

5HVLVWDQFH 3KHQRW\SHV RI %DFWHULDODWUDQG %DFWHUDHPLDDPRQJ )HEULOH &KLOGUH

ORKDPHGSJ%DUDWQGR 6DUUR 'HP E pOp \$RXUp %\$DRUpp Qp 67UDRUHDQWD70VVRXJXHX2QGR'3DOORHNDQD  
'RXNL -DQG 'LDOOR '\$  
&HQWUH GH 5HFKHUFKH HW GH /XWWH FRQWUH OD 'UpSDQRF\WRVH &5/' %DPDNR 0DOL  
5HJLRQDO 'RFWRUDO 6FKRROV LQ 7URSLFDO ,QIHFWL RORJ\ )UDQFHYLOOH \*DERQ  
&HQWHU RI ,QIHFWL RORJ\ &KDUOHV 0HULHX[ RI %DPDNR 0DOL  
&HQWUH ,QWHUQDWLRQDO GH 5HFKHUFKH 0pGLFDOH GH )UDQFHYLOOH \*DERQ  
&HQWUH +RVSSLWDOR 8QLYHUVLWDLUH &+8 GX 3RLQW \* 6HUYL FH '1+HPDWR 2QFRORJLH 0pGLFDOH %D  
'HS DUWPHQW RI 3DUDVLWRORJ\ 0\FRORJ\ 7URSLFDO 0HGLFLQHV )DFXOW\ RI 0HGLFLQH 8QLYHUVLW\ RI +  
&RUUHVSRQGLQJ DXWKRU 'DSD \$O\ 'LDOOR 'HS DUWPHQW RI +HPDWRORJ\ 8QLYHUVLW\ RI 6FLHQFHV  
)D[ ( B DQG DOOR#LFHUPDOL RUJ  
5HFHLYHG GDWH '\$IFFHSWHG GDWH -DQ 3XEOLVKHG GDWH -DQ  
&RS\ULJKW %DUDEND 0\$\* HW DO 7KLV LV DQ RSHQ DFFHVV DUWLFOH GLVWULEXWHG XQGHU WK  
XQUHVWULFWHG XVH GLVWULEXWLRQ DQG UHSURGXFWLRQ LQ DQ\ PHGLXP SURYLGHG WKH RULJLQDO D

\$EVWUDFW

7KHEURDG VSHP@WLUKPF DQWLELRWLF WKHUDS\ UHFRPPHQGHG IRU VLFNOH FHOO IH  
UHVLVWDQFH 7KH SXUSRHV RI WKLV VWXG\ LV WR H[SORUH DQG GHVFULEH UHVLV  
XULQDU\ LQIHFWLRLQV DQG EDFWHUDHPLD DPRQJ IHEULOH FKLOGUHQ ZLWK VLFNOH  
ZH FROOHWLG EDFWHULD VWUDLQV IURP IHEULOH VLFNOH FHOO SDWLHQWV D  
E\ D FRQYHQWLRQDO VWDQGDUG SURFHGXUH ZKLFK LQFOXGHV PRUSKRORJLFDO VW  
WKH VWUDLQ IROORZHG E\ DQ DXWRPDWHG PHWKRG 7ZHGW\ ILYH EDFWHULD  
FKLOGUHQ FRPSULVLRQJ 66 6 & DQG 6 WKDODVHPLD QWUQLQW HWHG VE\ DFW  
RU DQG EORR@ FFXROOM\ X9dHWKRVH UH.FRZRHQGHSHMOW\ DQG UQ LKHQDQW  
6LFNOH FHOO FKLOGUHQ 0DOL FRSOLF DWLRLQV 6LQFH  
, QWURGXFWLRQ LQWHUQDWLRQDO UHFR  
%DFWHUHPLD DQG XULQDU\ WUDFW LQILMFW\ QRQXFRUD\ VRFN\ HPL  
PRUELGLW\ DQG PRUWDOLW\ DPRQJ FKLIGVSHQW DQG JDSWQHPLADW  
WKDW EDFWHULD VSHFLHV RI WKH HQWHURER\ FVFRUD\ LPB WQ RQ  
WKH PLFURRUJDQLVPV LQYROYHG DLQH WKHHMHV\ LQH\ QFW RR QDVQ WL P@  
VHFRQG OHDGLQJ FD\ XVDHV RQH\ H\ WLLRYXH \*LQDFR\ E\ VRLQW OH FHOO SD  
HVHEDFWHULD KDYH EHHQ UHSRUWHG UHWHUQDQFH DSXWKRURW\ S  
XULQDU\ WUDFW LQIHFWLRLQV DQG RVW\ H\ PPSIOLW\ QDQW\ DQG PFKD  
FHOO GLVHDVH > @ (QWHUREDFWHULD RWKHU WKDQ VDOPRQI  
IRXQG ZLWK DEQRUPDOO\ KLJK IWHKLU\ ADE0\ PU\ DHD\ QRL\ @ RU  
VXVFHSWLELOLW\ RI VLFNOH FHOO DQDHPLD WR LQIHFWLRLQV L  
UHODWHG WR IXQFWLRLQDO DVSOHQLD ZKLFK LV WKH FRQVHTX  
VSOHQLF LQIDUFWV > @ :KHQ QRW WUHDWHG WKH VHULRXV  
FRPSOLF DWLRLQV ZLWK OLIH WKUHDWHQLQJ ULVNV IRU  
, Q \*DVWRQ HW DO LQ D SULQFLSDO VWXG\ GHP RQVWUDWHD





PDFUROLGHV DQG TXLQRORQHV GXULQJ LQIHFWRQV DPRQJ VLFNOH FHOO  
FKLOGUHQ LQ 0DOL

## \$FNQRZOHGJPHQW

H DXWKRUUV DUH JUDWHIXO WR WKH FKLOGUHQ DQG WKHLU SDUHQWV RU  
JXDUGLDQV IRU SDUWLFLSDWWLW LQG WR WKH  
\*RYHUQPHQW RI 0DOL

## 5HIHUGHQFHV

0ULQG-RGDO 8 , QFULGVH QWLPPLSHWDRW\ VRUF XULQDU\  
WUDFW LQIHFWRQ LQ FKLOGUHQ XQGHU \HDUV RI DJH \$FWD 3DHGLDWU  
\$PHULFDQ \$F3HGGHPLD WURLQF V4, 6XEFRRPLWWHH RQ 8ULQDU\  
7UDFW , QIHFWRQ LQ FKLOGUHQ XQGHU DOXDWLRQ RI WKH  
LQLWLDO XULQDU\ WUDFW LQIHFWRQ LQ IHEULOH LQIDQWV DQG \RXQJ FKLOGUHQ  
3DHGLDWULF  
.RNRDQL ) <HQL \$5 2QHZLQ \$QGMDQJD \* 0RXVVDYRX \$ HW DO  
%DFWHULDO LQIHFWRQV LQ FKLOGUHQ ZLWK VLFNOH FHOO GLVHDVH LQ /LEUHYLOOH \$  
3HGLDW\ 26RBDQHDFDLVH 3HGLDWU  
0DYB \$PEH -3 %HOOR 0 :DWLOD , 1RWVLGJH 9\$ 8ULQDU\ WUDFW  
LQIHFWRQ LQ IHEULOH FKLOGUHQ ZLWK VLFNOH FHOO DQDHPLD :-\$0  
\$VLQ\$RE(L)DXWXQGH 2- %URZQ %- 2VLQXVL . )DVLQD 1\$ 8ULQDU\  
WUDFW LQIHFWRQ LQ IHEULOH FKLOGUHQ ZLWK VLFNOH FHOO DQDHPLD LQ ,EDGDQ  
1LJHULD \$QQ 7URS 3DHGLDWU  
0LOOHW \$ +XOOR ( \$UPDUL \$& %RVW %UX & 'XUDQG & HW DO 6LFNOH  
FHOO GLVHDVH DQG VDOPRQHOORVLV LQYDVLYHV RVWRDUWLFXODLUH \$UFKLYHV RI  
3HGLDWULF  
%DUUHW & RQQRU ( %DFWHULDO LQIHFWRQ DQG VLFNOH FHOO DQHPLD \$Q  
DQDO\VLV RI LQIHFWRQV LQ SDWLHQWV DQG D UHYLHZ RI WKH OLWHUDWXUH  
0HGLFLQH %DOWLPRUH  
0DOOR\$SK 6DODPDK 00 3DWWHUQ RI EDFWHULDO LQIHFWRQV LQ  
KRPR]JRXP VLFNOH FHOO GLVHDVH \$ UHSRUW IURP 6DXGL \$UDELD \$P - 'LV  
&KLOG  
'LRS6.Ry \* 1d'DKW] ( \$OODQJED 2 \$ND \$GMR 0\$ HW DO  
, QIHFWRQ