

TOOLS FOR PUBLIC HEALTH PRACTICE

UECP582<"C" Tguqwteg" hqt" c" 582/ Fgi tgg" Xkg y" qh
Ecpegt" Rtgxgpvkqp. "Tkum. "cpf" Uwtxkxcn

N|bn| 6U|Ynž GV8ž A GD< % / F Ura cbX 6U|gYž D\8% / @UmU 6ci mci VUUž A D< % / 9f|b ?

Ceeguukdng"Xgtukqp<" y y 0efe0i qxlreflkuuwgul4242l42a24850jvo

Uwi igurgf"ekvcvkqp" hqt" vjku" ctvkeng<" Dckng{ " \. " Dcnkug" T.
Dqw|qwdcc" N. " Mqdgyl" G0" UECP582<" C" Tguqwteg" hqt" c" 582/ Fgi tgg
Xkg y" qh" Ecpegt" Rtgxgpvkqp. " Tkum. " cpf" Uwtxkxcn0" Rtgx" Ej tqpkc" Fku
4242-39<4224850" FQK" jwru<lflqk0qti13207: : : lref3904224850

PEER REVIEWED

Gla a Ufm

K \Uh|g|UfYUxm_bckb'cb'h|g|hd|V8

I bXYfg|UbX|b| 'hY dUHYfbg|cZUbbWfYHc|c| nža cfV|X|maUbX'a cftU|Im
UWcgg|dcdi 'Uh|cbg|b|c| Yga i 'h|d'Y'Y'g|cZUWc|fz|fub| |b| 'Zca 'hY V|c|
'c| |W' 'h' hY gcvYU

K \Uh|g|UXXYX Vn|h|g|fYdcff8

K Y'XYgV|VY' hY XU|U'gci fWgž|b|Y| fU|h|cbzW|W' U|h|cbgž|UbX' cddcfh|b|fYg
UggcV|UHYX k|h' G75B' * \$ZUb|b|YfUW|j Y'k YV d'U|Zcfa 'Uja |b| 'h' d|f|c| X|Y U
' * \$|X|Y|fY|j Yk 'cZUWc|fz|fub| |b| 'Zca 'hY V|c|
W|b VY' fYd' |W|YX b|U|h|cbk|X|Y

K \Uh|UfY' hY' ja d' |W|h|cbg|Zc|di V|W|YU'h' d'fUW|W3

G75B' * \$ |g|Ub|UW|gg|VY' fYgci fW' Zc' cgd|U' U|Xa |b|g|fU|h|c|fz|V|a |
a i b| |m|c|f| Ub| |U|h|cbgž|UbX' di V|W|ZUW|U|g|h' a U_Y |b|Zcfa YXZV|a d'fY' Yb|g|
j YZUbX' dcdi 'Uh|cb|gdV|W|YX V|g|cbg|

Cduvtcey

UECP582. "cp" kpvgtcevkxg" ygd" rncvhtq o" ck o kpi" vq" rtqxfkg" c" 582/
fgi tgg" xkg y "qh" hcevqtu" vjcv" ftkxg" ecpegt. "ecnewncvgu" cpf" kpvgi tcvgu
ugxgtcn" o gcuwtgu" qh" ecpegt" dwtfgp" htq o" vjg" Hnqtkfc" Ecpegt" Fcvc
U{ uvg o. "vjg" uvcvg u" ecpegt" tgi kvt{. "htq o" 4234" vq" 4238" ykvj" ecpegt
tkum" hcevqtu. "enpkecn" hcevqtu. "cpf" uqecn" fgygt o kpcpvu" qh" jgcnvj" qp
o wnvkrng" ngxgnu" qh" igqi tcr j{ " "tcp i kpi" htq o" vjg" gpvktg" uvcvg" vq" vjg
pgki j dqt jqqf0" Kpvgi tcvkpi" xctkquw" uqwtugu" qh" fcvc. "vjg" ygd" rncv/
hqt o" xkuwcnk|gu" pw o gtqwu" kp fkecvqtu. "kpenwfkpi" uqekqfg o q i tcr jke
ejctcevgtkuvkeu. "ecpegt" jkuvnqi i{ "cpf" uvc i kpi. "tkum" dgjcxkqtu.
uetggpkpi" dgjcxkqt. "gpvktg o gpvcn" hcevqtu. "j c|ctfquw" ukvgu. "jgcnvj
kpuwtcepg" ceegu. "rtgxcngpeg" qh" rqvgpvkcn" eq o qtdkfkvkgu. "jqwukpi
ejctcevgtkuvkeu. "cpf" ngxgnu" qh" tgukfgpvkcn" ug i tgi cvkqp. "vj tqwi j" o cru
cpf" gc u{ /vq/ kpvgttrtgv" i tcr ju0" D{ " ycnmkpi" vj tqwi j" ep" gzc o rng" qh" c
rtcevkcn" wug. "y g" ujqy" vjcv" UECP582" rtqxfkgu" fcvc" vjcv" ctg" gc u/
kn{ "ceeguukdng" vq" rwdnke" jgcnvj" r tqhguukqpcnu. "fgekukqp" o cmgtu. "cpf
tgugcte jgtu" cpf" ecp" cuukuv" vjg o" ykvj" kfgpvkh|kpi" r qvgpvkcn" ftkxgtu
qh" ecpegt" dwtfgp" qp" c" nqecnk|gf" ngxgn0

Dcemi tqwpf

Cu" vjg" ugeqpf" ngcfkpi" ecwug" qh" fgcvj" kp" vjg" Wpvkgf" Uvcvgu. "ecpegt
ku" c" o clqt" rwdnke" jgcnvj" rtqdnq o" kp" eq o o wpvkkgu" cetquu" vjg" pcvkqp
*3.4+0" Mg{ "dgjcxkqtu" *gi. "u o qmkpi. "jgcx{ " ftkpmkpi. "kpcevkvkv{+. "kp/
hgevkwu" ci gpvu" *gi. "jw o cp" rcrknq o cxktwu" J JRX_. "jgrcvkvku" D.
jgrcvkvku" E. "J KX. " Jgnkeqdcervt" r {nqt+. "cpf" igpgu" *gi. "DTEC3.
DTEC4. " r75+ "kpetgcug" vjg" tkum" qh" fgxgnqrkpi" ecpegt" *4 6+0
Jqy xgt. "ecpegt" ku" eq o rngz. "cpf" wfgtucpfkpi" kvu" rcwgtg" cetquu
rqrwncvkqu" kpxqnxgu" cp" kpvgt rnc{ "dgvy ggp" o wnvkrng" ngxgnu" qh
hcevqtu. "tcp i kpi" htq o" vjg" dkqnq i kecn" vq" vjg" uqekgvcn0" Vjku" wfgt/
uvcpfkpi" o wuv" kpenwfg" tgeq i pkvkqp" qh" vjg" tqng" qh" r j {ukecn" cpf" uq/
ekcn" gpvktg o gpvu" kp" u jcrkpi" nkhuvg{ ngu. "jcdkvu. "jgcnvj" r tq o qvkpi
tguqwtegu. "cpf" rtgxcngpeg" qh" kphgevkqu" ci gpvu" *4+0" Cnvj qwi j" uq o g
uvcvgu" jcxg" fgxgnqr g f" u{ uvg o u" vjcv" kpvgi tcvg" ctgc/ ngxgn" o gcuwtgu
qh" uqecn" cpf" dwknv" gpvktg o gpvu" cpf" igqeqfgf" ecpegt" tgi kvt{ "fcvc
*gi. "Ecnkhtpkc" P gki j dqt jqqf u" Fcvc" U{ uvg o" J4_+. "Hnqtkfc" fkf" pqv
jcxg" vjku" mkpf" qh" kpvgi tcvg f" u{ uvg o" dghqtg" vjg" fgxgnqr o gpv" qh
UECP582. "cp" kpvgtcevkxg" ygd" rncvhtq o" ck o kpi" vq" rtqxfkg" c" 582/
fgi tgg" xkg y "qh" hcevqtu" vjcv" ftkxg" ecpegt" dwtfgp" kp" Hnqtkfc" *7+0

UECP582" ecnewncvgu" cpf" kpvgi tcvgu" ugxgtcn" o gcuwtgu" qh" ecpegt
dwtfgp" htq o" vjg" Hnqtkfc" Ecpegt" Fcvc" U{ uvg o" *HEFU+. "vjg" uvcvg u
ecpegt" tgi kvt{. "ykvj" ecpegt" tkum" hcevqtu. "enpkecn" hcevqtu. "cpf" uq/
ekcn" fgygt o kpcpvu" qh" jgcnvj" qp" o wnvkrng" ngxgnu" qh" igqi tcr j{ " "tcp/
i kpi" htq o" vjg" uvcvg" vq" vjg" pgki j dqt jqqf0" UECP582" ujqy u
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j c|ctfquw" ukvgu. "jgcnvj" kpuwtcepg" ceegu. "rtgxcngpeg" qh" rqvgpvkcn
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i tgi cvkqp. "vj tqwi j" o cru" cpf" gc u{ /vq/ kpvgttrtgv" i tcr ju0" UECP582" ku
c" vqqn" wugf" d{ "ecpegt" egpvgtu" kp" vjgkt" ecpegt" eqpvtn" uvtcvg i kgu. "dwv
kv" ku" cnuq" cp" ceeguukdng" tguqwtegu" hqt" j qukrvcn" cf o kpvkvtcvqtu. "eq o /
o wpvk| "qt i cpk| cvkqu. "cpf" rwdnke" qh hkecnu" vq" o cmg" kphqt o gf. "eq o /

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rtg jgpkxg."cpf"rqrwncvkqp/urgekhe"fggekukqpu"Vjku"ctvkeng"fg/
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UECP582."y jkej"ecp"dg"tgrnkecvgf"pcvkqp ykf g()

Fcvc"Uqwtegu"cpf"Rncvhtq o "Fgxgnqr o gpv

Urqpuqtgf" d{ "vjg" Wpkxgtukv{ "qh" Okc ok u"U{ ngxugvt" Eq o rtg jg p/3:
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gpeg" Kpuvkvwg. "UECP582" rtqxfkgu" vcdwnct"cpf" i tcr jkecn"uw o o ct/
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Jkurcpke" Y jkgv. "pqp/ Jkurcpke" Dncem. "Jkurcpke. "cnn" tcegu+. "6" cig
i tqwru" * { qwj" J2 3; ". "cfwnv" J42 86" { ". "ugpkqt" } 87
gxgt" { qpg+. "cpf"7" ngxgn"qh" igqitcr j { 0" Vjg" igqitcr jkgu" "vjg" gp/
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rtqxfkg" rqnke{ " o cmgtu" ykvj" o gcpkpi hwn" nqecvkqpu()

Cnvj qw i j" ekvkgu. "xkncig u. "cpf" vq y p u j k r u" * y j c v" vjg" Egpwu" ecnnu
EFRu+ "ctg" etkvecn"vq" o cmkpi" rqnke{ " fgekukqpu. "vjg" HEFU" vci u" cpf
tgrqtu" ecpegt" d{ " egpuwu" vtcev. "pqv" EFRu" Vjg" WU" Egpwu" Dwtgcw
fqu"pqv" rtqxfkg" c" fktgev" o cr r k p i" d g v y g g p" egpuwu" vtcev u" cpf
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ke" Eqtgurqpf gpeg" Gpikpg. "rtqxfkgf" d{ "vjg" Okuqwtk" Egpwu" Fcvc
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etquugu" o wnvkrng" EFRu. "vjg" ecpegt" ecugu" kp" vjcv" vtcev" ctg" cuukipgf
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eqwpvkpi. "dww"kv" ecwugu" u o c n n g t" r n c e g u" v q" d g" u w d u w o g f" d{ " p g k i j d q t/
kpi. " o q t g" r q r w n q w u" EFRu" Vjg tghqtg. "UECP582" tgrqtu" qp"986" qh
vjg"; 43" EFRu" kp" Hnqtkfc()

Y g" u v c p f c t f k | g f" H E F U / r t q x k f g f" f c v c" q p" k p e k f g p v" e c p e g t" e c u g u" h q t
4234 4238" t g n c v k x g" v q" v j g" 4222" W U" E g p u w u" Y g" e c n e w n c v g f" c i g/
u v c p f c t f k | g f" o q t v c n k v{ " t c v g u" h q t" v j g" u c o g" d{ " w u k p i" f c v c" h t q o" v j g
H n q t k f c" F g r c t v o g p v" q h" J g c n v j" D w t g c w" q h" X k v c n" U v c k u v k e u" Y g" g u v k o /
c v g f" d q v j" t c v g u" d{ " w u k p i" v j g" f k t g e v" u v c p f c t f k | c v k q p" h w p e v k q p" k p" v j g
g r k v q q u" T" r c e m c i g" x g t u k q p" 207 3203" T" H q w p f c v k q p" h q t" U v c k u v k e c n
Eq o r w v k p i + 0" Y g" e c n e w n c v g f" { g c t u" q h" r q v g p v k c n" n k h g" n q u v" v q" e c p e g t
f g c v j u" d{ " c f c r v k p i" v j g" o g v j q f n q i { " h q t" q x g t c m" { g c t u" q h" r q v g p v k c n
n k h g" n q u v" v q" e c p e g t" f g c v j u" d g h q t g" c i g" 87" k p u v g c f" q h" c n n" f g c v j u" d g h q t g
c i g" 87" * 9 + 0" D g e c w u g" q h" t g u v t k e v k q u" k o r q u g f" d{ " v j g" H E F U. " v j g
UECP582" y g d u k v g" f q u" p q v" f k u r n c { " c p { " e c p e g t" k p e k f g p e g" q t" o q t/
v c n k v{ " t c v g u" h q t" c p { " i g q i t c r j { " v j c v" j c u" h g y g t" v j c p" 32" e c u g u" q h" e c p/
e g t" Y g" e c n e w n c v g f" q v j g t" e c p e g t" u v c k u v k e u. " u w e j" c u" v j g" r g t e g p v c i g" q h

rgqrng" fkcipqugf"cv" c"ncvg"uvcig" *UGGT" J U w t x g k n n c p e g. " G r k f g o k /
q n q i { ". " c p f" G p f" T g u w n v u. " U w o o c t { " u v c i g u" 4" v j t q w i j" 9 + " c p f" v j g" h t g /
s w g p e { " q h" v j g" j k u v q n q i k e c n" x c t k c p v u" * d { " e c p e g t" c p f" t c e g l g v j p k e v { +
d { " w u k p i" h w p e v k q p u" h t q o" v j g" v k f { x g t u g" T" r c e m c i g" x g t u k q p" 30403" * : + 0

Kp" c f f k v k q p" v q" e c p e g t" u v c k u v k e u. " U E C P 5 8 2" q h h g t u" u w o o c t k g u" q h" t g n /
g x c p v" d g j c x k q t c n" c p f" g p x k t q p o g p v c n" t k u m" h c e v q t u. " k p e n w f k p i" f c v c" q p
/ 3 : " w p k s w g" h c e v q t u" m p q y p" v q" k p h n w g p e g" e c p e g t" k p e k f g p e g" c p f" o q t v c n /
k v { ". c x c k n c d n g" v j t q w i j" v j g" C o g t k e c p" E q o o w p k v { " U w t x g { " * ; + 0" V j g u g
h c e v q t u" k p e n w f g" c x g t c i g" e q o o w v g" v k o g. " c e e g u u" v q" c" x g j k e n g. " k p u w t /
c p e g" u v c v u. " c p f" 32" e c p e g t" t k u m" c p f" r t q v g e v k x g" h c e v q t u" e c r v w t g f" k p
v j g" 4238" D g j c x k q t c n" T k u m" H c e v q t" U w t x g k n n c p e g" U { u v g o" * D T H U U +.
u w e j" c u" o c o o q i t c r j { " c p f" e q n q t g e v c n" e c p e g t" u e t g g p k p i" K p" e j q q u /
k p i" y j k e j" t k u m" c p f" r t q v g e v k x g" h c e v q t u" c t g" v j g" o q u v" t g n g x c p v" v q" v j g
e c p e g t u" k p e n w f g f" k p" U E C P 5 8 2. " v j g" t g u g t e j" v g c o" e q p f w e v g f" n k v g t /
c v w t g" t g x k g y u" q h" u q e k f g o q i t c r j k e. " g p x k t q p o g p v c n. " d g j c x k q t c n.
e n p k e c n. " c p f" q v j g t" t k u m" h c e v q t u. " c p f" u q w i j v" c f x k e g" h t q o" g z r g t v u" k p
v j g" c p h f u" q h" e c p e g t" g r k f g o k n q i { ". o g f k e c n" q p e n q i { ". u q e k c n" g r k /
f g o k n q i { ". c p f" j g c n v j" f k u r c t k v k g u" Y g" u q w t e g f" f c v c" q p" g p x k t q p /
o g p v c n" h c e v q t u. " u w e j" c u" v j g" r t g u g p e g" q h" v q z k p u" k p" v j g" c k t. " v j g
c o q w p v" q h" w n v t c x k q n g v" g z r q u w t g. " v j g" c k t" s w c n k v { " k p f g z. " c p f" v j g" r t g /
x c n g p e g" q h" h q q f" k p u g e w t k v { ". h t q o" h g f g t c n" c i g p e k g u" u w e j" c u" v j g" G p /
x k t q p o g p v c n" R t q v g e v k q p" C i g p e { " c p f" v j g" E g p v t u" h q t" F k u g c u g" E q p /
v t q n" c p f" R t g x g p v k q p" * V c d n g u" 3" c p f" 4 + 0" V j k u" k p h q t o c v k q p" k u" c x c k n c d n g
q p" v j g" U E C P 5 8 2" y g d u k v g" * u e c p 5 8 2 0 e q o + * 7 + 0

Y g" e q p f w e v g f" c n n" c p c n { u g u" h q t" U E C P 5 8 2" w u k p i" T" 50705" u q h v y c t g
* T" H q w p f c v k q p" h q t" U v c k u v k e c n" U q h v y c t g + 0" Y g" g z v t c e v g f" C o g t k e c p
E q o o w p k v { " U w t x g { " f c v c" h q t" x c t k q w u" i g q i t c r j k g u" x k c" C R K" * c r r n k e c /
v k q p" r t q i t c o o k p i" k p v g t h c e g + " e c n n u" w u k p i" v j g" c e u" T" r c e m c i g" x g t u k q p
40306" * T" H q w p f c v k q p" h q t" U v c k u v k e c n" E q o r w v k p i + = " v j c v" k u. " y g" w u g f
v j g" T" r t q i t c o o k p i" n c p i w c i g" v q" e q o o w p k e c v g" y k v j" v j g" W U" E g p u w u
D w t g c w" y k v j q w v" j w o c p" k p v g t x g p v k q p. " c p f" y g" e c n e w n c v g f" r g t e g p v /
c i g u" h q t" g c e j" n g x g n" q h" i g q i t c r j { " w u k p i" v j g" d c u g" T" c p f" v k f { x g t u g
h w p e v k q p u" Y g" f g h k p g f" O k c o k" e k v { " f k u v t k e u" d { " v j g k t" e g p u w u" v t c e v u
H q t" g c e j" f k u v t k e v. " y g" e c n e w n c v g f" h c e v q t" g u v k o c v g u" d { " v c m k p i" v j g" c x g t /
c i g" q h" v j c v" g u v k o c v g" y g k i j v g f" d { " v j g" r q r w n c v k q p" k p" v j g" e g p u w u" v t c e v u
D g e c w u g" D T H U U" f c v c" c t g" c x c k n c d n g" q p n { " c v" v j g" e q w p v { " n g x g n. " y g
e c n e w n c v g f" t c v g u" q h" d g j c x k q t" * g i. " o c o o q i t c r j { " u e t g g p k p i + " h q t
E F R u" c p f" f k u v t k e u" h t q o" e g p u w u" v t c e v n g x g n" f c v c" q d v c k p g f" h t q o" v j g
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⁵Fkxkukqp"qh"Dkquvcvkukv."Fgrctv"ogpv"qh"Rwdnke"Jgcnvj"Uekgpegu. Wpkxgtukv{"qh"Okok."Okok."Hnqtfc0

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- 340 \ c j p f " Y G. " L c o g u " C U. " L g p m k p u " Y F. " K | c f k " U T. " H q i n g o c p " C L.
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FUhj`cZ]bVta Y'rc dcj Yf'mYj Y'	7%+ \$ \$&	d'cfsdcj Yf'm	2&hja Yg'dcj Yf'm'h'fYg\c`X#0&hja Yg'dcj Yf'm'h'fYg\c`X#0dcj Yf'm h'fYg\c`X
FUW	6\$&\$ \$%	d'cfsfUW	& F UWg#DUW]Wg'UbXYf#5g]Ub#BUhj Y`5a YfjWb#6 UW`#K`]hY
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A YUbg`cZ f]Ubdcf]Uhcb'h'k cf_ Vmj Y`]W]gUj U]UVY	6\$, % (%	d'cfsj Y`]W]	%JY`]W]#bc`j Y`]W]
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V 8UfU`Zcf'h.]gZUWcf'k YfY`cVU]bYX`Zca`&gYdUfU'h'j Uf]UVYg`Zca`h'Y'gUa Y`HUVY"

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: ccX'JbgYWf]m	FK > 7ci bhm<YU'h FUb_]b[g/ A Ud'hY'A YU' : Ud Zca : YYX]b['5a Yf]W	&\$%)	F UHY	\Htd.##k k k "Vdi bhmYU'h.fUb_]b[g'cf[#fUb_]b[g#XUHU# : @
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DYfWbHU[Y'cZdcdi 'Ujcb 'j]b['k]h]b'\$) 'a]Y'cZU dUf_	7YbhYgZcf'8]gYUgY'7cbrfc' UbX DfYj Ybhjcb f'87EUBUjcbU' 9bj Jfcb a YbHU' Di V]W<YU'h HFUW_]b['BYrk cf_	&\$%%	F UHYg	\Htdg.##Yd\HFUW_]b["VXV[cj #8UHU9I d'cfYf#.
5]f'ei U]m]bXYI	9bj Jfcb a YbHU' DfchVMjcb 5[YbWn	&\$%	bXYI	\Htdg.##UegYdU"[cj #Uegk YV#U]fXUHU#Ubbi U'SUe]SVnSWdi bhm&\$% "hjd
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DYfWbHU[Y'cZgY] YfY 'ci g]b['dfcY'a g	FK > 7ci bhm<YU'h FUb_]b[g/ 7ca dfY\Ybg]Y'<ci g]b[5Zc'fXU'Y]mGfUHY[nrf'<5Gt XUHU	&\$%\$	&\$%(F UHY	\Htd.##k k k "Vdi bhmYU'h.fUb_]b[g'cf[#fUb_]b[g#XUHU# : @
FYg]XYbhU' gY[fY[Ujcb	FK > 7ci bhm<YU'h FUb_]b[g/ 5a Yf]Wb'7ca a i b]mGi f] YnZ) !nYUfYgha UHYg	&\$%&	&\$%bXYI	\Htd.##k k k "Vdi bhmYU'h.fUb_]b[g'cf[#fUb_]b[g#XUHU# : @
bVda Y]bYei U]m	FK > 7ci bhm<YU'h FUb_]b[g/ 5a Yf]Wb'7ca a i b]mGi f] YnZ) !nYUfYgha UHYg	&\$%&	&\$%F UHYc	\Htd.##k k k "Vdi bhmYU'h.fUb_]b[g'cf[#fUb_]b[g#XUHU# : @
Gi dd'Ya YbHU' Bi f'hjcb 5gg]ghUW Dfc[fua fGB5DEfYXYa dhjcbg# GB5D!Ui h'cf]nYX g'rcfYg	I G85: ccX'9bj Jfcb a Ybh5hUg	&\$%	5j YfU[Y Xc'Uf	\Htdg.##k k k "Yfg'i gXU"[cj #k YVXcVg#8UHU:]Yg#(, + '% 8UHU8ck b'cUX'g3j 1\$
6fck bZ'YXg	: 'cf]XU: Yc[fud\]W8UHU'@VfUfm A YfUXUHU'9I d'cfYf	&\$%	g\ d Z'Yg	\Htdg.##Xck b'cUX"Z'X"cf[#di V#gUHY#Vfck bZ'YXgSURYUGSZV% "hjd
<UnUfXci g'k Ugh'g]hYg	: 'cf]XU: Yc[fud\]W8UHU'@VfUfm A YfUXUHU'9I d'cfYf	&\$%	g\ d Z'Yg	\Htdg.##Xck b'cUX"Z'X"cf[#di V#gUHY#VXUnS' % "hjd

fVeb]bi YX'cb bYI hdu[Yt

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fVzbhbi YXL

HUV'Y&"bXjWlrcfgUbX'8UHU'Gcl fWg'l gYX'lb'G75B' *\$

bXjWlrcf	Gcl fW	MUF	HndY	I F@
7cFYVMcbU'ZMjYjYg	: 'cf]XU'; Yc[fUd\jWBUHU'@jVfUfm &\$%+ A YHUXUH'9l d'cfYf		g\ d Z'Yg	\hfdg.##Xck b'cUX"Z'X"cf[#di V#ghUHY#[V&VeffYVjcbU'VbXSgYd%+"hjd
: jFYghUjcbg	: 'cf]XU'; Yc[fUd\jWBUHU'@jVfUfm &\$% A YHUXUH'9l d'cfYf		g\ d Z'Yg	\hfdg.##Xck b'cUX"Z'X"cf[#di V#ghUHY#[V&ZfYghUfSa Uhf% "hjd
<YU'h WfY'ZMjYjYg	: 'cf]XU'; Yc[fUd\jWBUHU'@jVfUfm &\$%(A YHUXUH'9l d'cfYf		g\ d Z'Yg	\hfdg.##Xck b'cUX"Z'X"cf[#di V#ghUHY#[V&\YU'h.Sui [%< "hjd
DUF_g	: 'cf]XU'; Yc[fUd\jWBUHU'@jVfUfm &\$%+ A YHUXUH'9l d'cfYf		g\ d Z'Yg	\hfdg.##Xck b'cUX"Z'X"cf[#di V#ghUHY#[V&dUF_gSgYd%+"hjd
GWcc'g	: 'cf]XU'; Yc[fUd\jWBUHU'@jVfUfm &\$%+ A YHUXUH'9l d'cfYf		g\ d Z'Yg	\hfdg.##Xck b'cUX"Z'X"cf[#di V#ghUHY#[V&gWcc'gSgYd%+"hjd
A cVjY'ca Y'UbX'FJ dUF_g	: 'cf]XU'; Yc[fUd\jWBUHU'@jVfUfm &\$% A YHUXUH'9l d'cfYf		g\ d Z'Yg	\hfdg.##Xck b'cUX"Z'X"cf[#di V#ghUHY#[a \fj Sa Uf% "hjd
A Ua a c[fUd\mWbhYfg	I G: ccX'UbX'8fi [5Xa]b]gfhUjcb	&\$%+	; YcVtXYX UXXFYggYg	\hfdg.##k k k "ZU"[c] #fUXjUjcb!Ya]h]b[dfcXi Vtq# a Ua a c[fUd\nei U']mgfubXUfXgUjWbXdfc[fUa #Vtbgf a Yf]bZ:fa Ujcb# i Vt %%% - * &\ha
GdYVjU'Gi dd'Ya YbHU' Bi hf]hcb Dfc[fUa 'Zcf K ca Ybz'bZbghZ'UbX 7\]XfYb WbhYfg	GdYVjU'Gi dd'Ya YbHU'Bi hf]hcb Dfc[fUa 'Zcf K ca Ybz'bZbghZ' UbX 7\]XfYb	&\$%	; YcVtXYX UXXFYggYg	\hfd.##k k k "k]Vtfc[fUa g'cf[#ghUHY#Zcf]XU
: fY YVj]Vg	: fY Y7]b]Vg Vta	&\$%	; YcVtXYX UXXFYggYg	\hfdg.##k k k "ZfY YVj]Vg Vta #Vt#Z
<= hf]ghb[]ghYg	: 'cf]XU'8YdUfha YbhcZ<YU'h	&\$%	; YcVtXYX UXXFYggYg	\hfdg.##Z\j "Xc\"ghUHY"Z'i g#7]b]VgYUfW.#YI hgYUfW'UgdI 3VtI bml hfI Y
DfY!YI dcci fY dfcd\mU]g fDf9DclghYg	: 'cf]XU'8YdUfha YbhcZ<YU'h	&\$%	; YcVtXYX UXXFYggYg	\hfdg.##Z\j "Xc\"ghUHY"Z'i g#7]b]VgYUfW.#YI hgYUfW'UgdI 3UfYU1 hfI Y
Gmj YghYf'7ca dfY\Ybgj] Y 7UbWf'7YbhYf'ghY'jY g]Yg	Gmj YghYf'7ca dfY\Ybgj] Y 7UbWf'7YbhYf	&\$%	; YcVtXYX UXXFYggYg	\hfdg.## a]Ua]\YU'h"cf[#gmj YghYfVta dfY\Ybgj] YVbWf'WbhYf# 'cWjcbg3WjY[cfmU' / WfYbHUXFYgg1/ X]ghUbW1%\$
5VUXYa jWUbWf'WbhYfg	: 'cf]XU'5VUXYa jWUbWf' 7YbhYf'5]UbW	&\$%	; YcVtXYX UXXFYggYg	\hfd.##Zcf]XUWbWf'fYgYUfW'cf[
8YdUfha YbhcZ 7ca a i b]mGYfj jW \YU'h ZJfg	I b] Yfg]mCZA]Ua]A]Yf GWcc'cZA YX]MbYz 8YdUfha YbhcZ7ca a i b]m GYfj jW	&\$%	; YcVtXYX UXXFYggYg	\hfdg.## a XcVg'a YXYXi "a]Ua]YXi #dfcYVtq
HcVUWt'fYUjYfg	: 'cf]XU'8YdUfha YbhcZ 6i g]bYgg'UbX'DfcZyg]cbU' FY[i Ujcb	&\$%	; YcVtXYX UXXFYggYg	\hfdg.##k k k "a nZcf]XUjWbgy'Vta #k %%%Ugd3a cXY1% G-81/ Vfx1/ hml1

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