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Title: Biological Weapons Reference Guide (BW)

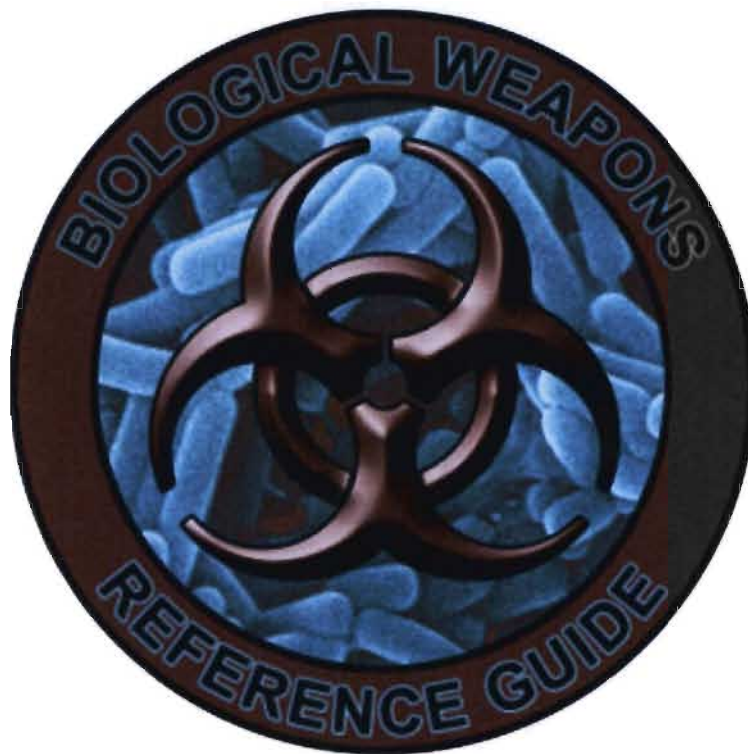
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Intended for: Presentation
JOWOG 29 Meeting



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Biological Weapons Reference Guide (BW)

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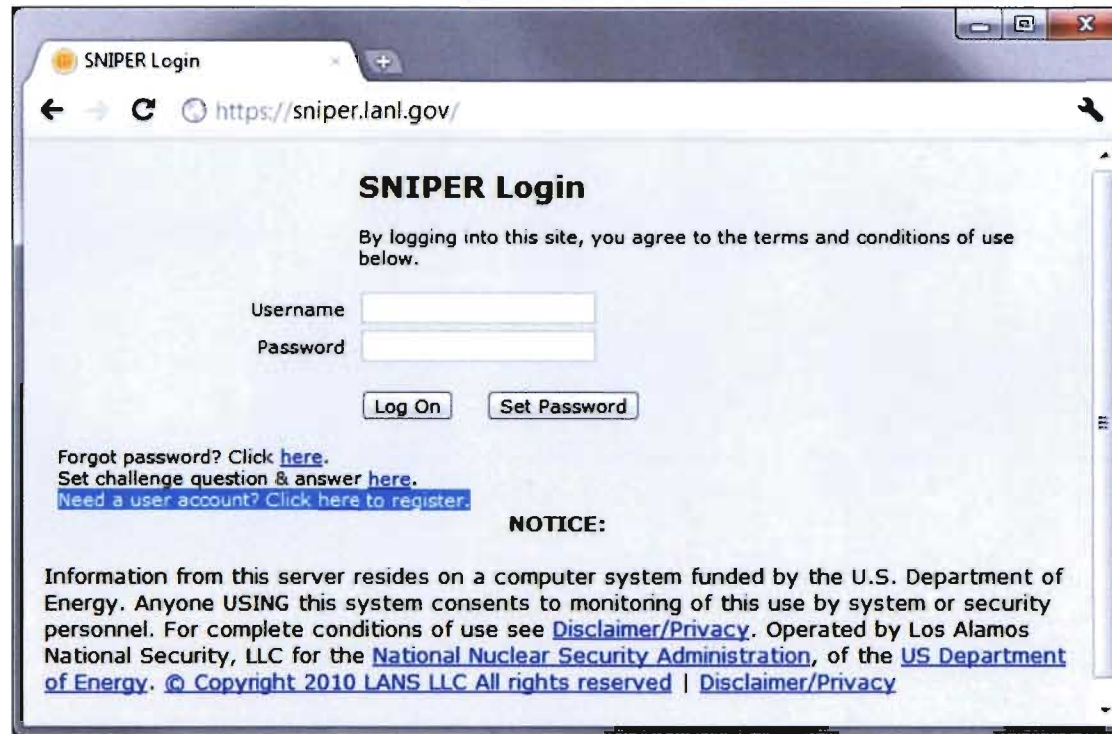


Database Overview

- “**BW**” is part of Los Alamos’ *Unclassified* **SNIPER** suite (+ CIDER, High/Homemade Explosives, Chem Weapons)
- Most users are DOD-EOD and the FBI. DOE labs/KCP and some state/local law enforcement also use CIDER.
- BW is licensed for unlimited users but currently unfunded.
- MOD & AWE are approved to download *and upload* data.
- BW currently contains 122 MB of data (<1 CD):
 - Biological Warfare Agents (BWAs)
 - Production Processes, Facilities, & Equipment
 - Weapons Primer
 - Glossary, Library, Quiz (self test), Search

Account Requests

- Using any of the “big 3” browsers (Internet Explorer, Firefox, Chrome), go to <http://sniper.lanl.gov> (no www):



- Click the link highlighted above.

Account Requests, cont.

- Complete the brief registration form and click Submit:



The screenshot shows a web browser window with the URL <https://sniper.lanl.gov/domcfg.nsf/SelfReg?OpenForm&RedirectTo=/sniper>. The page title is "New User Registration". A note states: "Note: Items in red are required". The form contains the following fields:

- First Name:
- Last Name:
- Email Address:
- Organization:
- Which database(s) do you wish to access?:
- How did you learn about this system?:

At the bottom of the form are two buttons: "Submit" and "Reset".

- You should receive a user name and temporary password in 5 business days or less.

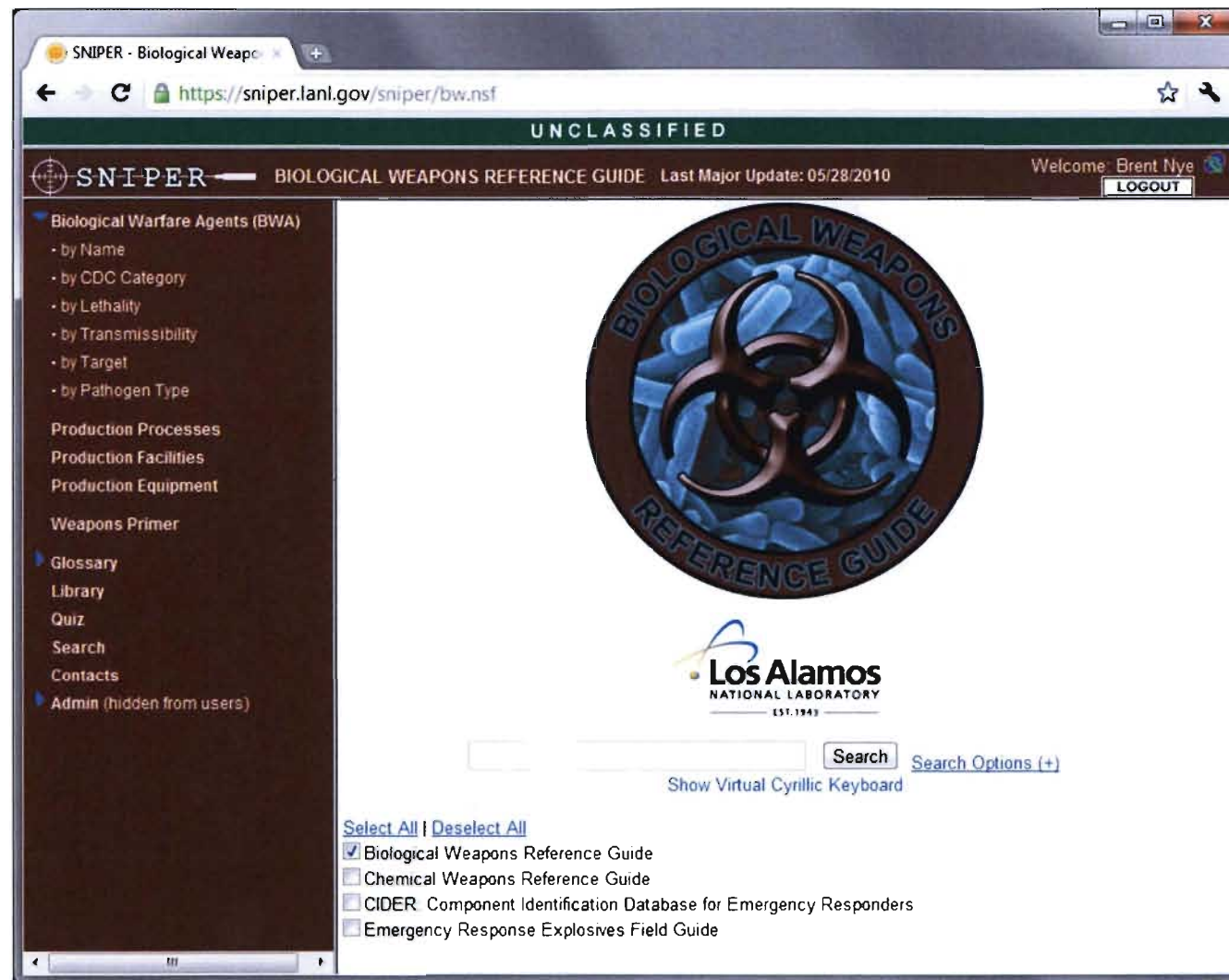
Logging In

- After your first login, you'll need to do the following:
 - Reset your password
 - Set a challenge question and answer (in case you forget your password)
- **Note:** After three incorrect login attempts, your account will be locked and require an administrative reset.
- Depending on your request/access, you'll see one or more active database icons:



"BW"

Interface/Layout

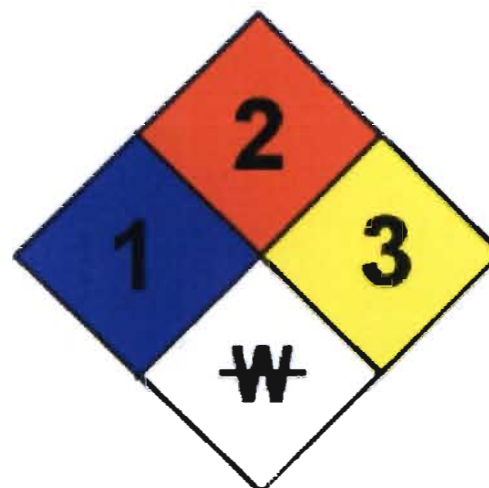
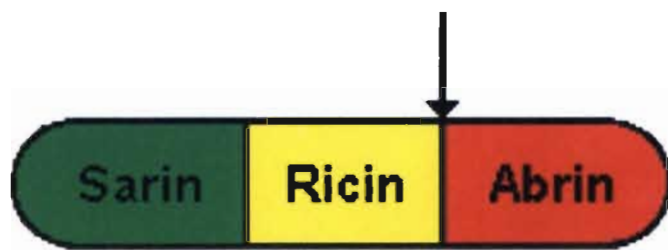


Data Overview: Biological Warfare Agents

- 94 BWAs, 80 of which are Australia Group Controlled.
BWAs are organized multiple ways:
 - By Name
 - By CDC Category
 - A
 - B
 - C
 - By Lethality
 - High
 - Low Moderate
 - Variable
 - Very Low
 - By Target
 - Animal
 - Human
 - Plant
 - By Transmissibility (Human to Human)
 - High
 - Moderate
 - Low
 - Rare
 - No (not transmissible)
 - By Pathogen Type
 - Bacteria
 - Fungus
 - Protozoa
 - Rickettsia
 - Spore-Forming Bacteria
 - Toxin
 - Virus

BWA Data

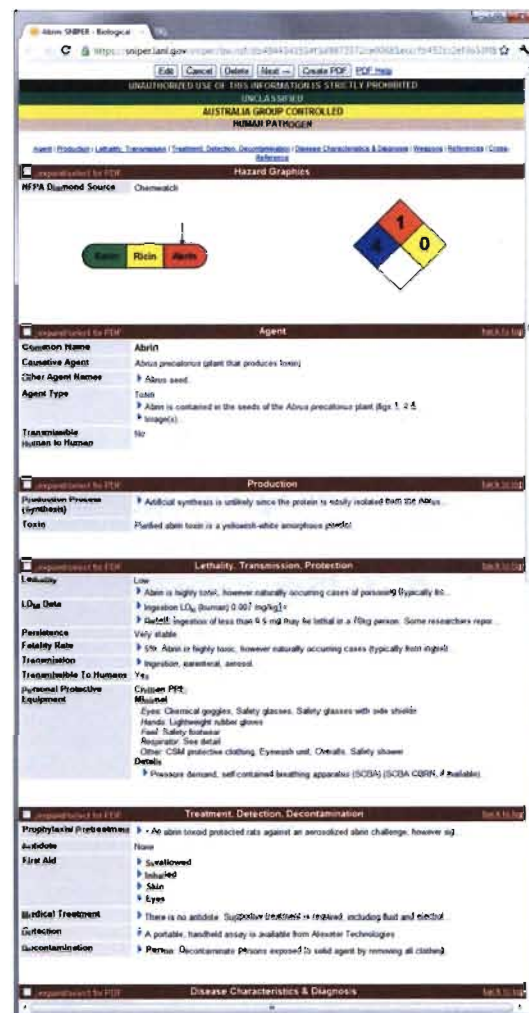
- Toxicity & Hazard Graphics



AUSTRALIA GROUP CONTROLLED
CDC CATEGORY A
HUMAN PATHOGEN

BWA Data, cont.

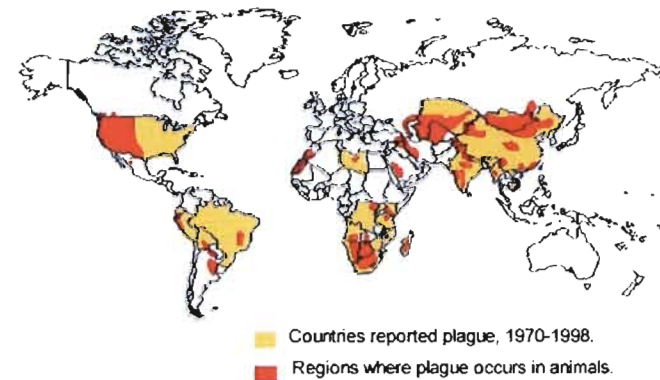
- General Agent Data
- Production Data
- Lethality, Transmission, Protection
- Treatment, Detection, Decontamination
- Disease Characteristic & Diagnosis
- Unclassified Weapons Data
- Unclassified Country Intelligence
- Unclassified Terrorism Data



BWA Data, cont.

- References/Citations
- Cross-Reference
- Miscellaneous Comments
- File Attachments
 - Material Safety Data Sheets (MSDS)
 - Other Data Sheets
 - Images
 - All non-binary attachments are indexed and searchable

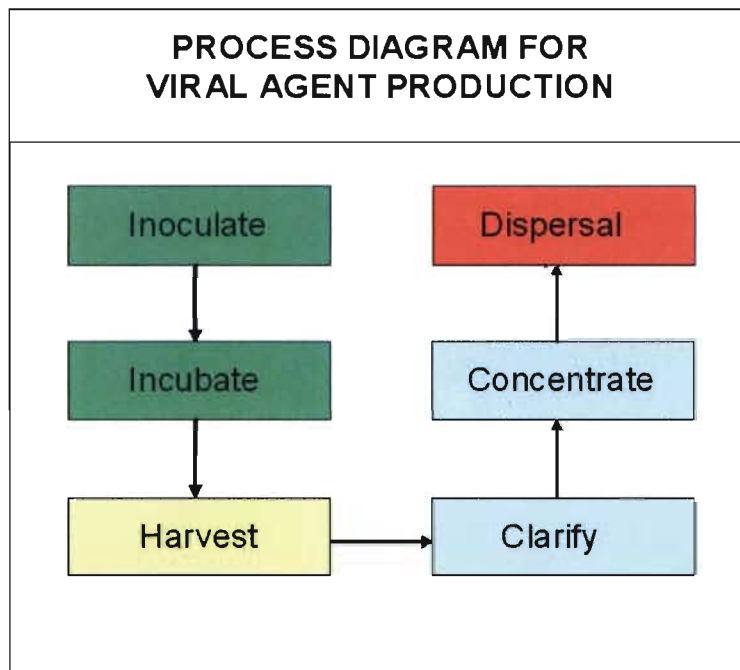
World Distribution of Plague, 1998



Production Processes & Facilities

- Production Processes:

- Bacterial Agent Production
- Toxin Production
- Viral Agent Production



- Production Facilities:

- Large scale, Dual use
 - Biological Research Institute
 - Biopesticide Plant
 - BSL-1 Laboratory
 - BSL-2 Laboratory
 - BSL-3 Laboratory
 - BSL-4 Laboratory
 - Fermentation Plant
 - Medical Research Training Facility
 - Pharmaceutical Plant
 - Protein Production Facility
 - Public Health Research Facility
 - Vaccine Production Facility



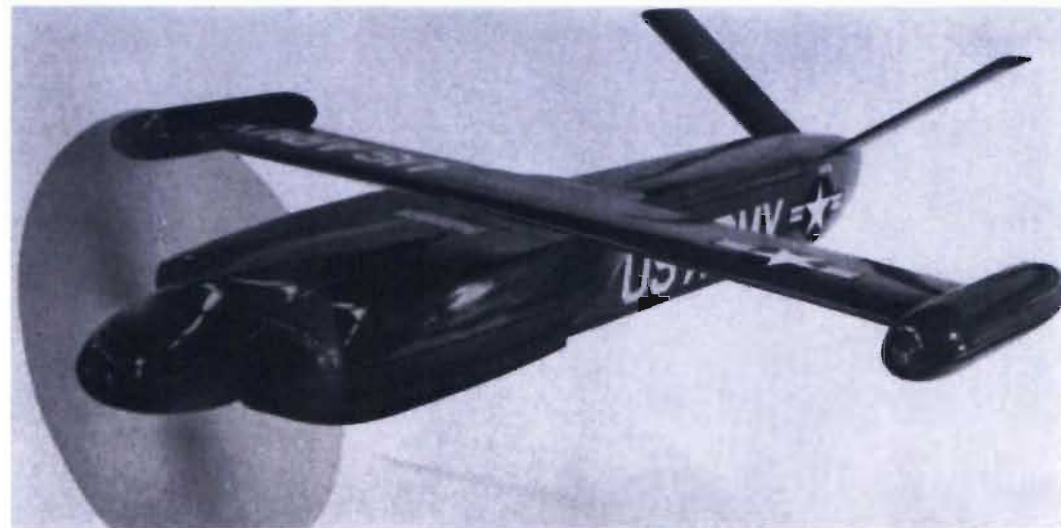
Production Equipment

- Equipment Examples:

- Drying
 - Spray Drying
 - Drum Drying
 - Freeze Drying
- Fermentation
- Harvest/Separation
 - Cross Flow Filtration
 - Centrifuge
 - Flocculation, Foam Flotation, Settling
 - Cell Disruption
- Incubation
 - Cell Incubator
 - Egg Incubator
 - Incubator Shaker
- Inoculation
 - Automated Egg Inoculator
- Milling
 - Jet Mill Micronizer
 - Powderizer
 - Tumble Milling
 - Mortar and Pestle
- Other
 - Shakers
 - Autoclave
 - Laminar Flow Hood
 - Inverted Microscope
 - Biological Safety Cabinet
 - Shaker Flasks
- Protective Gear
 - N95 Respirator
 - Pressure Suits
 - Powered Air Purifying Respirator

Weapons Primer

- Weaponization examples:
 - Aerial Bomb
 - Artillery/Rockets
 - Contamination
 - Food
 - Water
 - Living Hosts
 - Vectors
 - Missile System
 - Sprayer
 - Submunition



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Reference

- Glossary
 - 88 Word Definitions
 - 21 Acronym Descriptions
- Library Items
 - 6 records with attached PDFs
- Quiz
 - Self test containing 99 randomized questions
 - Multiple-choice answers
 - Amusing graphics/animations correspond to correct/incorrect answers

Question (2 of 99) What is this piece of equipment called?



Answer

☐ biosafety cabinet/hood
☐ fume hood
☐ incubator

Submit Answer

< Prev

Next >

Search

- Search All
 - Boolean, Google-like search, queries all component fields
 - Non-binary (.pdf, .xls, .doc, etc.) attachments indexed/searchable.
 - Virtual Cyrillic keyboard included. Researching Arabic.
 - Currently upgrading this function & customizing results display.

afatoxin [Search Options \(+\)](#)

[Hide Virtual Cyrillic Keyboard](#)

To type in Cyrillic, click on a letter.
(Characters will appear in upper case. Search is not case sensitive.)

А а	Б б	В в	Г г	Д д	Е е	Ж ж	З з
И и	Й й	К к	Л л	М м	Н н	О о	П п
Р р	С с	Т т	У у	Ф ф	Х х	Ц ц	Ч ч
Ш ш	Щ щ	Ъ ъ	Ы ы	Ь ь	Э э	Ю ю	Я я

[Select All](#) | [Deselect All](#)

- ☒ Biological Weapons Reference Guide
- ☐ Chemical Weapons Reference Guide
- ☐ CIDER: Component Identification Database for Emergency Responders
- ☐ Emergency Response Explosives Field Guide

Download BW

- Using *Internet Explorer* on a *Microsoft Windows* PC, log in to <https://sniper.lanl.gov>.
- Open the Biological Weapons Reference Guide.
- Click the small icon (🌐) in the upper right corner of the window. If using *Windows XP*, a yellow bar may open near the top of the window. If so, click it and select “Install ActiveX Control.”
- Follow on-screen prompts. Note: Detailed instructions are available.



BW Summary

- Biological-pathogen Weapons
- Production Information
- Related Intelligence
- Self Tests
- Human-pathogen data: 100% complete
- Plant/animal-pathogen data: 50% complete
- Design: 100% complete
- Currently unfunded/static

