Preventing Anthrax After Exposure: Options

JulieLouiseGerberding,MDMPH
ActingDeputyDirector
NationalCenterforInfectiousDiseases
CentersforDiseaseControlandPrevention

Presentedduringprogram "CDCResponds: Treatment Optionsfor Postal and Other Workers Exposed to Anthrax," Friday, December 21, 2001



Fact:

Todate,nocasesofinhalationalanthraxhave occurredamong10,000personsforwhompost exposure antimicrobial treatmentwas recommendedormadeavailable.



Key Questions

- Dosporespersistafterantibiotics, and if so, will inhalational anthrax develop?
- Doesaddingvaccination/extradaysofantibiotics decreasethechanceofinhalationalanthrax
 - amongexposedpeoplewhotookall60daysof antibiotics?
 - amongexposedpeoplewhodidnottakeall60 daysofantibiotics?

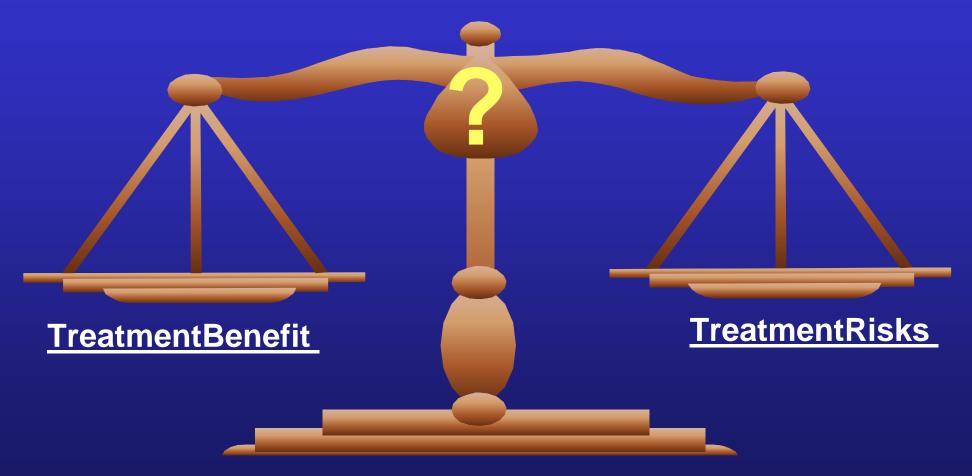


Preventing Anthrax After Exposure: Options

- Initialrecommendation:
 - Antibioticsfor60days
- NewOption1:
 - Antibioticsfor100days
- NewOption2:
 - 40moredaysantibioticsplusvaccine(3doses over4weeks)



Anthrax Prevention Treatment Decisions





Individual Risk: Tips for Workers Things that might mean higher risk

ExposureHistory

- Directcontactwithanthraxpowder
- Presenceintheimmediateareawhereanthrax containingenvelopewasopened
- Presenceinanareawithwidespread environmentalcontamination
- Presenceinasitewheresomeoneacquired inhalationalanthrax



Individual Risk: Tips for Workers Things that might mean higher risk

ExposureHistory

- Workinginanareawhereananthraxenvelope wasprocessedusingmechanicalpostal equipment
- Workinginanareawhereananthraxenvelope wasriffled



Individual Risk: Tips for Workers Things that might mean higher risk

NotTakingAntibiotics

- Peoplewhocouldn'ttakeall60daysof antibiotics
- Peoplewhomissedmanydosesof antibiotics



Individual Risk: Tips for Workers Things that might mean lower risk

ExposureHistory

- Noknowndirectexposuretoanthraxpowder
- Presenceinanareawithonlyfocalcontamination
- Shorttimeincontaminatedarea
- Memberofagroupwith:
 - noinhalationalanthrax
 - delayedantibioticsbutnoinhalationalanthrax



Facts about Antibiotics

- Todate,nocasesofinhalationanthraxhave occurredamong10,000personsforwhomantibiotic treatmentwasrecommendedormadeavailable
- Sideeffectsarecommon, butnot usually serious
- Takingall60daysofantibioticsisdifficult



Facts about Anthrax Vaccine

- Whatweknowwaslearnedfromvaccination ofhealthymilitarypersonnel
- Vaccineiseffective, thoughnot 100%
- Vaccinehasshort -termsideeffects
 - Mostarelocalandgoawayindaysor weeks
 - Seriousreactionshavebeenrare
- Long-termvaccineevaluationisincomplete



Vaccine Side Effects

MildProblems

- Soreness, redness, oritching where the shot was given (about 1 out of 10 men, about 1 out of 6 women)
- Alumpwheretheshotwasgiven(about1personoutof2)
- Muscleachesorjointaches(about1personoutof5)
- Headaches(about1personoutof5)
- Fatigue(about1outof15men,about1outof6women)
- Chillsorfever(about1personoutof20)
- Nausea(about1personoutof20)



Vaccine Side Effects

ModerateProblems

 Largeareasofrednesswheretheshotwasgiven (uptolpersonoutof20)

SevereProblems

Seriousallergicreaction(veryrare - lessthanonce in100,000doses)

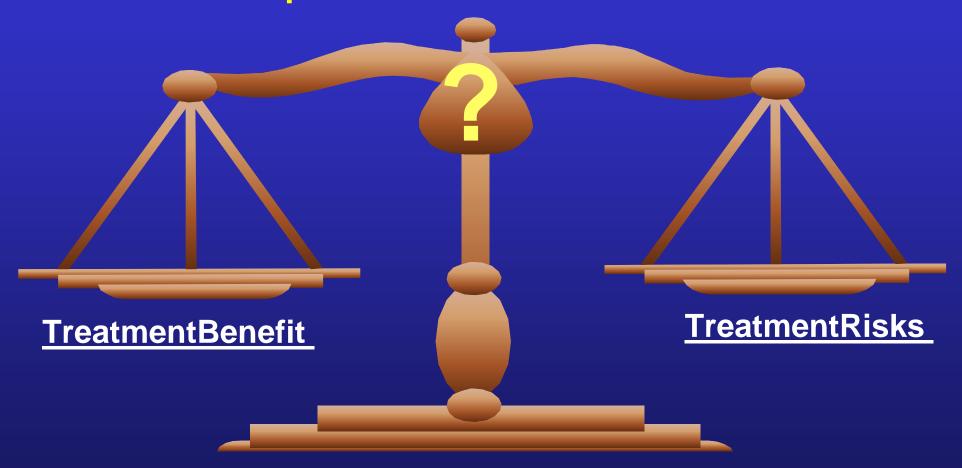


Preventing Anthrax After Exposure: Options

- Initialrecommendation:
 - Antibioticsfor60days
- NewOption1:
 - Antibioticsfor100days
- NewOption2:
 - 40moredaysantibioticsplusvaccine(3doses over4weeks)



Post-exposure Treatment Decisions





Some Ways to Learn More

- Askyourdoctororotherhealthcareprovider.
- ContacttheCentersforDiseaseControland Prevention(CDC):
- Call 1-888-246-2675 (English)
- Call 1-888-246-2857 (Español)
- Visitthe CDC's websiteat
- http://www.bt.cdc.gov

