak, early compilation of accurate information to confirm and define the scope of the problem will be a critical element in any response effort.

e. Early recognition and definition of a possible smallpox attack may be the deciding factor in how quickly the spread of disease can be contained.

4. Possible Scenarios.

a. There are several types of events that may occur:

(1) Reports of one or more clinical cases suspected to be smallpox.

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(2) An incident occurs in which one or more people are exposed to a substance suspected to be smallpox.

b. There are several types of civilian-military interaction that may occur:

(1) Within the borders of the United States, an attack occurs that initially appears to involve only personnel and locations entirely on a military installation.

(2) Within the borders of the United States, an attack occurs that initially appears to involve only civilian personnel and locations outside of military installations.

(3) Within the borders of the United States, an attack occurs that initially appears to involve both civilian and military personnel or to involve locations both within and outside of military installations.

(4) Outside of the borders of the United States, an attack occurs that appears to involve military personnel or military installations.

(5) Outside of the borders of the United States, an attack occurs that appears to involve only US civilian personnel and locations outside of military installations (e.g., Embassies and their staffs).

5. Concept.

a. Depending on the nature of the attack, a DoD Smallpox Epi-Team may be assigned under the operational control of a Unified Command, a medical command authority of one of the US Armed Services (e.g., a regional medical command, Military Treatment Facility), or an installation commander. Alternatively, after a request from civilian authorities, the team could be assigned under the operational control of FEMA, CDC, state health officer, or other designated authority.

b. Number of Smallpox Epi-Teams. DoD will establish at least six teams, two from each Service, to provide the necessary global response capability to DoD. One or two will be located in the Pacific region, at least two in the United States, and one or two in Europe.

c. Smallpox Epi-Team Composition. Epidemiologic response teams will be trained with materials developed by the DoD and the CDC. Each full team will consist of approximately 6 to 12 members. DoD may field smaller teams with sufficient capability where local support can be expected from host organizations or installations. Sufficient members will be identified to allow team function despite members taking personal leave. Team members will typically serve terms of 24 or more months. Teams will arrange for replacement of a portion of the team on an annual cycle, according to personnel turnover. The core members of the teams will typically include the following:



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(1) Team leader (1 per team). A senior officer in the medical branch responsible for all activities of the team. This individual will serve as the lead coordinator with military and civilian authorities and oversee communication between the team and command-and-control elements.

(2) Operations officer or public-health advisor (1 to 2 per team). Medical Service Corps, Medical Corps, or other medical-branch officer with training in public health (e.g., community health nurses) who assists the team leader with communications, logistics, inter-agency coordination, mission tracking, reporting to high headquarters, vaccination activities, contact tracing, training, and related functions. Also serves as primary adviser for operations and disease-response activities, including recommendations for quarantine, isolation, and hospital infection control.

(3) Epidemiologist (1 per team). Medical corps officer or other medical branch officer with advanced degree in epidemiology who serves as technical consultant and primary leader of investigation activities, medical surveillance, data collection, analysis, and definition of the scope of disease occurrence.

(4) Infectious-disease physician and/or dermatologist (1 to 2 per team). Serves as primary consultant in diagnosing and monitoring possible cases of disease. Also assists with diagnosis of adverse events after vaccination and monitors and analyzes vaccine safety data. Serves as the primary consultant on matters of infection control in medical facilities. An Infection Control Officer could fulfill some roles in this category.

(5) Laboratory scientist (1 per team). Medical service corps officer with laboratory expertise who advises team leader on specimen collection, handling, shipping, and related procedures. Serves as liaison with military and civilian laboratories to support the investigation and disease-control plan.

(6) Preventive-medicine, public-health, or environmental-health technician (1 to 2 per team). Provides logistical and administrative support to team, to meet requirements for equipment, supplies, transportation, meals, and quarters. As time allows, augments the activities of other team members, to assist in accomplishing critical tasks.

(7) Communication specialist (0 to 1 per team). Public affairs or medical branch officer or senior noncommissioned officer with excellent writing and speaking skills and experience in media relations and risk communication. Serves as the communication link between the team and local health departments, press offices, and other outside agencies requesting information on team activities. In the absence of a specific member assigned to the team, the team will request local support from the host command.

(8) Occupational-medicine specialist (0 to 1 per team). An occupational-medicine physician who provides consultation and recommendations relating to protecting health-care workers, health department staff, emergency responders, and others with occupational risk in the outbreak.

## DoD Smallpox Response Plan

(9) Community health nurse (0 to 1 per team). Community health nurse who provides expertise in performing case investigations, contact tracing, teaching, and home visits.

(10) Immunization technician (1 or more per team). A medic trained in screening for contraindications, vaccination, and management and reporting of adverse events after vaccination.

d. Smallpox Epi-Team Capabilities. Epi-Teams will be on-call to travel within 6 to 12 hours upon activation. The team will provide initial problem definition and assessment capabilities to senior authorities. After an initial in-brief with the host command authority, the team will complete an initial assessment within 24 hours and provide updates on assessment activities at least daily thereafter. The Smallpox Epi-Team will serve in the capacity of a field investigative team and will have at least the following capabilities:

(1) Confirm or refute the existence and number of smallpox cases.

(2) Confirm or refute the presence of a substance that may contain smallpox virus (subject to more definitive testing facilities elsewhere in the Laboratory Response Network).

(3) Upon confirmation of cases or an exposure, estimate the immediate threat of disease spread in the affected population.

(4) Serve as advisors to local authorities on immediate response activities, to include vaccination, quarantine, medical care, and safety precautions.

(5) Rapidly identify additional resources required to support response to an outbreak and coordinate an appropriate civilian or DoD response package.

(6) Administer smallpox vaccine.

### 6. Required Training and Preparation.

a. All team members will be vaccinated against smallpox.

b. All team members will attend smallpox training provided by the CDC and/or DoD. Examples include the DoD Emergency Preparedness Course, Health-Risk Communication Course, Combined Humanitarian Assistance Response Training.

c. All team members will be knowledgeable experts on the CDC Smallpox Response Plan and Guidelines, as well as this DoD Smallpox Response Plan.

d. Teams will complete 1-day planning and practice sessions at least quarterly.

### 7. DoD Implementation.

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a. Team development and support will be coordinated by the US Army Medical Department, as lead agent for the DoD Immunization Program for Biological Warfare Defense. Nonetheless, individual team composition and the various teams will be constituted and supported by each of the military Services. The Services and the Joint Staff will develop agreements to ensure that Unified Combatant Commands and other command authorities develop plans to support this response capability.

b. Prior planning and coordination with Unified Commands is critical to ensure that senior commanders know of and are prepared to request the Smallpox Epi-Team capability as needed. Also, hosting commands will provide the logistical, transportation, and other support requirements the team will need.

c. Initial team training and preparation will focus on the smallpox threat. However, as team capabilities mature, the team will develop expertise in responding to other bioterrorist events or to epidemics of contagious disease that result from natural, as well as deliberate, causes.

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### APPENDIX A-5

State Health Laws Observed by US Officers (42 USC 97).

42 US Code Section 97.

“The quarantines and other restraints established by the health laws of any State, respecting any vessels arriving in, or bound to, any port or district thereof, shall be duly observed by the officers of the customs revenue of the United States, by the masters and crews of the several Coast Guard vessels, and by the military officers commanding in any fort or station upon the seacoast; and all such officers of the United States shall faithfully aid in the execution of such quarantines and health laws, according to their respective powers and within their respective precincts, and as they shall be directed, from time to time, by the Secretary of Health and Human Services.”

# DoD Smallpox Response Plan

## APPENDIX A-6

### Handout to Identify Symptoms of Smallpox.

**Signs of Smallpox:** a sudden fever of 101°F (38.3°C) or higher followed 1 to 4 days by a rash of blisters or firm pus-filled blisters. Unlike chickenpox, all the bumps of the rash should be at about the same stage as it develops. Fever may drop once rash begins.

**High Risk for Smallpox:** If you have **ALL THREE** of these symptoms, come in for medical evaluation right away.

- Check:   Sudden fever above 101°F (38.3°C), blistery rash 1 to 4 days later **AND** at least one of the following: exhaustion, headache, backache, chills, vomiting, or severe abdominal pain.
- All 3 boxes checked = High Risk  Blisters or pus-filled blisters with clear borders. Blisters that are firm/hard, round, and deep. Blisters may contain a sunken center or join together.
- Blisters at the same stage on all areas: all blisters, or all pus-filled blisters.
- 

**Moderate Risk of Smallpox:** If you check **BOTH** boxes in group A or if you check **BOTH** big boxes in group B, come in for medical evaluation.

#### GROUP A

Both boxes checked = Moderate Risk

Check:

#### GROUP B

First Box + 4 other symptoms checked = Moderate Risk

- Sudden fever above 101°F (38.3°C), rash 1 to 4 days later **AND** at least one of the following: exhaustion, headache, backache, chills, vomiting, or severe abdominal pain.
- Blisters or pus-filled blisters with clear borders. Blisters that are firm/hard, round, and deep. Blisters may contain a sunken center or join together.
- 
- Sudden fever above 101°F (38.3°C), rash 1 to 4 days later **AND** at least one of the following: exhaustion, headache, backache, chills, vomiting, or severe abdominal pain.
- Four or more of the following symptoms:
- Blisters appearing thickest on the face, arms, legs, and head.
  - First blisters appear on roof of mouth, inside nose, face, or forearms.
  - Blisters changed from spots to bumps to pus-filled blisters.
  - Blisters appearing on palms and soles of feet.
  - Patient appears really sick.
- 

**Low Risk for Smallpox:** If you don't have the symptom combinations listed above, you probably don't have smallpox. If you get a fever above 101°F, follow the directions above. If you have other symptoms, seek routine or appropriate medical care.

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### APPENDIX A-7

#### Smallpox Clinical Case Description and Differential Diagnosis.

1. Smallpox is characterized by both an enanthem (internal rash) with lesions in the mouth and on the posterior pharynx, as well as an exanthem (external rash). Constitutional symptoms before onset of rash (exanthem) include fever (100%), which generally occurs about 1 to 3 days before rash onset, headache (90%), backache (90%), chills (60%), and vomiting (50%). Less common symptoms include pharyngitis and severe abdominal pain. The hallmark of the ordinary (or classic) type of smallpox is a generalized vesiculopustular rash with lesions found more densely on the face and extremities (centrifugal pattern), including the palms and soles of the feet. All lesions on any one part of the body are at a similar stage of development and are about the same size. Rash progresses from sparse macules (day 1), to papules (day 2), vesicles (days 3 to 4), pustules (days 5 to ~ 12), and scabs (days 13 to 18) for a total duration of 2 to 3 weeks.

2. Less common presentations of the smallpox rash include flat, or hemorrhagic lesions. A rash that progresses through the stages more rapidly and has fewer lesions characterizes modified smallpox, which occurs more commonly among previously vaccinated people. Infection via cutaneous inoculation also has a shorter course with appearance of one or several vesicles at the site of inoculation after about 3 days. Asymptomatic cases are very uncommon and their role in transmission is unclear, but likely to be minimal.

3. Because routine childhood vaccination in the United States stopped in 1971, people currently < 30 years old are susceptible to smallpox. If exposed, they are expected to exhibit classic or atypical presentations. People > 30 years old may have been vaccinated during childhood or as adolescents or adults for travel or occupational reasons. Vaccination of health-care workers and people traveling overseas continued until the late 1970s and U.S. military personnel were vaccinated until 1990. Epidemiological studies showed that a high level of protection against smallpox persists for  $\leq 5$  years after primary vaccination and substantial but waning immunity can persist for  $\geq 10$  years. Antibody levels after revaccination can remain high longer, conferring a greater period of immunity than occurs after primary vaccination alone. Although some assume that adults > 30 years old in the United States have little or no immunity to smallpox, there is evidence that vaccination during infancy results in long-term reduction in mortality. Therefore, it is possible that if smallpox virus were introduced into the U.S. population, some vaccinated adults -- especially those who received two or more doses of smallpox vaccine -- may develop modified smallpox following exposure and that mortality would be markedly lower than among unvaccinated people.

4. The most likely condition to consider in the differential diagnosis of vesiculopustular rash is varicella (chickenpox). Major and minor distinguishing characteristics are listed in the following table:

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	<b>Smallpox: Clinical Features</b>	<b>Varicella (Chickenpox): Clinical Features</b>
<b>Major Distinguishing Features</b>	Febrile prodrome: temperature > 101°F and systemic symptoms (e.g., prostration, severe headache, backache, abdominal pain, vomiting) 1 to 4 days <i>before</i> rash onset.	No or mild prodrome before rash onset.
	Lesions are deep, firm, well-circumscribed pustules; may be confluent or umbilicated.	Lesions are typically superficial vesicles.
<b>Other Distinguishing Features</b>	Rash concentrated on face and distal extremities (centrifugal pattern).	Rash concentrated on trunk and proximal extremities (may involve face or scalp) (centripedal pattern).
	Rash in same stage of evolution on any one part of the body	Rash appears in crops so lesions are in different stages of evolution (i.e., mixed papules, vesicles, or crusts) on any one part of the body.
	First lesions on oral mucosa/palate (enanthem), followed by exanthem (rash) on face or forearm.	First lesions on trunk (occasionally face).
	Lesions on palms and soles of the feet (seen in > 50%).	Lesions very uncommon on palms and soles.
	Lesions may itch at scabbing stage.	Lesions generally itch intensely.
	Lesions slowly evolve from papule to pustule in days.	Lesions generally evolve from macules to papules to vesicles to crusts in < 24 hours.
	Illness lasts 14 to 21 days.	Illness lasts 4 to 7 days.

5. In herpes zoster, lesions are usually localized to 1 or 2 dermatomes (i.e., an area of the surface of the body attached to the same spinal nerve), but can become generalized, especially among immune-compromised people. The lesions in localized herpes zoster are painful and could be differentiated from smallpox based on their appearance.

6. Other diagnoses include drug eruptions, erythema multiforme, impetigo, disseminated herpes simplex, and enteroviral infections associated with a vesicular rash.

## DoD Smallpox Response Plan

### APPENDIX A-8

#### Smallpox Case Definitions and Case Classification.

*Note: Preliminary CDC case definitions appear below, but may require revision by public-health personnel conducting the epidemiological investigation, depending upon the specifics of the epidemic.*

1. Clinical Case Definition of Smallpox. An illness with acute onset of fever > 101°F, followed by a rash characterized by vesicles or firm pustules in the same stage of development without other apparent cause.

2. Laboratory Criteria for Confirmation. To be conducted in Laboratory Response Network (LRN) Level C or D laboratories only. LRN Level D laboratories include CDC and USAMRIID. Initial confirmation of a smallpox outbreak requires testing in a Level D laboratory. Level C laboratories will assist with testing of clinical specimens after initial confirmation of an outbreak by CDC.

a. Isolation of smallpox (variola) virus from a clinical specimen (Level D laboratory only), or

b. Polymerase chain reaction (PCR) identification of variola DNA in a clinical specimen, or

c. Negative-stain electron microscopy (EM) identification of variola virus in a clinical specimen (Level D laboratory or approved Level C laboratory).

3. Case Classification.

a. Confirmed. A case of smallpox that is laboratory confirmed.

b. Probable. A case that meets the clinical case definition that is not laboratory confirmed, but has an epidemiological link to another confirmed or probable case.

c. Suspected.

(1) A case that meets the clinical case definition, but is not laboratory confirmed and does not have an epidemiological link to a confirmed or probable case of smallpox, or

(2) A case that has an atypical presentation that is not laboratory confirmed, but has an epidemiological link to a confirmed or probable case of smallpox. Atypical presentations of smallpox include (a) hemorrhagic lesions or (b) flat, velvety lesions not appearing as typical vesicles nor progressing to pustules.



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4. Definition of Contact. A person who has had contact with a suspected, probable, or confirmed case of smallpox. A contact's risk of contracting smallpox increases with close contact (6 feet or less), increasing length of exposure to a case and the stage and severity of clinical case (increasing with onset of rash and/or cough.) Thus, close contact is defined as any face-to-face contact ( $\leq 6$  feet, able to reach out and touch) with a smallpox case and duration of contact should be quantified, if possible.

5. The importance of case confirmation using laboratory diagnostic tests differs depending on the epidemiological situation. Laboratory confirmation is important for a first case in a geographic area, leading to release of vaccine as part of a response. In a setting where multiple cases are identified, laboratory capacity may soon be overwhelmed. In such instances, priority for laboratory resources will include:

a. Testing of clinical or environmental specimens that will provide information about a potential source of exposure, facilitating law-enforcement activities and case detection.  
And

b. Testing of clinical specimens from cases with an unclear presentation but who are suspected as cases following expert consultation.

## DoD Smallpox Response Plan

### APPENDIX A-9

#### Expected Epidemiological Features of Smallpox.

1. Incubation period: typically 12 to 14 days (range: 7 to 17 days).
2. Person-to-person spread by droplet transmission (most common), contact with material from pustules/rash lesions or contaminated clothing or bedding (less common), or small-particle aerosol (least common).
3. Although smallpox cases are generally not infectious to others until the onset of rash (about 7 to 17 days after exposure), because exact date of rash onset may not be noted accurately and because the infectious enanthem may precede rash onset by 1 to 2 days, consider cases potentially infectious from date of onset of fever.
4. Period of highest transmission is during the first 7 to 10 days after onset of rash. But a person is considered infectious until all scabs have separated. Risk of contracting disease increases with length and environment of contact.
5. People at greatest risk for disease are household and face-to-face contacts to cases after the onset of rash.
6. During the smallpox era, the seasonal transmission of disease was highest during winter and early spring.
7. Currently, the age distribution of cases would be expected to mimic the age distribution of the population, due to the lack of immunity among many people in the community.
8. An expected case-fatality rate of up to 30%. This proportion may be greater due to (a) lack of natural immunity, (b) a high percentage of non-vaccinated people in the U.S. population, (c) waning immunity against smallpox in previously vaccinated people, and (d) a larger immune-compromised population compared to the smallpox era. The case-fatality rate may be lower due to (a) better intensive care and medical treatment options than 30 years ago and (b) partial immunity among the adult population.
9. Smallpox does not spread like wildfire. A smallpox outbreak would evolve over the course of months. Given the typical 12- to 14-day incubation period between exposure and symptoms, generations of smallpox cases will arise at intervals of roughly 2 to 3 weeks. On average, each person infected with smallpox will infect 3 to 5 other people. In hospital settings, where more serious cases of disease are taken and where workers have closer contact with cases, the average smallpox case will infect 10 to 12 people.
10. The likelihood of a susceptible household contact of a smallpox case contracting smallpox is about 58% (range: 38% to 88% in 8 studies).

## DoD Smallpox Response Plan

11. Epidemiological features of **varicella** (chickenpox) that are similar to smallpox:

a. Incubation period: typically 12 to 14 days (range 7 to 17 days).

b. Person-to-person spread of varicella occurs by (a) direct contact, droplet or aerosol from vesicular fluid of skin lesions or (b) secretions from the respiratory tract.

c. Varicella cases may be infectious several days before rash onset until lesions scab, but the period of highest transmission is the first 2 to 3 days after rash onset. Scabbed varicella lesions are not infectious. Although these transmission features are different from smallpox, they will probably not be helpful in distinguishing between the two diseases.

d. The seasonal transmission of varicella is highest during winter and early spring though in the United States, in areas where varicella vaccine coverage is high, the spring seasonality is becoming attenuated.

12. Epidemiological features of **varicella** (chickenpox) useful in distinguishing it from smallpox:

a. Most varicella cases occur in children. Only 5% of adults 20 to 29 years of age are susceptible and only 1% of adults 30 to 39 years are susceptible. Thus, varicella in adults is uncommon. However, adults from tropical climates are more likely to be susceptible than their U.S. counterparts. Although varicella cases have declined dramatically in areas with moderate to high vaccine coverage in the United States, varicella cases have declined in all age groups and about 90% of cases still occur among children < 15 years old.

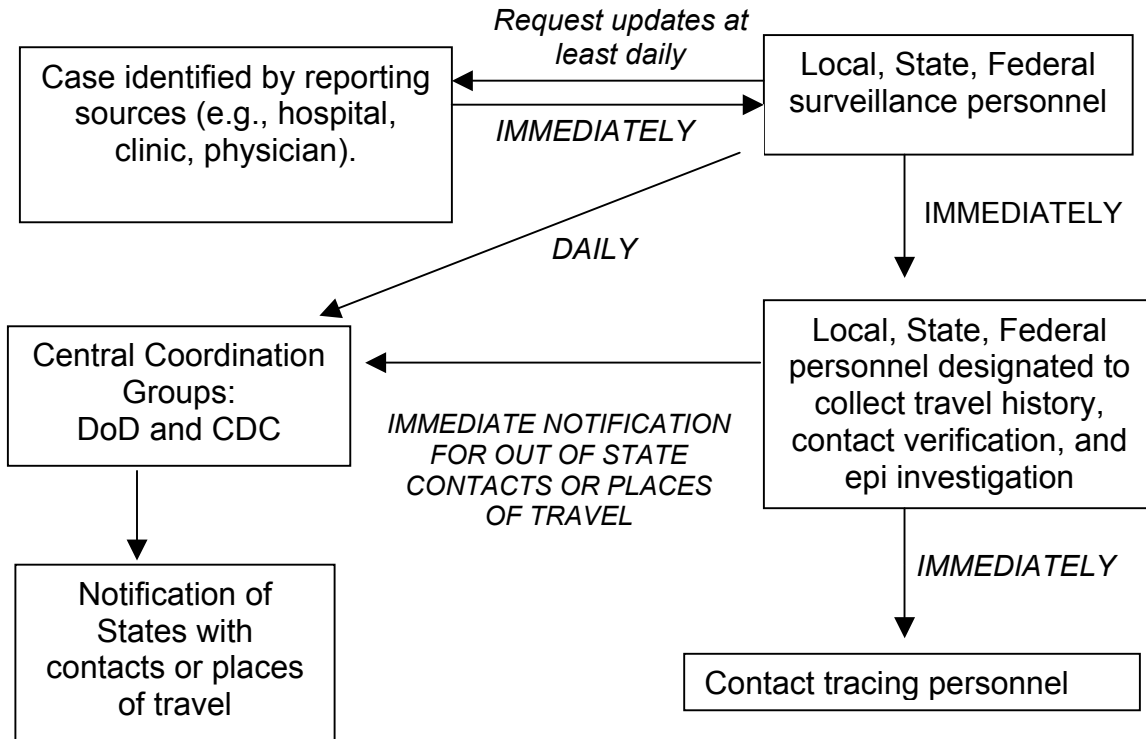
b. Varicella has an expected case-fatality rate of 2 to 3 deaths per 100,000 cases, much lower than smallpox.

c. A secondary attack rate among susceptible household contacts of about 80% (range 65% to 90%), higher than smallpox.

## DoD Smallpox Response Plan

### APPENDIX A-10

#### Surveillance Reporting and Information Flow.



1. MTF personnel will use the CDC GVPRI protocol to evaluate unusual clinical cases, synchronizing medical and infection-control expertise with the command group.
2. After ruling out more plausible explanations, submit GFVPRI report immediately through established Service disease-reporting systems (Appendix A-2), regardless of time of day. These reporting systems typically begin with the local preventive-medicine or public-health service.
3. Also submit Serious Incident Report (SIR) to higher military headquarters (i.e., operational forces command communications channels), regardless of time of day. Operational forces command communications will be the primary/only means of reporting in certain situations (e.g., deployed forces).
4. Also notify CDC Emergency Preparedness & Response Branch, 770-488-7100, if within the United States, its possessions, or its territories.
5. Also notify State Health Department (see <http://www.cdc.gov/other.htm#states>).
6. Also notify other appropriate authorities (e.g., local health department; host nation public-health authorities), as applicable.

## DoD Smallpox Response Plan

### APPENDIX A-11

#### Enhanced Hospital-Based Surveillance.

1. Once a case of smallpox has been confirmed in a community, patients with febrile rash illnesses will be directed to seek evaluation and care at a small number of facilities (e.g., clinics, hospitals) where physicians and health professionals familiar with smallpox and similar rash illnesses will see, diagnose, and triage patients. Precautions to prevent spread of possible smallpox will be implemented. In addition, other area hospitals will be asked to initiate active medical surveillance for cases to identify patients admitted with compatible illnesses. Installations should identify these facilities in advance and make plans for the evaluation of sizeable numbers of patients with rash illnesses.

#### 2. Active Surveillance in Hospitals.

a. Each hospital in the active medical surveillance network will identify one person (i.e., hospital surveillance officer) responsible for daily active surveillance at that institution (e.g., infection-control practitioner, ICP). Patients will be evaluated and assigned a risk category: high, medium or low. The ICP will notify the health department immediately of any high-risk patient for transfer to the designated type C facility for isolation of smallpox cases (Annex C). All patients identified as medium risk will be reported to the health department and transferred to a type X facility (Annex C). In the event there are no suspected smallpox patients, a report will still be sent to notify the health department that surveillance was conducted and yielded no suspect patients (i.e., “zero reporting”). Smallpox surveillance forms will be completed on all suspect cases. Line lists will be maintained and updated daily, including both new patients and previously reported patients until smallpox is ruled out (CDC Form 6 and CDC Form 7).

b. Prospective Surveillance. Active surveillance for possible cases of smallpox currently hospitalized will be performed prospectively from first report of an index case in the emergency room (and any other unit that could accept patients directly without having ER evaluation), intensive care units, pathology and laboratory departments. Whenever possible, potential cases will be seen by an infectious-disease (ID) consultant, dermatologist, or smallpox consultant to clarify the diagnosis. Surveillance in each department is described below.

c. Retrospective Surveillance. To identify cases that may have been admitted before the outbreak was recognized, but once transmission in the community was theoretically possible, conduct retrospective screening of patients admitted with compatible syndromes from the date determined by local health department personnel. If resources are available, review records for all patients who were seen in the ER and discharged home, admitted, or transferred to another hospital. Review charts of patients with a non-lab-confirmed diagnosis of varicella (chickenpox), or generalized herpes zoster (shingles) or herpes simplex virus (HSV), or those described to have a diffuse vesicular or pustular rash with fever and no lab-confirmed diagnosis, to determine if the illness may have been smallpox. Evaluate patients currently in the hospital. Report those

## DoD Smallpox Response Plan

transferred to another facility, discharged or expired to preventive-medicine or public-health channels, or gaining MTF for follow-up.

### 3. Strategies for Conducting Active Surveillance.

a. Emergency Departments, Intensive Care Units (ICUs), Wards. The ICP will visit or contact each hospital ward or unit to identify any hospitalized patient who could have smallpox.

b. Any patient with diagnosis of varicella (chickenpox), generalized herpes zoster (shingles), or HSV or “rule out (R/O) smallpox” will be evaluated. Any cases not already lab-confirmed will have infectious disease and/or dermatology consultation and rapid laboratory testing for varicella-zoster virus (VZV) (with HSV or other testing, if clinically indicated). Those considered high risk will be reported to the local or state health department as suspected or probable smallpox cases and be referred to the designated type C facility for isolation (Annex C). Moderate-risk patients will be entered on a separate line list (CDC Form 7, page 2) kept by the ICP with status updated at least daily (CDC Form 6). If a non-smallpox diagnosis is made, the patient is no longer on the active moderate-risk list. If the patient’s illness evolves and he or she meets criteria for high risk, the patient is reported as a new high-risk case and reported and transferred accordingly.

c. Pathology Department (for hospitals where autopsies are performed).

(1) Prospective. ICP will contact the chief pathologist daily to identify any previously unreported patients who died with a diagnosis of varicella (chickenpox), disseminated herpes zoster (shingles), or HSV, R/O smallpox, hemorrhagic or petechial or confluent/flat rashes, and any patient with a rash who died within 48 hours of admission. All these cases will have autopsies requested to confirm cause of rash, with a record review by an infectious-disease consultant. Report high-risk cases to preventive-medicine or public-health channels and complete smallpox surveillance form (CDC Form 1A and Form 1B).

(2) Retrospective. Review all deaths that occurred since smallpox transmission began in the community (as determined by local health officials), using the same criteria as above. All these patients will have autopsies requested to confirm cause of rash, with record review by the infectious-disease consultant. The physician of record may be contacted to provide additional information. Report high-risk cases to preventive-medicine or public-health channels. Complete a smallpox surveillance form.

d. Laboratory.

(1) Prospective. Review lab requests and results daily for tests ordered for orthopox viruses, varicella-zoster (excluding serology), herpes simplex (excluding serology), Rocky Mountain spotted fever, rickettsial pox, coxsackie viruses or echoviruses (excluding serology) or blood cultures ordered with diagnosis of possible

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meningococemia. Cross-check patients with newly ordered tests that have negative or pending results against a list of reported smallpox cases and the hospital's daily line list of cases for continued monitoring (CDC Form 6 and CDC Form 7). Record those not on either list on the lab surveillance list and perform chart review, to determine if patients have a clinically compatible illness. The infectious-disease consultant will determine risk category of patients in these groups. Report high-risk patients to preventive-medicine or public-health channels as suspected or probable smallpox cases, then transferred to a type C isolation facility. Follow results on low-risk hospitalized patients daily via line list until a diagnosis is confirmed. Review previously ordered tests with negative results in the same manner.

(2) Retrospective. If resources are available, review lab requests over the previous 7 days for the above tests with negative or pending results. Cross-check them against the list of reported smallpox cases and daily line list for continued monitoring. Record those not on either list on the lab surveillance list and perform chart review and infectious-disease consultation as above.

e. List Updates. ICP will maintain two lists (i.e., high-risk list, moderate-risk list) of cases and continually update lists with new cases.

(1) All high-risk cases are considered suspected or probable smallpox cases and will be reported immediately to the preventive-medicine or public-health surveillance officer, with arrangements made for immediate transfer to the designated type C isolation facility (Annex C). Report people whose illnesses evolve and who move from moderate- to high-risk as suspected or probable smallpox cases. Update patient location, status and lab results daily (CDC Form 6). Deliver the smallpox surveillance forms and updated high-risk list to the preventive-medicine or public-health surveillance officer once daily.

(2) The ICP will maintain daily line list of patients at moderate risk for smallpox but who are still under investigation. Update patient location, status and lab results daily. Deliver this updated list to the preventive-medicine or public-health surveillance officer once daily.

## DoD Smallpox Response Plan

### APPENDIX A-12

#### Classification of Evaluated Patients.

##### 1. High Risk (“Epi-Linked”).

a. Patients epidemiologically linked to a confirmed case of smallpox who have a history of a febrile prodrome (early symptoms with fever) and on examination had a maculopapular (red, bumpy) rash with predominantly face or distal-extremity distribution OR involvement of the palms and/or soles. “Epidemiologically linked” means a known connection in time and space with a source of infection. Or

b. Patients epidemiologically linked to a confirmed case of smallpox who have a viral syndrome with fever > 101°F and systemic symptoms (e.g., prostration, headache, backache, chills, vomiting, abdominal pain) for < 4 days but who do *not* have a generalized rash on examination.

2. High Risk (Not Epi-Linked). Patients with a severe prodromal illness with temperature > 101°F 1 to 4 days before rash onset, and at least one of the following: prostration, headache, backache, chills, vomiting, or abdominal pain, AND either (a) or (b):

a. Generalized rash of acute onset that is either: comprised of deep, round, dermal lesions characteristic of smallpox; maculo-papular rash involving the palms and/or soles OR distributed more densely on the face and distal extremities than the trunk AND no other lab-confirmed diagnosis that would adequately explain the illness. Or

b. Prostration or shock AND either maculo-papular rash, hemorrhagic rash, or rash with flat, velvety lesions that may be confluent AND no other lab-confirmed diagnosis that would adequately explain the illness.

3. Moderate Risk (Not Epi-Linked). Patients with no known contact, or brief or uncertain contact, with a smallpox case with a prodromal illness consisting of temperature >101°F and at least one of the following: prostration, headache, backache, chills, vomiting, or abdominal pain AND a generalized rash of acute onset that is atypical for smallpox (e.g., lesions on oral mucosa only, maculo-papular rash with localized distribution to face, or face and forearms, hemorrhagic/petechial rash) AND no other lab-confirmed diagnosis that would adequately explain the illness.

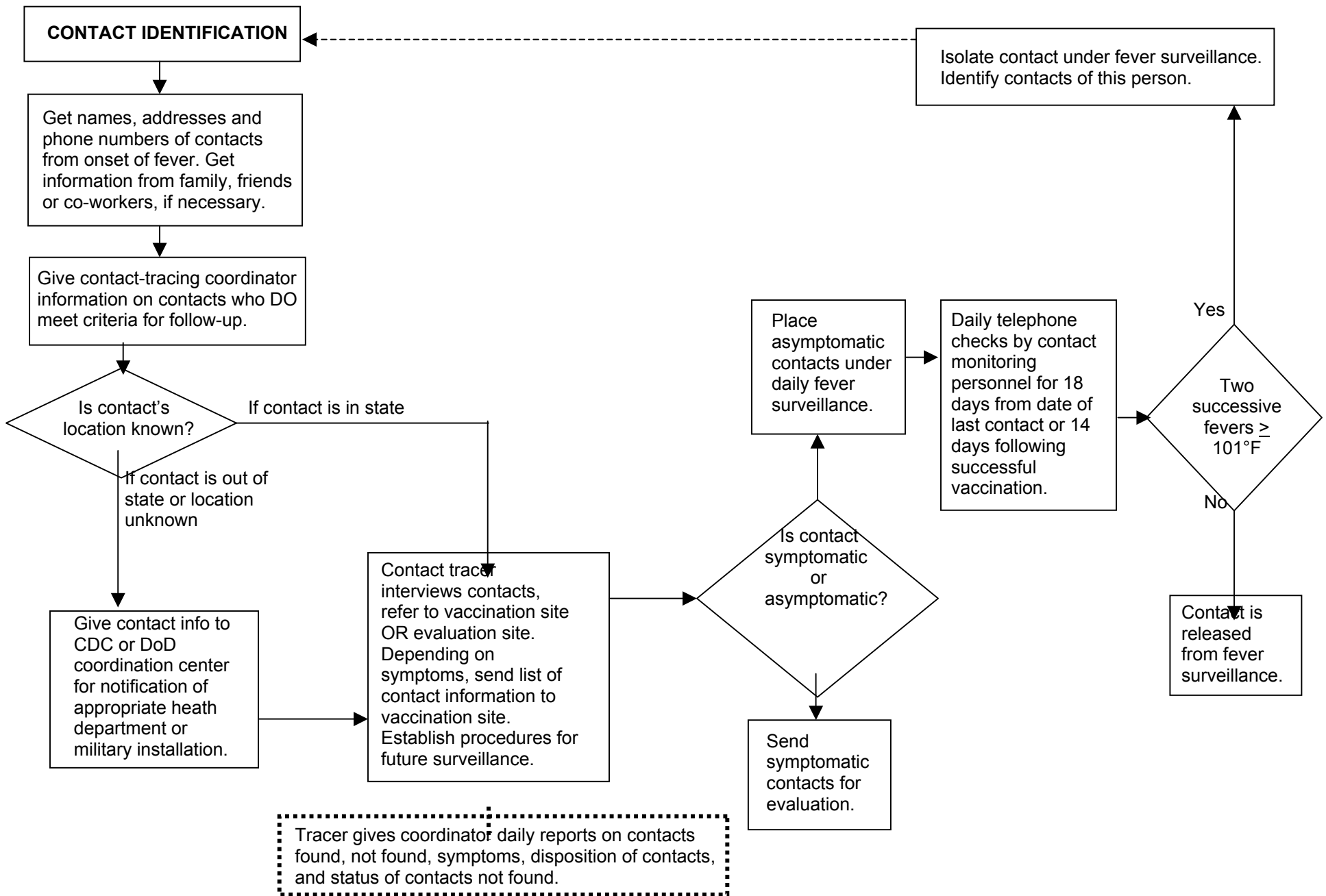
4. Low Risk (Not Epi-Linked). Patients who are not epidemiologically linked to a smallpox case AND

a. Lack a history of a febrile prodrome,

b. Do not have classic smallpox lesions, OR

c. Have a laboratory confirmed non-smallpox diagnosis compatible with their illness.





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### APPENDIX A-14

Forms for Contact Identification, Tracing, and Surveillance.

*Note. This appendix ignores obsolete CDC Forms and refers only to the CDC Form numbers in the numbering scheme of 23 January 2002. The CDC Forms are being extensively revised and will change again. Consult CDC website for current form versions: <http://www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/index.asp>.*

Form	Purpose	Comment
<i>Forms 1-4</i>	<i>Detailed smallpox case investigation</i>	<i>4 modules*</i>
Form 1 module	“Case Investigation Form Module.” Patient, medical history and clinical case information (4 pages total) Form 1A. Intake history of the smallpox case (2 pages). Form 1B. Clinical course of disease (2 pages)	
Form 2 module	“Contact Identification Module” (5 pages total) Form 2. Contact information/interviewer checklist (2 pages). Form 2A. Case Travel/Activity Calendar, for recording daily events, names, and contact information for household contacts (1 page). Form 2B. Interview Contact/Site Summary Worksheet, for recording names, contact information, and exposure risks (1 page). Form 2C. Contact Transportation, for recording information on transportation and places visited outside of work or residence (1 page). Form 2D – Out of Area Travel Log, for recording names of places visited outside of home/work area (1 page).	
Form 3 module (previously Form 4)	“Source of Exposure Module” Form 3. Source of Exposure Interview Form (7 pages). Form 3A. Exposure Source Site Visit Form, for listing sites visited during period of possible exposure (1 page). Form 3B. Exposure Source Transportation form, for listing sites (cities, states, countries) where case traveled during period of exposure and modes of transportation (1 page).	

\* Note. The modules represented by the series of CDC Forms 1 through 4 are intended for the initial stages of a smallpox outbreak investigation. The investigation will require two or three staff members working concurrently. Using CDC Forms 1A and 1B, a medical epidemiologist should abstract information from admitting medical record or ER record, while another epidemiologist or public-health advisor interviews the case (or family member/friend if case is too ill for the interview) starting with CDC Form 2A, 2B, 2C, and 2D (contact identification module) and then CDC Forms 3A and 3B (source of

## DoD Smallpox Response Plan

exposure module). Obtain information needed for CDC Form 1A or 1B that is not available from the medical record from the case or a close family member or friend.

- Form 6                    Daily Case Status Tracking form, used for updating case information that affects case classification (e.g., lab results, epi linkage) (1 page).
- Form 7                    Smallpox Hospital Surveillance Daily Tracking form.  
Page 1 of 2 is used to line list high-risk patients.  
Page 2 of 2 is used to line list medium-risk (sick) patients.
- Form 8                    Contact Interview, form for interviewing each contact and identifying household contacts of contacts (1 page).
- Form 9                    Contact Vaccination Referral form, roster for recording referral of contacts and household members for vaccination at a fixed site (1 page).
- Form 10                  Individual Contact Surveillance form, to record vaccine take and serious adverse events among household members of contacts (for use by contact tracer)  
Page 1 of 2 is used for recording contacts.  
Page 2 of 2 is used for secondary contact information (household contacts of case contacts).
- Form 11                  Contact Tracing form, master form for daily tracking of contact list (1 page).

CDC Forms under development.

Form 12                  Form for contact to record daily temperatures, health status, vaccine take, and serious vaccine adverse events and vaccine take and serious vaccine adverse events of household contacts. *(This could be the same form as form 10 or with minor modifications.)*

Form 13                  Daily master form to summarize contacts found/not found, symptoms of contacts, disposition of found contacts (vaccinated/referred for vaccination, referred for illness evaluation, isolated if fever or rash develops, status of contacts not found, number of contact's household members and those vaccinated or referred for vaccination. *(This may not need to be a form but rather a computer generated report from contact form data.)*

CDC Forms follow on successive pages. Forms 1A, 1B, 8, 9, 10-1 and 10-2 are provided with DoD overlays to collect Service-specific information.